Seinäjoki University of Applied Sciences



ECTS STUDY GUIDE

2008-2009



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Seinäjoki University of Applied Sciences

Office of Seinäjoki University of Applied Sciences

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International Office of Seinäjoki University of Applied Sciences P.O. Box 412 / Keskuskatu 34 (Campus building), FI–60101 Seinäjoki Tel. +358 20 124 5004, fax + 358 20 124 5001 E–mail: international.office@seamk.fi

Admissions Office

P.O. Box 412 (visiting address: Keskuskatu 34), Kampustalo 2nd floor FIN-60101 Seinäjoki tel. +358 20 124 5208 fax +358 20 124 5022 email: admissions@seamk.fi

Academic Calendar

At Seinäjoki University of Applied Sciences tuition is given during 10 months (ca 40 weeks). The academic year is divided into five periods, one of which is implemented in summer, primarily in June or alternatively in August. Teaching can also be arranged at other times.

The periods for the academic year 2008–2009 are the following:

- 1. 1 September to 26 October 2008
- 2. 27 October to 21 December 2008
- 3. 5 January to 15 March 2009
- 4. 16 March to 24 May 2009
- 5. 25 May to 21 June 2009 or alternatively 4 August to 31 August 2009

In October and March most students have a week of independent study, during which contact teaching is not arranged. There is also a two-week break at Christmas.

Four graduations are arranged every academic year:

- Friday 24 October 2008
- Friday 19 December 2008
- Friday 20 March 2009
- Wednesday 20 May 2009

According to the Decree of Universities of Applied Sciences (16 June 2004/497), to complete a year of studies requires on average 1600 hours of student work, which produces 60 credits.

Administration and academic authorities

Seinäjoki University of Applied Sciences is maintained by the Joint Municipal Authority for Education, which is formed by 14 South–Ostrobothnian municipalities. The Joint Municipal Authority also runs a research library, R&D units and Seinäjoki Vocational Education Centre that provides secondary–level vocational education. The whole Joint Municipal Authority employs about 900 people.

The Council of the Joint Municipal Authority holds the supreme power of decision, while the Board of the Joint Municipal Authority is the highest executive authority. Dr Tapio Varmola is both President of the Joint Municipal Authority and Rector of the University of Applied Sciences.

Board of the Seinäjoki University of Applied Sciences

The operations of Seinäjoki University of Applied Sciences are led by the Board of the University of Applied Sciences chaired by the President/Rector. The Board consists of members representing the academic and non–academic staff and students of the university as well as representatives of working life.

Management of Seinäjoki University of Applied Sciences

The two main areas in the operations of the University of Applied Sciences are education and research & development. The educational operations are led by Vice President Jouni Niskanen, while R & D Director Hannu Haapala is in charge of research and development activities. Central administration and coordination tasks are conducted in the office of the university which is located in the campus area in Seinäjoki.

Education is offered by five educational units/faculties, which are led by Deans.

General Description of activities

SeAMK – Seinäjoki University of Applied Sciences

Seinäjoki University of Applied Sciences is a multidisciplinary regional institution of higher education, which offers education in seven fields of study. It offers 21 Bachelor–level and seven Master–level programmes. In addition, continuing education and professional specialisation studies are available.

Fields of education

- Culture
- Social sciences, Business and Administration
- Natural Sciences
- Technology, Communication and Transport
- Natural Resources and the Environment
- Social services, Health and Sports
- Tourism, Catering and Domestic Services

Education leading to Bachelor's degrees

Bachelor's degrees are the fundamental degrees of the universities of applied sciences. The length of studies varies between 210 and 240 ECTS credits and the duration between 3.5 and 4 years depending on the programme.

The most important objectives of studies are professional development and growth into expertise. The competences required by working life form the basis of the curricula. Theoretical studies are supported by a strong connection with working life, for example in practical training, development tasks, projects and thesis work.

In addition to knowledge and skills in one's professional field, a graduate from a university of applied sciences needs design and evaluation skills, ability to make decisions, creativity and social skills. These qualities are trained in different learning situations: during lectures and exercises, team assignments and contacts with working life.

Learning takes place by means of different methods and in various surroundings led by a teacher, through independent studying or in virtual learning environments. Students also have an opportunity to study or do their practical training abroad.

Education leading to Master's degrees

A Master's degree (a second-cycle polytechnic degree) is a new type of higher education degree, the aim of which is to combine studies and development of working life. Practically-oriented education deepens students' professional know-how and expertise. The degree provides students with the knowledge and skills to work in demanding expert, development and management tasks of their own field and gives new opportunities of career development. It gives the same qualifications as a Master's degree taken at a university.

A Master's degree taken at a university of applied sciences is meant for a person who has taken a Bachelor's degree in a university of applied sciences or other applicable higher education degree and who has at least three years' work experience in the field. The length of the degrees is either 60 or 90 ECTS credits depending on the field.

Seinäjoki University of Applied Sciences offers seven programmes leading to a Master's degree:

Degree Programme	Head of Programme
– Development of Agriculture and Rural Enterprises	Jussi Esala, tel. 020 124 5745
– Social Work – Information Systems Competence	Timo Toikko, tel. 040 830 4189
- Entrepreneurship and Business Competence	Anne–Maria Aho, tel. 020 124 4930

 International Business Management Construction Development and Management of Social Work and Health Care 	Anne–Maria Aho, tel. 020 124 4930 Päivö Laine, tel. 040 830 4175 Heikki Ylihärsilä, tel. 040 830 4153 Contact person: Eija Kyrönlahti, tel. 020 124 5186
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Education leading to Bachelor's degrees for adults

SeAMK provides degree–level study programmes intended for adult students. The supply of degree programmes vary annually, since the programmes are designed to meet the needs of labour market and the demand. The extent of most degree programmes is either 210 or 240 credits.

Professional specialisation studies

Professional specialisation studies are extensive supplementary studies which support professional development and they are primarily arranged for people with higher education or vocational degree or other equivalent level of education. The extent of Professional specialisation studies are 30–60 credits. The quality of professional specialisation studies is guaranteed by the quality control system of the university and by the national registration of the studies.

Open education in universities of applied sciences

Open education is also provided in Seinäjoki University of Applied Sciences (SeAMK). Education is available for everyone, regardless of previous studies or age. Open studies in the university of applied sciences are mainly courses and modules of the degree programmes. Studies conducted in open education can be recognised if the student later gains the status of a degree student.

Continuing education

Continuing education is a flexible and multifaceted form of meeting the educational needs of companies and organisations. Continuing education courses are characteristically of shorter duration than other types of education and is often implemented as a training project.

Number of students and staff of Seinäjoki University of Applied Sciences

Total number of students	4663
Adult students	998
Number of staff	417

Research and development

Research and development (R&D) is one of the three primary tasks of universities of applied sciences: education, research and development, and regional development.

According to the R&D strategy (2008–2010), the R&D know-how of Seinäjoki University of Applied Sciences focuses on the following key areas:

- business competence
- user-oriented product development
- services and working methods in the field of Health Care and Social Work
- applications of intelligent technology
- experience production
- agro-technology
- food economy and technology

The key areas represent our national-level R&D know-how strengthened by project and service activities.

R&D at Seinäjoki University of Applied Sciences consists primarily of applied research and development work. Development projects and services serving the working life of the area are of great importance. Projects and services are closely connected with education and the development of the industry, commerce and working life of the area. Most of the work is conducted in South Ostrobothnia, but cooperation partners often come from other parts of Finland and from abroad.

The best know-how of Seinäjoki University of Applied Sciences is productized and offered to customers as market-priced services. New project ideas often arise in connection with service activities, and in this way projects and services support each other.

SeAMK Projects

SeAMK Projects coordinates our project activities. Seinäjoki University of Applied Sciences participates to an increasing degree in extensive research projects as an expert in applied research. International projects become more common, and staff and student exchanges promote internationalisation.

Also the numerous theses produced by our students are an important resource in research and development. A thesis commissioned by a company or organisation gives the student hands–on knowledge of working life. It may also open the

door to employment. Teachers' own research activities and doctoral dissertations also strengthen our research competence.

SeAMK Services

SeAMK Services sells and markets the knowledge and skills of Seinäjoki University of Applied Sciences to companies and organisations. The objective or SeAMK Services is to make the know-how of SeAMK better-known in the area and to make it easier for companies and organisations to contact SeAMK. The products of SeAMK Services are non-free education, research and development services. Most of the services are produced at educational units.

Educational Units/Faculties

SCHOOL OF CULTURE AND DESIGN

Jurva, Seinäjoki Dean: Irmeli Jussila, M.A. (Arts and Design)

Design P.O.Box 4 / Kotikouluntie 1, 66301 Jurva Tel. +358 20 124 5900, telefax. +358 20 124 5901 kulttuuri.opintotoimisto@seamk.fi

Frami (Cultural Management & Library and Information Services) P.O.Box 416 / Kampusranta 9 A, 60101 Seinäjoki Tel. +358 20 124 4946, telefax +358 20 24 5986 kultuuri.opintotoimisto@seamk.fi

Conservation

Törnäväntie 26, 60200 Seinäjoki Tel. +358 20 124 5312, telefax +358 20 124 5337 rakennuskonservointi@seamk.fi

BUSINESS SCHOOL

Seinäjoki, Kauhava, Kauhajoki Dean: Elina Varamäki, D.Sc. (Econ.& Bus.Adm.)

Business

Koulukatu 41, 60100 Seinäjoki Tel. +358 20 124 5400, telefax +358 20 124 5401 liiketalous.opintotoimisto@seamk.fi

Entrepreneurship Kauppatie 109, 62200 Kauhava Tel. +358 20 124 5399, telefax +358 20 124 5388 yrittajyys@opintotoimisto@seamk.fi

Hospitality Management P.O.Box 19 / Topeeka 47, 61801 Kauhajoki Tel. +358 20 124 5600, telefax +358 20 124 5601 ravitsemisala.opintotoimisto@seamk.fi

SCHOOL OF ENGINEERING

Seinäjoki Dean: Jorma Nevaranta, Lic.Sc. (Technology)

Frami Kampusranta 9 A, 60320 Seinäjoki Tel. +358 20 124 4903, telefax +358 20 124 4909 tekniikka.opintotoimisto@seamk.fi

Törnäväntie Törnäväntie 26, 60200 Seinäjoki Tel. +358 20 124 5300, telefax +358 20 124 5301 tekniikka.opintotoimisto@seamk.fi

Vaasantie Vaasantie 1, 60100 Seinäjoki Tel. +358 20 124 5327, telefax +358 20 124 5301 tekniikka@seamk.fi

SCHOOL OF AGRICULTURE AND FORESTRY Ilmajoki, Ähtäri

Dean: Antti Pasila, D.Sc. (Agriculture & Forestry)

Agriculture Ilmajoentie 525, 60800 Ilmajoki Tel. +358 20 124 5700, telefax +358 20 124 5701 maa.opintotoimisto@seamk.fi

Forestry Tuomarniementie 55, 63700 Ähtäri Tel. +358 20 124 5800, telefax +358 20 124 5801 metsa.opintotoimisto@seamk.fi

SCHOOL OF HEALTH CARE AND SOCIAL WORK

Seinäjoki Dean: Asta Heikkilä, D.Sc. (Health Care)

Campus Seinäjoki P.O.Box 158 / Keskuskatu 32 E, 60101 Seinäjoki Tel. +358 20 124 5100, telefax +358 20 124 5101 sosiaali.opintotoimisto@seamk.fi

Koskenalantie Koskenalantie 17, 60220 Seinäjoki Tel. +358 20 124 5157, telefax +358 20 124 5151 terveys.opintotoimisto@seamk.fi

Library and Information Services

The library and information services of the institution are provided by the libraries of the faculties, Health Library, located in Health Technology Center Mediwest and Campus Library, located in the Campus Building. The library is open to all users. The libraries provide literature and magazines that support the studies and the thesis process. Course literature is lent at the Campus Library only. The loan period of course literature is two weeks. Any required material unavailable in Seinäjoki, can be borrowed from other libraries. Inter–library loans can be made at the Campus Library.

At the Institution, independent information search is encouraged. The staff at Campus Library, library of Seinäjoki University of Applied Sciences, participates in the teaching of information gathering skills and provide user training in the libraries. National and international CD databases and access to the Internet are provided to the students. The objective is to teach the students to use different databases and all the library and information services in the region.

The Campus library collections consist of non-fiction and research literature, textbooks, periodicals and electronic material. The unit libraries specialise in the subjects taught in the faculty. Collections of Campus Library can be browsed through the Plari database http://plari.amkit.fi/

When borrowing books you need a Plari library card, available in any of the faculty libraries and Campus Library. You will need a form of identification when applying. The card is free, personal and you are responsible for all materials borrowed on your card. When obtaining the card you become responsible for obeying the library rules. The materials of the library can be browsed at http://plari.amkit.fi.

Contact information, opening hours and other information about library services can be found on the Internet http://kirjasto.seamk.fi.

The Campus Library houses the Electronic Learning Centre (eOppimiskeskus) that serves all higher education students, teachers and researches in the area of South Ostrobothnia. Its purpose is to promote learning based on new technology.

CAMPUS LIBRARY

Keskuskatu 34 (Campus building), FIN–60100 Seinäjoki Tel. +358 20 124 5040 (information) kampuskirjasto@seamk.fi

AGRICULTURE

Ilmajoentie 525, FIN-60800 Ilmajoki Tel. +358 20 124 5711 maaseutu.kirjasto@seamk.fi

BUSINESS Koulukatu 41, FIN–60100 Seinäjoki Tel. +358 20 124 5455 liiketalous.kirjasto@seamk.fi

DESIGN

Kotikouluntie 1, FIN–66300 Jurva Tel. +358 20 124 5915 muotoilu.kirjasto@seamk.fi

ENTREPRENEURSHIP

Kauppatie 88, FIN–62200 Kauhava Tel. +358 6 431 4443 kirjasto@kauhava.fi

FORESTRY

Tuomarniementie 55, FIN–63700 Ähtäri Tel. +358 20 124 5830 metsa.kirjasto@seamk.fi

HEALTH LIBRARY

Koskenalantie 16, Mediwest Health Technology Center, FIN–60220 Seinäjoki Tel. +358 020 124 5230 (information) terveys.kirjasto@seamk.fi

HOSPITALITY MANAGEMENT

Topeeka 47, FIN–61800 Kauhajoki Tel. +358 20 124 5641 ravitsemis.kirjasto@seamk.fi

Studies at a university of applied sciences

The system of universities of applied sciences is based on national and regional educational needs. Universities of applied sciences offer a practically oriented alternative of higher education and highest professional education in the fields that they represent. Students gain both theoretical knowledge and practical training in their own field.

Studies at a university of applied sciences are characterised by varied teaching and learning methods. The amount of traditional lecturing has been reduced and the school emphasises the students' responsibility for their own studies. In modern society, information increases and diversifies constantly. Therefore it is important that students adopt the idea of lifelong learning, and independent search for information during and after their studies.

The aim of studies is to train creative, cooperative and internationally oriented experts who have initiative for tasks in planning, development, consulting, education and management or as entrepreneurs.

Internationality is one of the strengths of universities of applied sciences and it is part of today's working life. Students can conduct part of their studies or their practical training abroad. International studies are recognised in the degree programmes. Universities of applied sciences also offer complete programmes or separate courses taught in English. Students from all over the world study in universities of applied sciences.

Cooperation with industry, cultural life, enterprises and public organisations is a central part of university activities. Practical training, different projects and thesis work are implemented in cooperation with businesses and organisations.

Generic competences of polytechnic graduates

A project initiated by Arene and funded by the Ministry of Education has produced national guidelines for subject–specific competences and non–specific, generic competences of polytechnic graduates. The subject–specific competences can be found in the description of each degree programme.

Competences are understood as wide–ranging combinations of know–how – composites of knowledge, skills and attitudes possessed by an individual. Competences illustrate the person's proficiency, capacity and ability to perform in professional tasks.

The subject–specific competences form a base for the student's development in his/her career and expertise. The generic competences are common to different degree programmes and subject fields, but they may have different emphases and vary in importance in different professions and vocational tasks. The generic competences lay a foundation for the person's participation and collaboration in working life as well as for his/her professional development.

Generic Competences of Polytechnic Graduates 19 April 2006:

Generic competences	Description of the competence, first–cycle graduates	Description of the competence, second–cycle graduates
Learning competence	 is able to self-evaluate one's competences and define his/her development and learning needs recognises one's learning style orientation and is able to conduct studies independently and develop one's learning strategies is capable of collaborative learning and sharing knowledge in teams and working communities is able to operate in changing environments and to recognise and utilise available learning opportunities and scopes for action is able to plan, organise and develop one's own actions 	 is able to self-evaluate one's competences and expertise in a versatile and systematic way and to define one's development and learning needs is equipped for life-long learning and understands and self-directs one's learning process is able to study together and share one's learning and expertise in different expert teams and networks is able to work initiatively and to anticipate changes and needs for change is able to plan, organise and develop one's actions
Ethical competence	 is able to apply the value systems and ethical principles of the subject field in one's conduct and tasks takes responsibility of one's own actions and works according to the jointly agreed principles and measures is able to apply the principles of sustainable development in one's actions is able to take other people into account in one's actions 	 is able to apply the value systems and ethical principles of the subject field in one's conduct and tasks as an expert and a developer of working life takes responsibility of one's own actions and works according to the jointly agreed principles and measures is able to apply the principles of sustainable development in one's actions and knows the social responsibility of one's organisation is able to cater for others in one's actions and make decisions considering an individual, community and a society at large
Communicative and social competence	 is capable of listening to others and communicating in writing, speech and visually using different communicative styles is able to function in the communicative and interactive situations typical of the field understands the principles of group and teamwork and is able to work together with others in multidiciplinary teams is able to utilise information and communications technology at one's work 	 is able to listen to others and communicate in writing, speech and visually with different target groups is able to manage in different communicative and interactive situations and to organise and create professional networks understands the principles of group and team work and is capable of working together in multidisciplinary teams also as a team–leader is able to utilise information and communications technology at one's work
Development competence	 is able to retrieve and analyse information of one's subject field, to critically evaluate it and to perceive entities in a holistic way knows the basic principles and methods of research and development work and is able to conduct small–scale research and development projects applying the existing knowledge of the field knows the principles of project work and is able to work in projects adopts an initiative and proactive approach to work and is capable of problem solving and decision making at one's work 	 is able to retrieve and analyse information of one's own subject and neighbouring fields and to critically evaluate and holistically perceive it as well as to generate new knowledge masters the methods of research and development work and is able to independently carry out R&D projects of one's field knows the intricacies of project work and is able to to work in projects and manage them works initiatively and proactively and is able to start and implement change processes

	• understands the principles of profitable and customer–focused operations and possesses entrepreneurial skills	 is capable of creative and innovative problem solving and decision making at one's work is able to start profitable and customer-focused development projects is able to guide and mentor others
Organisational and societal competence	 knows the socio-economic interdependence of the organisations in one's subject field knows the possibilities of societal influencing for the development of one's field knows the basic principles of organisational management and leadership and has abilities for supervision tasks knows the methods of working life and is able to operate in work communities is able to plan and organise activities 	 knows the socio-economic interdependence of the organisations in one's subject field knows and is able to utilise the possibilities of societal influencing knows the organisational and work cultures and is able to participate in intra-organisational and inter-organisational coordination, development and management is able to evaluate the operations of a work community and to plan, organise and develop activities in the changing situations in working life is able to perceive holistically wide entities and cause – effect relationships as well as to operate in demanding situations requiring versatile competences even when there are constraints of information
Internationalisation competence	 possesses spoken and written communicative competence at least in one foreign language necessary for one's work and for professional development understands cultural differences and is able to work together with people coming from different cultural backgrounds is able to use international sources of information of his/her own field understands the effects and opportunities of internationalisation in one's own field 	 possesses the written and spoken communicative competence in one or two foreign languages necessary for one's work and for professional development understands cultural differences and is able to operate in diverse international environments is able to apply international knowledge and competences in one's own field possesses an overview of the position and importance of the profession in the international environment

In addition, the following competences common to all are emphasised at Seinäjoki University of Applied Sciences:

Entrepreneurship competence:

- understands interaction between the operations of an enterprise and its business environment and adopts an entrepreneurial way of action
- understands the basics of profitable business operations and knows how to analyse the operations and risks of an enterprise

Quality management competence:

- the student knows the quality systems typical of the field
- the student understands the requirements of quality thinking and quality systems

Degree programmes

A degree programme is defined as a course of studies which concentrates on a given area of professional expertise. The first-cycle degree programme studies lead to a Bachelor's degree in both day and adult education. The total number of undergraduate degree programmes in Seinäjoki University of Applied Sciences is 21. Those with a polytechnic Bachelor's degree followed at least 3 years of relevant work experience are offered the opportunity to complete a second-cycle degree.

Structure of the Bachelor-level degree programmes

Studies leading to a Bachelor's degree are organised as degree programmes. A degree programme is an educational curriculum, which concentrates on a professional field and its development. A degree programme may include several specialisation lines.

Each degree programme includes basic studies, professional studies and practical training, thesis and maturity test. The studies consist of study modules and courses. A study module consists of two or more courses which focus on a particular subject or problem area. Courses are compulsory, alternative or elective. The degree programmes include a minimum of 12 credits of elective studies. The students have many opportunities to develop their skills by taking courses at the other faculties. The students can enrich their core knowledge provided by their educational fields by means of a personal curriculum. Naturally, the students have the wide international cooperation network of the University of Applied Sciences at their disposal. Studies in a foreign university provide the student with credits, too.

Basic studies

Basic studies give the student an overall picture of the degree programme and the field studied. The objective of basic studies is also to familiarise the student with the general theoretical basics of the field. Languages and communication skill studies also form an important part of the basic studies.

Professional studies

Professional studies deal with the essential problems and applications including their theoretical basis in the degree programme's professional field. Professional studies prepare the student for independent work in expert tasks of the field. Professional studies are compulsory, alternative or elective.

Practical training

Practical training is an essential part of the study programme. The objective is to introduce the student to the field and apply to practice the theoretical knowledge gained. An important part is to learn the practices and environments of working life. It widens students' working life connections and contacts with potential employers. Practical training is obligatory and equivalent to 30–75 credits depending on the degree programme.

Thesis

Thesis is a written work or project to show that the student has the required knowledge and skills to deal with the tasks connected with his/her professional field. It can be, for example, a study, survey or a R&D project, but it must be presented in the form of a written report. Thesis is equivalent to 15 credits. The maturity test taken at the final stage of the degree work demonstrates the student's knowledge of his or her field and skills in the mother tongue.

Learning Methods

One course may consist of lectures, literature, written assignments, laboratory work, projects, seminars, excursions, traditional homework and exams, the emphasis of which varies according to the objectives of the course.

Eligibility conferred by polytechnic degrees

The first cycle polytechnic degree (bachelor–level degree) confers eligibility for civil service posts and positions where the qualification requirement is higher education degree or lower academic degree.

The second cycle polytechnic degree (master-level degree) confers the same field-specific eligibility for civil service posts as a Master's degree completed at a university or another institution of higher education.

Finnish higher education degrees are equivalent to degrees taken at corresponding other European institutions of higher education.

Online studies

The aim of online studies is to offer all students alternative ways of completing courses. The objective is that all students would have an opportunity of conducting 30 credits of studies online.

The primary online learning environment is Moodle. Adobe Acrobat Connect Pro communication system software is also available. The system allows the student to participate in online lectures anytime and anywhere where there is access to the Internet.

Online courses of all Finnish universities of applied sciences are available at the portal of VirtuaaliAMK at http://amk.fi. Before starting studies at VirtuaaliAMK the student must agree on the courses and recognition with the Head of Programme or Student Counsellor. More information about online studies can be obtained from Asko Ojanperä, tel. +358 40 830 4278, asko.ojanpera@seamk.fi.

Study regulations

The student is entitled to complete the studies leading to the polytechnic degree in a certain field of study according to the Degree Programme and its curriculum as well as the foundations defined in the Degree Regulations of University of Applied Sciences. The student's personal curriculum is based on the educational curriculum of the academic year the studies were begun. The educational curriculum is confirmed every academic year, which may cause changes in the supply of the study programme.

Degree Regulations

General regulations and guidelines according to the studies and degrees in the University of Applied Sciences are presented in the Degree Regulations, which is an important document for every student to be familiar with. The Degree Regulations of Seinäjoki University of Applied Sciences can be found in intranet http://intra.seamk.fi/yleinen/Tutkintosaanto2007.pdf.

Study Entitlement

The maximum duration of the studies of a full-time student must not exceed the duration of the programme by more than one year. A full-time student may register as non-attending for two semesters. This period of non-attendance is not counted in the maximum duration of the studies. A non-attending student has no right to carry on the studies and is not entitled financial aid to students either.

When it comes to losing the study entitlement, the instructions of the Act of Universities of Applied Sciences (351/2003) is observed. A student has to participate in the necessary working methods of the course to be able to achieve the aims of the curriculum. The working methods as well as the evaluation methods are announced at the beginning of each course.

Registration for examinations

An examination arranged at the end of a course does not require separate registration unless agreed otherwise. A student has to register bindingly for other examinations at the latest seven days before the examination.

By using their own consideration the faculties also arrange general examination days for retaking a failed course and/or for improving the grade of an approved course. The accurate dates of examination days are informed in the study guide of each faculty. Unfounded absence is regarded as an exploited opportunity to take the examination.

Evaluation of study

The assessment of studies is part of the learning process which is supposed to measure the attainment of the objectives of a course. Assessment is done through oral or written examinations, case exercises or other assessment methods. In addition to the assessment of knowledge (depending on curriculum) it may include the assessment of working methods and attitudes.

The assessment is mainly made by using the following numerical scale:

- excellent K(5), corresponding to grade A of the ECTS scale
- good H(4–3), corresponding to grades B and C of the ECTS scale
- fair T(2–1), corresponding to grades D and E of the ECTS scale
- fail (0) corresponding to grade F of the ECTS scale.

If necessary, the courses can be assessed by using the scale pass/fail.

Assessment is done within one month from the study attainment, unless agreed otherwise, and approved study attainments are written in the Study Records. A student is entitled to receive information on the assessment criteria of the study attainment. Study attainments are archived for six months after announcement of the results. A student not satisfied with the assessment can make an appeal to the teacher who administered the assessment and, if necessary, further to the Examination Committee of the University of Applied Sciences.

Study Records at WinhaWille

Through the student interface (WinhaWille) of the study management system Winha, a student may register as a student, to follow the advancement of the studies as well as to enrol for the elective subjects. To be able to use the student interface WinhaWille, a student needs a user identification as well as a pin code to log in the system. The pin codes are given by the Student Affairs Office of each faculty.

Codes of Curricula

In the supply of education in Seinäjoki University of Applied Sciences, each course has a code that follows a certain code system. Codes can be needed for example for enrolling a course. The use of the study management system Winha is based on these codes.

For instance code KH14AAIL80 includes the following information of the course:

- level of education: K = higher education
- educational unit: H = School of Culture and Design
- Degree Programme: 14 = Degree Programme in Design

- classification: A = basic studies
- curriculum: AIL80 = photography

Degree Certificates

Two months before graduation, a student must inform the student affairs office about his/her willingness to graduate and two weeks before the graduation date at the latest submit a written Degree Application. More detailed directions concerning the graduation, relevant forms and the graduating dates can be found on the intranet http://intra.seamk.fi/opiskelijat/opintoasiainhallinto

The faculty gives a student the Degree Certificate for the degree completed. The Degree Certificate and its appendices show the courses completed and their extent as well as grades, language skills and the language of the Maturity Test.

On request, a student is entitled to receive an English translation of the Degree Certificate. An English–language Diploma Supplement is also given to every student. The Diploma Supplement includes the description of the Finnish educational system, the description of the student's own educational field and Degree Programme as well as a transcript of records in English.

During the studies, a student can receive on request an official transcript of records from the student affairs office of the faculty.

Degree Programmes

Bachelor-level Degree Programme

Agriculture and Rural Enterprises Automation Technology **Business Information Technology Business Management** Conservation **Construction Engineering** Cultural Management Design Food Processing and Biotechnology Forestry Health Care and Social Services/Elderly Care Hospitality Management Information Technology International Business Library and Information Services Mechanical and Production Engineering Nursing Physiotherapy SME Business Management Social Work

Head of Degree Programme

Juha Tiainen Hannu Reinilä Markku Lahti Päivö Laine Matti Laine Ilkka Loukola Jussi Kareinen Hannu Ruokonen Jarmo Alarinta Hannu Lassila Aila Vallejo Medina Liisa Nuotio Petteri Mäkelä Ritva Leppänen Pirkko Vuorela Jukka Pajula Raija Palo Kaija Loppela Anmari Viljamaa Päivi Rinne

The email addresses are forename.lastname.

Admissions

There is a nation–wide joint application system for students applying for entry to Finnish universities of applied education/polytechnics. Degree programmes in foreign languages (www.admissions.fi) and for adult education will also join the nation–wide joint application system. The Student Admissions Office operating in connection with the Student Affairs Office at Seinäjoki University of Applied Sciences takes care of admissions. Nearly all degree programmes arrange an admission test, to which the applicant is invited by mail. The final selection criteria are usually the results of the entrance examination, previous study record and grades, the student's own priorities for admission, work experience and often even preliminary exam in the field of Culture.

The general entry requirements for admission to universities of applied education/polytechnics are:

- general upper secondary school of matriculation examination
- International Baccalaureate-, Reiseprüfung- or European Baccalaureate -examination
- basic vocational qualification
- qualification of vocational upper secondary education
- combination studies of upper secondary education
- basic vocational qualification or joint studies in adult education
- or corresponding international or foreign qualification.

Detailed entry requirements are presented in the Act of Universities of Applied Sciences (351/2003, § 20).

Universities of applied sciences/polytechnics determine their principles of student selection and admission examinations independently, but they are committed to make a wide cooperation and to follow the general selection criteria in different fields of study. More accurate information about the entry requirements and selection criteria can be found in the annually published, national Admission Guide for Polytechnics as well as in the Applicant's Guide of each HEI.

Acceptance of student place

After accepting to study in Seinäjoki University of Applied Sciences student must enrol at the beginning of academic year. If the student does not enrol within the allotted time, he/she is considered to have given up his right to study in the school. The student's written notification of accepting the study place is always binding and cannot be withdrawn or modified.

Registration as a student

A student studying for the Degree of University of Applied Sciences has to register as a student every academic year during the time set by the University of Applied Sciences. Registration is done either through the student interface of the study management systems or in writing. Only a student registered as attending is entitled to study and receive completed courses in the record.

A new student who is starting studies has to register as a student at the same time he/she is notified the University of Applied Sciences of accepting the student place offered. Registration is done filling in a personal data form and for the whole academic year.

A student who has accepted a student place but postponed the start of the studies with a notification of absence, must register as a student the following year observing the same dates as the new students accepted into the degree programme in question.

A student continuing the studies has to register as a student for the whole academic year at a time between 15 April and 1 August.

The registration information may be changed during the period for registration (15 April to 1 August) or at the beginning of the spring semester (1 to 15 January).

Legislation and decrees

In the student admission, planning and implementation of the training of the Degree Programmes, as well as upon the establishment of study entitlement, the following Acts and Decrees, as well as later amendments to them, are observed:

- Act on Universities of Applied Sciences (351/2003)
- Decree on Universities of Applied Sciences (352/2003)
- Act on the Student Admission Register and on the Matriculation Register (1058/1998, 547/2002)
- Decree on the Joint Application System of the Universities of Applied Sciences (353/2003)
- Decree on the Basis for the Collection of Fees for Tuition (354/2003)
- Decree on the Eligibility Produced by Certain Studies for Studies in Universities of Applied Sciences (35572003)
- Administrative Procedure Act (434/2003)
- Personal Data Act (523/1999)
- Act on the Openness of Government Activities (621/1999)
- Study Grants Act (65/1994)
- Study Grants Decree (260/1994)
- Act on the Financing of Education and Culture (635/1998)
- Decree on the Financing of Education and Culture (806/1998)
- Decree on the System of Degrees of Higher Education (464/1998, 1132/2003, 426/2005
- Regulations of Šeinäjoki Joint Municipality of Education and Seinäjoki University of Applied Sciences

With a view to achieving a licence to practise, in the Degree Programme of Nursing, the Act and the Decree on Health–Care Professionals are observed (L559/1994, A564/1994) as well as the EU Directives 77/452/EEC, 77/453/EEC, 89/48/EEC, 89/594/EEC, 89/595/EEC and 92/51/EEC.

ECTS – European Credit Transfer and Accumulation System

The purpose of the European Credit Transfer System, ECTS is to improve comparability of credits and grades between different educational systems. The recognition of studies and grades is a prerequisite for the free mobility of students. ECTS provides an instrument to evaluate the learning achievements of students through the use of commonly accepted

measurements, and it also provides a basis for interpretation of national systems of higher education. Full academic recognition is necessary for student mobility in the framework of the Erasmus and Socrates programmes.

The ECTS is based on three core elements

- information on study programmes and student achievement
- mutual agreement between the partner institutions and the student
- ECTS credits to indicate student workload.

Credit transfer is implemented by means of three basic documents

- This Study Guide has been published to provide information on the degree structure and study programmes of Seinäjoki University of Applied Sciences. Potential partners, students and staff at partner institutions can use it as a guide to programmes, courses, and academic and administrative arrangements employed in the institutes of the University of Applied Sciences.
- The Student Application Form is filled in by the student when he intends to study at a foreign host institution. When the three parties involved – the student, the home institution and the host institution – agree about the study programme abroad, they sign a learning agreement attached to the application form. This agreement, which describes the scope of study abroad, must be signed before the student leaves for the host institution.
- Credit transfer in ECTS operates by means of exchange of transcript of record between home and host institutions.

ECTS credits are a numerical value allocated to course to describe the student workload. They reflect the total quantity of work including lectures, seminars, tutorials, private study, examinations etc., and are not limited to contact hours only.

The ECTS grading scale provides a tool for measuring the quality of student achievements. It is based on the combined use of appropriate keywords and numerical definitions as follows:

ECTS-grade Definition

ECTS credits are a numerical value allocated to course or study units to describe the student workload. They reflect the total quantity of work including lectures, seminars, tutorials, private study, examinations etc. and they are not limited to contact hours only. The workload for an academic year carries 60 credits. The Finnish credit unit (study week) is normally equivalent to 1.5 ECTS credits.

ECTS-grades

- A EXCELLENT (best 10 %)
- B VERY GOOD (next 25 %)
- C GOOD (next 30 %)
- D SATISFACTORY (next 25 %)
- E SUFFICIENT (next 10 %)
- FX FAIL (some more work required)
- F FAIL (considerable further work required)

In Seinäjoki University of Applied Sciences like in other Finnish Universities of Applied Sciences, the Finnish grading scale is used:

- 5 Excellent
- 4 Good
- 3 Good
- 2 Satisfactory
- 1 Satisfactory
- 0 Failed

Diploma Supplement

The Diploma Supplement is a document that provides a standardised description of the nature, level, context, content and status of the studies completed at the polytechnic. The Diploma Supplement, which is based on a European template, is attached to the polytechnic degree certificate. It also contains an overview of the educational system in Finland. The purpose of the Diploma Supplement is to enhance transparency and to facilitate academic and professional recognition of qualifications. All students who complete a degree at Seinäjoki University of Applied Sciences obtain a Diploma Supplement– free of charge– on their graduation.

ECTS coordinators at Seinäjoki University of Applied Sciences

Seinäjoki University of Applied Sciences has appointed an institutional co-ordinator and departmental ECTS coordinators for each faculty. The task of the institutional co-ordinator is to promote ECTS within the University of Applied Sciences and outside, to facilitate the practical implementation of ECTS and provide support to departmental co-ordinators. The departmental co-ordinator is the contact person of students and teachers within the faculty and deals with the practical aspects of the implementation of ECTS. Departmental co-ordinators are in charge of documenting and counselling, as well as communication between home and host institutions.

Institutional coordinators: Päivö Laine Head of Programme, PhD Seinäjoki University of Applied Sciences, Business School Koulukatu 41, FI–60100 Seinäjoki tel. +358 20 124 5409, fax +358 20 124 5401 email paivo.laine@seamk.fi

and

Helli Kitinoja Manager of International Affairs P.O.Box 412 / Keskuskatu 34, FI-60101 Seinäjoki Tel. +358 20 124 5004, fax +358 20 124 5001 email helli.kitinoja@seamk.fi

Departmental coordinators: The departmental ECTS coordinators are the international coordinators of the educational units. Please turn to them for further information on ECTS practices and forms.

Degree Programme in Agriculture and Rural Enterprises (In Finnish)

Head of degree programme: Mr Juha Tiainen, tel.: +358 40 830 2429, e-mail: juha.tiainen@seamk.fi Student counsellor: Ms Anu Katila, tel.: +358 20 124 5747, e-mail: anu.katila@seamk.fi

QUALIFICATION AWARDED

Bachelor of Natural Resources, Agronomist (UAS)

ADMISSION REGUIREMENTS

See the Applicant's Guide

GENERAL DESCRIPTION OF THE DEGREE PROGRAMME

Educational and professional goals

Agronomists typically work as consultants in livestock husbandry and plant production, as specialists in administration, education or research, and work in the development of rural areas. Many agronomists also work as entrepreneurs.

Studies in the Degree Programme in Agriculture and Rural Enterprises involve contact lessons, independent study, practical training and a final thesis. Before beginning their studies, students make out a Personal Study Plan with the help of a student counsellor or tutor. Students then follow this plan to ensure they achieve the goals they have set and the goals of the school.

Contact lessons integrate theory and practice. Studying is flexible and students may focus on different areas of study in the programme according to their own personal interests. The courses in the programme are divided according to the seasons, periods of growth and harvest, and the reproductive cycles of the animals. During their first year of studies, in particular, students are provided with opportunities to engage in practical work on a weekly basis. The school has modern classrooms, laboratories, and farms, which allow students to combine theoretical learning with practical learning.

Areas of study include livestock husbandry, plant production, forestry, technology, agricultural economics, business economics, consultation, biology and environmental protection. Students gain practical skills on farms, and they may choose to do their specialisation training in Finland or abroad. Immense co-operation between the various faculties in the university of applied sciences ensures that students have the opportunity to choose from an extensive, diverse selection of courses. At the end of their studies, students are required to write a final thesis.

Educational approach and learning methods

The constructive learning method emphasises the active role of the students and their experiences. The teacher is seen as a guiding tool in the students' learning process, to assist them in understanding the information the teacher has provided.

General characteristics of learning:

- 1. Students set goals for their learning, e.g. Personal Study Plan.
- 2. Theory is connected to the experiences of the students, to work and the working environment.
- 3. Communication between the teachers and students aims to enhance learned information and to provide a tool for evaluating learning experiences.
- 4. Students engage in process learning, i.e. they do not focus merely on the goals and contents of the studies.
- 5. Students monitor and evaluate their own learning and that of their peers together with the teachers. Teachers strive to improve their teaching based on course–end feedback.

A wide range of teaching methods are utilised in the programme, which support students professional growth. These methods include lectures, information acquisition, projects, distance and online teaching, assignments, practical training and various forms of co-operative learning.

Competences acquired in the degree programme

Agriculture and forestry

The student is familiar with the whole concept of farm and the functions and work connected. The student is able to farm appropriately as well as profitably. The student is able to keep, feed and breed livestock in a profitable manner, taking their health and well-being into consideration. The student knows how to operate the machinery both effectively and safely and is able to take care and utilize forests economically and in an ecologically sustainable manner.

Rural environments

The student knows the networks of activators in rural areas and is able to act in them. The student is also familiar with international and national agricultural politics and their effects on the precognitions and development of rural areas and agriculture.

Business and entrepreneurship

The student knows the basic principles of entrepreneurship and the different sectors of business operations and is able to run and develop rural enterprises both systematically and economically.

Environment

The student is familiar with the environmental effects of his/her own acts and the interaction between the rural enterprise and environment. The student is also able to develop the enterprise in an environmentally responsible way.

Access to further studies

After having received their bachelor's degree, graduates are eligible for a post–graduate degree in Agriculture and Rural Enterprises (See act 351/2003 concerning Finnish universities of applied sciences, in Finnish).

Course structure diagram with credits

The Degree Programme in Agriculture and Rural Enterprises (240 cr) consists of basic and professional studies (120 cr), specialization studies (40 cr), elective studies (15 cr), practical training (50 cr) and a final thesis (15 cr). Students should complete their studies in four years.

Beginning the studies

Studies begin in mid–August with a two–day orientation during which students receive basic information concerning the structures and practices of the studies. During this time, students meet their tutors who help and guide them during the first few weeks. Contact lessons are usually held from Monday to Friday between 8 a.m. and 4:15 p.m. During the first year, students engage in practical training in Ilmajoki where they practice harvesting and taking care of livestock. Students who have already completed a basic degree in agriculture do not need to partake in the first training period.

General studies and practices

During the first two years of study, students concentrate on basic and professional courses, which are common to all students in the degree programme and which include computer technology, language studies, mathematics, biology and environmental protection, livestock husbandry and plant production, technology, economy and forestry. Upon completion of the first year, students engage in a second period of practical training which takes from May to September. During the periods of training on a farm, students learn to do the typical chores associated with farming and other duties based on their chosen area of focus. Training farms are located around the country, but it is also possible to complete the training abroad.

Second-year studies begin at the beginning of October and end at the end of April. During this time, students complete courses according to their Personal Study Plan, and they focus on their professional studies. Students may choose 15 credits of elective studies from the entire course selection available at the Seinäjoki University of Applied Sciences. One credit of coursework equals 26 working hours. Courses completed in another university of applied sciences or academic university may be included in the elective studies.

After their second year of studies, students once again have an opportunity to apply the theory they have learned in the classroom to practice. traditionally, students have also made a field trip to Central Europe, which gives them a chance to see and get to know the culture and agriculture of different countries. Since students pay the expenses for the trip themselves, they try to raise money through various events and campaigns. The trip is not compulsory.

Specialisation

During the third year of their studies, students focus on their line of specialisation, which amounts to 50 credits. They can specialise in pig husbandry, growing potatoes, rural environment, water management, environmental engineering, business management for farms, production design, development of rural areas, or health care of domestic animals, just to mention a few examples.

Upon completion of their third year of studies, students engage in training associated with their line of specialisation. The training lasts 75 days and takes place between May and August. Students may seek a place to do their practical training independently or with the assistance of their supervisor. Students are encouraged to consider their career direction when planning their training. Oftentimes, students are also able to obtain a topic for their final thesis during this training.

The purpose of the final thesis (15 cr) is for students to demonstrate their knowledge in their line of specialisation. Students of agriculture have been permitted to select the topics for their thesis quite freely, but it is wise to keep in mind the possible uses of the thesis in the future when planning one's future career or employment.

Examination and assessment regulations

Regulations pertaining to the operations in universities of applied sciences

Degree Programme in Agriculture and Rural Enterprises (In Finnish), 240 cr (1.9.2008) MAELINK 2008

Code	Name	St	tudy	Yea	ar	CR
		1.	2.	3.	4.	
KA01AYP	BASIC STUDIES					32
KA01AAMKAS	Introduction to studies and professional growth			1		5
KA01AAMKAS1	Studying at polytechnic	x				2
KA01AAMKAS2	Psychology	x				1
KA01AAMKAS4	Career planning and employment			х		2
KA01AAMKAS5	Urasuunnittelu			х		1
KA01AAMKAS6	Labour policy			х		1
KA01ATET	Health–related sports, labour protection and erconomics					4
KA01ATET01	Health-related sports and erconomics	x				3
KA01ATET02	Labour protection		x			1
KA01AMEN	Methodological studies					5
KA01AMEN001	Basics of applied research and documentation			х		2
KA01AMEN004	Information retrieval			х		1
KA01AMEN003	Statistical mathematics			х		2
KA01AVIE	Communication studies					3
KA01AVIE001	Written communication	x				1
KA01AVIE002	Organizational communication		x			2
KA01AKIE	Language studies					6
KA01AKIE001	Swedish	x				3
KA01AKIE002	English		x			3
KA01AATK	Tele informatics					3
KA01AATK001	Computer literacy	x				3
KA01AMAT	Mathematics and natural sciences					6
KA01AMAT001	Mathematics	x				2
KA01AMAT002	Natural sciences					4

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KA01AMA002A	Chemistry	х			2
KA01AMA002B	Physics	х			2
KA01BYA	COMMON PROFESSIONAL STUDIES				78
KA01BKAS	Crop production		12		
KA01BKAS001	Orientation of crop husbandry	х			1
KA01BKAS002	Plant biology	х			2
KA01BKAS003	Soils and meteorology	х			2
KA01BKAS004	Fertilization and soil cultivation	х			2
KA01BKAS005	Field crop production		х		3
KA01BKAS006	Basics of plant production		х		2
KA01BKOT	Animal husbandry				14
KA01BKOT001	Introduction to animal husbandry – basic knowledge and skills	х			4
KA01BKOT002	Biological principles of animal production	х			2
KA01BKOT003	Animal housing, behaviour and welfare	х			2
KA01BKOT004	Basics of animal nutrition and feeding	х			2
KA01BKOT005	Cattle production		x		2
KA01BKOT006	Pig production		x		2
KA01BYMP	Environmental information systems				3
KA01BMET	Private forestry				6
KA01BMET001	Silviculture	x			3
KA01BMET002	Forest management		x		3
KA01BTEK	Agricultural technology				11
KA01BTEK001	Use and maintenance of farming machines	х			4
KA01BTEK002	Fundamentals of agricultural technology		х		7
KA01BRAK	Basics of farm building				6
KA01BRAK001	Contracting	X			4
KA01BRAK002	Repair of buildings		х		2
KA01BBEK	Agricultural economics		1		11
KA01BEKO001	Basic principles of farm economics	х			5
KA01BEKO002	Tax management of the farm		х		3
KA01BEKO003	Applied production analysis		х		3
KA01BLII	Business economics and marketing				9
KA01BLII001	Introduction to bookkeeping		x		3
KA01BLII002	New venture strategies in rural small business		х		3
KA01BLII003	Introduction to marketing	Х			3
KA01BKEH	Basics of development of rural areas		1		6
KA01BKEH001	Basics of rural extension and project work		x		3
KA01BKEH002	The techniques of negotiation and meetings and the psychology of customer service		x		3
KA01BKASVUK	THE GROWING SEASON		1		10
KA01BKAUSI1	Kasvi– ja puutarhatuotanto		x		7
KA01BKAUSI2	Technics		x		2
KA01BKAUSI3	Forestry		х		1
KA01CVA	ALTERNATIVE PROFESSIONAL STUDIES				40

KA01CKAS	Crop production					27
KA01CKAS001	Field drainage and irrigation		x			2
KA01CKAS002	The crop and seed production			x		3
KA01CKAS003	Cropping and cirtilization planning			x		3
KA01CKAS004	Diseases and pests of cultivated plants			x		3
KA01CKAS005	Grassland management			x		3
KA01CKAS006	Potato production				x	3
KA01CKAS007	Sugar beet production				x	2
KA01CKAS008	Actual special field crops			x		2
KA01CKAS009	Living soil				x	2
KA01CKAS010	Different cropping systems			x		2
KA01CKAS011	Plant breeding				x	2
KA01CPUU	Horticulture production					8
KA01CPUU001	Basics of domestic planning				x	3
KA01CPUU002	Vegetable and Berry Production				x	3
KA01CPUU003	Greenhouse Production				x	2
KA01CLUO	Organic farming					11
KA01CLUO001	Organic farming			x		3
KA01CLUO002	Organic crop husbandry			x		2
KA01CLUO003	Organic animal husbandry				x	2
KA01CLUO004	Organic home gardening			x		2
KA01CLUO005	Organic gardening				x	2
KA01CYMP	Environment and rural enterprises					32
KA01CYMP001	Environment and agriculture			x		3
KA01CYMP002	Environment ecology				x	3
KA01CYMP003	The legislation of environmentalism				x	3
KA01CYMP004	Environmental questions of field crop production			х		2
KA01CYMP005	Environmental questions of animal husbandry			х		2
KA01CYMP006	Nutrient budgets of the farm and development of nutrient management			х		2
KA01CYMP008	Ecology				x	3
KA01CYMP009	Rural water resources management			х		8
KA01CYMP010	The environmment quality systems				x	4
KA01CYMP011	Field course			х		2
KA01CKOT	Animal husbandry	<u> </u>			t	29
KA01CKOT001	Specialising in pic production				x	6
KA01CKOT002	Specialising in cattle production				x	12
KA01CKOT003	Specialising in poultry production				x	6
KA01CKOT004	Other special topics of animal production				x	3
KA01CKOT005	Horse management 1				x	2
KA01CTER	Health care of farm animals				r	20
KA01CTER001	Maintaining animalhealth			х		9
KA01CTER002	Applied microbiology			X	└ ──	2
KA01CTER003	Animal diseases			х		3

KA01CTER004	Use of medicines in veterinary			х		3
KA01CTER005	Planning and management of health care			x		3
KA01CMET	Forestry			-	8	
KA01CMET001	Small/medium –scale wood processing			х		8
KA01CTEK	Agricultural technology				-	25
KA01CTEK001	Technology of crop husbandry			х		4
KA01CTEK002	Basics of farm energy management			х		3
KA01CTEK003	Control engineering of agricultural machines			х		3
KA01CTEK004	Environmental technology of agriculture			х		4
KA01CTEK005	Technology of animal husbandry			х		5
KA01CTEK006	Research and development of agricultural machinery			х		3
KA01CTEK007	Bioenergy			х		3
KA01CRAK	Farm building				-	8
KA01CRAK001	Basics of building construction				x	3
KA01CRAK002	The water supply and sewerage and the waste management				x	3
KA01CRAK003	Plant productions buildings				x	2
KA01CEKO	Agricultural production economics and farm management				-	36
KA01CEKO001	Agricultural production economics			x		6
KA01CEKO002	Financial management and capital budgeting methods in agriculture			x		9
KA01CEKO003	Whole–farm planning			x		15
KA01CEKO008	Agricultural policy			x		6
KA01CEKO007	Computer-aided planning of farm economics				x	5
KA01CLII	Management and development of rural entrepreneurship			T		57
KA01CLII001	Marketing planning and management			х		3
KA01CLII002	Collection and analysis of marketing information			х		3
KA01CLII003	Marketing communication			х		3
KA01CLII005	Double entry bookkeeping by PC				х	3
KA01CLII006	The legislation of a rural enterprise			х		9
KA01CLII007	The quality control of a rural enterprise			х		3
KA01CLII008	The taxation of a rural enterprise			х		6
KA01CLII009	Rural politicsŽsystem			х		2
KA01CLII010	The rural development scene			х		2
KA01CLII011	The know-how of a project work			х		3
KA01CLII012	Leadership			х		6
KA01CLII013	Communication skills				x	3
KA01CALU001	Introduction to Economics and regional sciences				x	6
KA01DEKON10	Marketing of farm products and supplies					2
KA01CLII014	Master Assistant training					3
KA01CMATK	Rural nature-based tourism			T		36
KA01CMATK01	Introduction to tourism			х		4
KA01CMATK02	Rural tourism			х		4
KA01CMATK03	The product development of a small/medium –scale rural tourism enterprise				x	4
KA01CMATK04	The legislation and product safety in rural tourism				х	2

KA01CMATK05	The marketing and distribution channels of a tourism				x	4
KI15CMATK01	Hygiene proficiency and in-house control in tourism business				х	2
KI15CMATK02	Food Experience as Tourist Experience			Х		2
KI15CMATK03	Production of Food Experiences				х	4
KB02CMOEV1	Hiking			Х		3
KB02CMOLL3	Survival skills in forests			Х		3
KB02CLVLM1	Nature tourism			Х		4
KA01CMARA	Rural Landscaping and Construction 30					30
KA01CMARA01	Planning and Landscaping Grounds					5
KA01CMARA02	Computerised Landscaping					5
KA01CMARA03	Construction Sites and Contracting					3
KA01CMARA04	Machines for Landscaping and Maintaining Green Areas					3
KA01CMARA05	Responsible Economic Activities					3
KA01CMARA06	Caring for Nature and the Landscape in the Coutryside					5
KA01CMARA07	The Rural Environment as a Recreation Area					3
KA01CMARA08	Maintaining and Preserving the Landscape, Milieu and Built Environment					3
KA01DVVO	FREE CHOICE STUDIES			15		
KA01CKOT006	Horse management 2				x	2
KA01CEKO006	Regulations concerning farmer and the land use			Х		3
KA01CEJA001	The quality chain of food			Х		9
KA01CATK001	Geographical information system			Х		3
KA01CATK002	Image processing and www-pages			Х		2
KA01CKIE001	Swedish for polytechnic studies	x				3
KA01CKIE002	English for polytechnic studies	x				3
KA01CMAT001	Introduction to mathematics	x				3
KA01CKIE003	English conversation			х		3
KA01CKOT007	Animal husbandry special practicals				х	2
KA01DTIET11	Maatalouden verotuksen ATK– sovellukset				x	2
KA01EH	PRACTICAL TRAINING				50	
KA01EMHARJ	Practical training				30	
KA01EEHARJ	Specialisation practice				20	
KA01FOPNÄYT	T FINAL THESIS				15	

Study Descriptions

BASIC STUDIES, 32 op KA01AYP (study entity)

During the Common Basic Studies, students acquire and develop a 'learning toolbox', which comprises communicative, mathematical and social skills. Students learn to know themselves better and to take care of themselves, both physically and mentally.

Introduction to studies and professional growth, 5 op KA01AAMKAS (study entity)

• Lecturers: Anu Katila, Pia Lahdenmaa, tutor teachers and students, guest speakers

- Objectives: Increase in self-awareness, planning of studies, follow-up and support. Students will have command of various learning techniques and tools needed in time management. They will acquire readiness for professional growth and awareness of basic psychological functions and the general modes of behaviour. Students will understand the status and significance of labour policy as a part of social policy. They will be familiar with the rights and responsibilities of various parties set forth in labour legislation, which will allow them to work in positions of trust in their professional field and provide them with readiness to reinforce security and a positive atmosphere at their workplace. Students will also be familiar with the services offered by employment offices and with unemployment benefits.
- Contents: Part 1: Studying at universities of applied sciences, orientation into Seinäjoki University of Applied Sciences and studies in agriculture, reinforcing self-awareness and the defining of professional goals, career planning, compiling a personal study plan, preparation for the working world and coping at work. Part 2: Psychology: Psychology as a science, e.g. the development of the individual in social interaction, the functions of feeling, will, and thought (emotion, motivation, cognition), learning, mental health, etc. Part 3: Labour policy: Labour market system and collective agreements in agricultural counselling agencies and in the field in general, labour protection, labour policy, applying of r a job.
- Literature/study material: Material compiled by the university of applied sciences and the lecturer.
- Learning methods: Written assignments, group discussions, presentations, lectures. Contact teaching and supervision: 30 %, assignments: 10 %, independent study: 60 %.
- Assessment: Active participation in contact teaching and supervision sessions, completion of written assignments, exam. All parts must be completed successfully to receive a grade for the course.

Studying at polytechnic, 2 op KA01AAMKAS1 (study unit)

Objectives

Students will learn to compile their personal study plan and learn strategies to become better learners.

Content Personal study plan

Literature / Study Material Given material

Learning Methods Group learning, field trips

Assessment Completed study plan and active participation

Psychology, 1 op KA01AAMKAS2 (study unit)

Objectives

Students II broaden their knowledge of human nature and of the principles of behaviour to adapt themselves in various tasks in the field. Students who have completed psychology in upper secondary school may receive full credit for this course.

Content

The course comprises the following topics:

- Psychology's scientific background
- The human being and social interaction
- Role of human being in processing information
- Emotion, motivation and cognition
- Mental health criteria

Literature / Study Material Salo 1997. Psykologian perustieto 1. Teema ja muunnelmia.5.p.Karisto

Learning Methods Lectures, active participation in lessons, written exam/journal

Assessment Lectures, active participation in lessons, written exam/journal

Career planning and employment, 2 op KA01AAMKAS4 (study unit)

Objectives Students will learn to survive in the job market.

Content Curriculum vitae

Literature / Study Material Given material

Learning Methods Case studies

Assessment Active participation and CVs

Health-related sports, labour protection and erconomics, 4 op KA01ATET (study entity)

The purpose of the module is to reinforce students' physical, mental, and social well-being, to teach students about exercises as a way of life and how to promote their health through exercise and to cope at work, and to reinforce their ability to function and occupational safety. Students will be familiar with the factors associated with occupational safety in agriculture and labour protection organisations. They will also acquire a positive attitude toward the development occupational safety.

Health-related sports and erconomics, 3 op KA01ATET01 (study unit)

Lecturers Heli Räty

Objectives

The aim of the course is to improve students' physical, mental and social well-being. The purpose of their exercise program is to imporve and maintain their health, to introduce them to various forms of sport and to provide them with aesthetical experiences.

Content

- Planning a fitness program which improves personal health and assessing how the plan has worked
- Various forms of sport
- Exercises the enhance students' basic condition, mobility and muscle tone
- Indoor and outdoor games
- Music and physical education combined
- Seasonal sports
- Opportunities to do sports in the municipality
- Using one's body at work, movement, lifting, breaks
- Recovery exercise, excersises to relax, significant of rest

Learning Methods

Contact teaching (60 %), assignments (10 %), independent study (30 %). Lectures, individual and group assignments, field trips, trying out various types of sport.

Assessment Approve assignments and exercises

Labour protection, 1 op KA01ATET02 (study unit)

Lecturers

- Heli Räty
- Jaana Petäinen

Objectives

Students will be familiar with issues concerning occupational safety in agriculture and develop a positive attitude toward

developing occupational safety.

Content

- Labour protection administration
- Activities of the labour protection organisation at the workplace and in rural enterprises
- Surveying risks pertaining to occupational safety and working safely

Literature / Study Material Rautiainen R. & Kivikoski T. 1992. Maatilan työturvallisuus. Mela.

Learning Methods

- Contact treaching: 40 %
- Assignments: 30 %
- Independent study: 30 %

Assessment Approved exam and assignments

Methodological studies, 5 op KA01AMEN (study entity)

- Extent: 5 cr, which comprise the following courses: Working and Writing Academically (2 op), Information Acquisition (1 op), and Mathematical Statistics (2 op)
- Objectives: The aim of the Methods Studies Module is to provide students with the knowledge and skills they need for acquiring information and working in an academic manner, as well as for doing their final thesis to complete their degree.

Basics of applied research and documentation, 2 op KA01AMEN001 (study unit)

Lecturers

- Pia Lahdenmaa MA
- Samu Palander PhD (Agr.)

Objectives

Students will learn to solve problems professionally, become familiar with research and thesis writing processes, and possess the knowledge to write in an academic manner and apply that knowledge in their own thesis. They will have command of the principles of writing an academic text and the nature of the writing process.

Content

- Nature ans process of the research process
- Style of a thesis
- Using sources and citation
- Requirements of an academic text
- Significance of language form
- Guidelines for Writing a Thesis

Literature / Study Material

- Hirsjärvi S., Remes P. & Sajavaara P. 2000. Tutki ja kirjoita. Helsinki: Tammi.
- Iisa K., Oittinen H. & Piehl A. 2002. Kielenhuollon käsikirja. Helsinki: Yrityskirjat.

Learning Methods

Lectures, assignments and independent study. Contact teaching: 50 %

Assessment Assignments and test on language form

Information retrieval, 1 op KA01AMEN004 (study unit)

Lecturers Anu Latva–Reinikka, BBA, BSc (Agr.)

Objectives

Upon completion of the course, students will understand the entire process of acquiring information to assist them in determining their need for information, in selecting appropriate sources of information, in acquiring the basic techniques for otaining information, and in evaluating and using the information they have found.

Content

- Library and information services at Seinäjoki UAS
- Field-related information and producers of information
- Databases and how to use them
- Online information acquisition
- Evaluating and using information

Literature / Study Material Material provided by the lecturer.

Learning Methods Lectures and exercises

Assessment Grading based on the assignments: pass/fail

Languages of Instruction Finnish

Further Information Research and development: 1 cr

Statistical mathematics, 2 op KA01AMEN003 (study unit)

Lecturers Ville Vauhkonen, MA

Objectives

Students will be competent in presenting statistical data in an appropriate manner, in calculating necessary parametres, studying and explaining the linear dependency between two variables.

Content

- Theory of statistical mathematics
- Use of SPSS for Windows software

Literature / Study Material Material distributed by lecturer.

Learning Methods Lectures, exercises, independent study. Contact teaching: 50 %

Assessment Assignment

Prerequisites Mathematics(KA01AMAT001)

Languages of Instruction Finnish

Communication studies, 3 op KA01AVIE (study entity)

The aim of the Communications course is to improve and diversify students' written and oral skills in the Finnish language. Students will become familiar with the activities in a work community and be competent in communicating in many ways.

Written communication, 1 op KA01AVIE001 (study unit)

Lecturers Pia Lahdenmaa, MA

Pia Landenmaa, MA

Objectives

Students will develop and diversify their written skills in the Finnish language. They will practise how to express themselves in writing, become more knowledgeable in the norms of the language, and learn about the requirements of an academic text. They will be competent in planning and producing various types of texts for their studies, work and self–expression.

Content

- Process writing
- Academic style
- Types of texts
- Documents
- Using sources

Literature / Study Material

- Repo & Nuutinen 1995. Aikuisten viestintätaito. Otava.
- Additional material provided by the teacher

Learning Methods

- Contact teaching: (60 %)
- Assignments and independent study: (40 %)

Assessment Contact teaching, approved assignments (portfolio)

Organizational communication, 2 op KA01AVIE002 (study unit)

Lecturers To be announced.

Objectives

The aim of the course is to improve and diversify students' communication skills. Students will become familar with the significance of communication as part of the activities in a work community. They will also be familiar with the aims of internal and external communications and know how to apply their skills in communications at the workplace.

Content

- Activities in organisations with regard to communication
- Goals and means of the various sub-sections of communication
- Theory and practices in making notifications
- Writing an article
- Oral presentation
- Oral communication

Literature / Study Material

- Siukosaari. 1999. Yhteisöviestinnän opas. Tietosanoma. OR
- Åberg. 1999 (or later). Viestintä. Tuloksen tekijä. Infoviestintä.
- Material provided by the lecturer.

Learning Methods

- Contact teaching: (60 %)
- Assignments and independent study (40 %)

Assessment

Contact teaching and approved assignments

Language studies, 6 op KA01AKIE (study entity)

Objectives: The aim of language studies is to provide students with the competency to work in their professional field using a foreign language. They will have command of customer–oriented communication. They will be capable of acquiring field–related information and utilising it sa well as developing their expertise. Students will acquire a positive attitude toward learning and a realistic understanding of their language skills, which they have the desire and ability to improve through independent study.

Swedish, 3 op KA01AKIE001 (study unit)

Objectives

Students will be competent in communicating both orally and in writing in Swedish and be able to acquire and utilise field–related information in the Swedish language. They will possess a realistic understanding of their language skills and a positive attitude toward learning Swedish. Upon completion of the course, students will be able to tell about themselves, their education and job experience. They will have knowledge of how to apply for a job in Swedish, know how to tell about their work environment and the surrounding society, communicate in a customer–oriented manner, and use field–related terminology.

Content

- Telling about oneself and one's education
- Applying for a job, interviews and CVs
- Describing one's work environment and duties
- Describing one's profession
- Small-talk, telephone cconversations, meetings, expressing opinions
- Written communication: e-mails, summaries, reports, notices
- Field-related terminology

Literature / Study Material Material distributed by the teacher

Learning Methods

- Oral exercises, such as dialogues, group discussions and presentations
- Written assignments
- Contact teaching: 50 %
- Independent study: 50 %

Assessment

- Active participation in lessons
- Active use of oral skills (presentations and dialogues)
- Completion of written assignments
- Exam
- All parts must be successfully completed to receive a grade for the course

Prerequisites

Students should have command of the linguistic structures of the Swedish language, which will be tested in a preliminary test. Students who pass the test will be accepted into the course. Students who fail the test are required to take the Swedish refresher course.

English, 3 op KA01AKIE002 (study unit)

Lecturers

John Pearce

Objectives

Students will be capable of communicating in English, both orally and in writing, in matters associated with their professional field, studies and leisure time.

- Telling about oneself and one's education
- Job applications, job interviews and curriculum vitae
- Describing one's work environment and duties

- Describing agricultural and farming operations
- Texts associated with the field of agriculture and farming
- Discussion and oral practice
- Written exercises: summaries, reports, abstracts
- Field-related terminology

Literature / Study Material

- Yates 1995, Agriculture. Phoenix.
- Håska 1998, English for you in Agriculture, Forestry and Horticulture. LTS Förlag.
- Promentor 5: English-language computer program
- Lecturer's own material

Learning Methods

Written and oral exercises such as dialogues, group discussions, lectures, written assignments, presentations and computer work. Lectures (50 %), independent study (50 %)

Assessment

Active participation in lectures, active demonstration of both oral and written language skills, completion of all written and spoken assignments and exercises. Word tests and written examination: All parts must be passed to receive a grade for the course. Evaluation is based on a scale of 1 to 5.

Prerequisites

Students should have command of the linguistic structures of the English language, which will be tested in a preliminary test. Students who pass the test will be accepted into the course. Students who fail the test are required to take the English refresher course.

Computer literacy, 3 op KA01AATK001 (study unit)

Lecturers

Marja-Liisa Mäntylä

Objectives

Students will have command of word processing, spreadsheet and graphics programmes. Additionally, they will be familiar with the technical aspects of the computer and operating systems.

Content

- Word processing, spreadsheet and graphics programmes
- Computer components and peripheral devices
- Operating systems

Literature / Study Material

- Hyppönen A., Ojala A. & Joutsi J. 2007. Tietokoneen käyttötaito 1 Office 2007 ohjelmille. Docendo.
- Lammi O. Tietokoneen käyttötaito 2 Office 2007 ohjelmille.
- Teacher's material
- Moodle-verkko-oppimisympäristössä. 2007. Docendo.

Learning Methods

- Lectures: 60 %
- Guided exercises: 25 %
- Independent assignments: 15 %

Assessment

- Active participation in lessons
- Guided exercises
- Approved independent assignments

Further Information Online studies: 1 cr

Mathematics and natural sciences, 6 op KA01AMAT (study entity)

Objectives: The aim of the Mathematics and Natural Sciences course is to provide students with tools to use for problem–solving situations in their future profession, and to prepare them for further studies.

Mathematics, 2 op KA01AMAT001 (study unit)

Lecturers Sarita Ventelä, MA

Objectives

The aim of the course is to enhance students' mathematical skills. Upon completion of the course, students will possess competency in solving algebraic and graphical problems independently, and in calculating the area and volume of 2– and 3–dimensional objects.

Content

- Polynomes
- Ratio and proportion
- Equations and using equations in problem-solving
- Trigonometry
- Calculating area and volume

Literature / Study Material Material provided by the lecturer.

Learning Methods

- Lectures/assignments: 20 % of the assignments must be successfully completed, approved tests (2)
- Contact teaching: 60 %
- Alternative: exam at the beginning of the course in which 50 % of the exam must be passed

Assessment Written exam

Prerequisites

Command of the basics in mathematics, which is tested at the beginning of the course (50 % must be passed)
Students who pass the test are accepted into the course. Those who fail the test are required to take the Basics in Mathematics course

Languages of Instruction Finnish

Natural sciences, 4 op KA01AMAT002 (study unit)

Lecturers

- Ville Vauhkonen, MA (Physics)
- Sarita Ventelä, MA (Chemistry)

Objectives

- Theme 1: Chemistry: Students will acquire knowledge of basic chemistry to utilise in their studies. They will be familiar with basic laboratory equipment. Students will do an assignment in which they determine the phosphorous content and pH of a soil sample. In this way, they will learn to analyse, assess and report about the results they acquire.
- Theme 2: Physics: Students will acquire knowledge of the laws of physics and basic concepts associated with physics, as well as the physical applications significant to agriculture, the environment, energy economy, and labour protection.

Content

• Theme 1: Chemistry: general chemistry, inorganic and organic chemistry, laboratory work.

• Theme 2: Physics: basics laws of physics, common applications for mechanics, thermodynamics and electricity

Literature / Study Material

- Theme 1: Chemistry: Arvonen & Levonen 1999. Ammattikorkeakoulun kemia. Otava. OR Arvonen & Levonen 1985. Opistoasteen kemia. Otava. Material distributed during lessons.
- Theme 2: Physics: Helakorpi, S., Ahoranta, J. 2001. Uusi Omega, Ammatillinen fysiikka. WSOY. Other material provided by the teacher.

Learning Methods

Chemistry and Physics: lectures, assignments, calculations, independent study, contact teaching (50 %)

Assessment

- Chemistry: Final exam/tests, approved exercises (20 % minimum), laboratory work (pass/fail)
- Physics: Final exam/tests (NB! Both tests must receive a passing grade), approved exercises (20 % minimum), laboratory work (pass/fail)

Languages of Instruction Finnish

Further Information Research and development: 1 cr

COMMON PROFESSIONAL STUDIES, 78 op KA01BYA (study entity)

Basic Professional Studies provides students with the basic knowledge and skills they need as agrologists. Upon completion of the studies, students will be familiar with farming and the work associated with it. They will know how to cultivate fields in an appropriate way and to take care of the health and well–being of farm animals. Students will be competent in using farm equipment and machinery safely, and understand how to use the forest in a sustainable way. They will be familiar with rural networks, rural policy, rural entrepreneurship and areas of business. Students will be aware of the impact their activities have on the environment as well as the interaction betweeb a rural enterprise and the environment. The Basic Professional Studies are take place during the first and second years of study.

Crop production, 12 op KA01BKAS (study entity)

- Extent: 12 cr, which comprise the following courses: Orientation into Plant Production (1 cr), Plant Biology (2 cr), Soil and Meteorology (2 cr), Fertilization and Soil Preparation (2 cr), Cultivating Field Plants (3 cr), Basics in Plant Protection (2 cr).
- Objectives: The aim of the studies in Plant Production is to teach students basic plant biology, the impacts of soil properties and climate on the growth and well-being of plants, as well as the more common cropping methods.

Orientation of crop husbandry, 1 op KA01BKAS001 (study unit)

Lecturers

- Leena Riikonen, MSc (Agr. & For.)
- Horticulturist Senja Arkko

Objectives

Students will be familiar with the techniques for cultivating the more significant field plants, the activities of the school's farm and the equipment used in cultivating land.

Content

- Crop production on the school farm
- Soil samples
- Biology of weeds and identifying them
- Cultivation techniques for field plants

Literature / Study Material

- Hyytiäinen, Hedman–Partanen & Hiltunen 1995. Kasvintuotanto 2. Kirjayhtymä.
- Other material will be announced later.

Learning Methods Lectures (20 %), practical work (55 %), approved assignment and exam (25 %)

Assessment

- Practical work: active participation
- Approved assignment
- Exam

Plant biology, 2 op KA01BKAS002 (study unit)

Lecturers

Horticulturist Senja Arkko

Objectives

Students will be familiar with the internal and external structure of plants. In addition, they will understand the phase of physiological growth and be able to utilise the information in practice. Students will recognize the most common weeds and forest plants in Finland.

Content

- How plants grow
- Plant anatomy
- Plant physiology: water, nutrition, and energy
- Plant reproduction
- Plant identification

Literature / Study Material

- Pankakoski A. 1999 (8th or 9th edition). Puutarhurin kasvioppi. Oy Edita Ab.
- Handouts

Learning Methods

- Contact teaching: 40 %
- Independent study: 60 %

Assessment

- Active participation in lectures
- Active participation in laboratory work
- Approved exams/possible plant book

Soils and meteorology, 2 op KA01BKAS003 (study unit)

Lecturers Heikki Harmanen, LSc (Agr. & For.)

Objectives

Student will acquire basic knowledge of soil formation and identify types of soils and their physical properties, and their relationship to farming. They will be familiar with the basic concepts associated with meteorology, the factors affecting various weather-related phenomena, and the features of Finland's climate. They will understand the impacts of the meso- and micro-climates, and be capable of utilising the weather service for farming. They will also know how to utilise field-related research.

- Soil formation
- Types of soils and their characteristics
- Minerals and secondary minerals
- Soil organic matter
- Weather observations
- Climate zones and Finland's climate
- Meso- and micro-climates
- Weather services for farming

Literature / Study Material

- Heinonen et al. (eds.). (editions 1992-2001). Maa, viljely ja ympäristö. (appl. parts). WSOY.
- Saavalainen (ed.). 1981. Salaojittajan käsikirja, osa 1a. Suomen olosuhteet kuivatusta silmällä pitäen.
- Salojituksenkannatusyhdistys.
- Elomaa et al. 1988. Sää ja maatalous. Maaseutukeskusten liitto.

Learning Methods

Lectures (45 %), assignments (10 %), distance learning and independent study (45 %), which are associated with the course contents and information students have acquired on a given topic, practical problem–solving, and an exam.

Assessment

Exam (50 %) and assignments (50 %)

Fertilization and soil cultivation, 2 op KA01BKAS004 (study unit)

Lecturers

- Juhani Suojaranta, MSc (Agr. & For.)
- Jussi Esala, MSc (Agr. & For.)

Objectives

Students will understand how nutrients behave in soil, plants and also with regard to the fertilization of plants. In addition, they will be familiar with the methods and requirements for spreading lime and fertilizing soil, and be able to make plans for fertilization. Students will also understand the purposes for ploughing various soils and be familiar with the methods used in cultivating.

Content

- · Growth factors as regards fertilization
- Fertilizers
- Sustainable fertilization
- Cattle manure and other organic fertilizers
- Principles and aims of soil preparation
- Soil preparation techniques

Literature / Study Material

- Heinonen et al. (eds.). 1992. Maa, viljely ja ympäristö. WSOY.
- Kalkitusopas. Kalkitusyhdistys.
- Alakukku et al. 2002. Maan rakenteen hoito. Tieto tuottamaan 98. Maaseutukeskusten liitto.
- Kasvukirja 200X. Kemira.
- Articles distributed by the teacher

Learning Methods Lectures (50 %), assignment (20 %), and written examination (30 %)

Assessment

- Lectures
- Approved assignment
- Examination

Field crop production, 3 op KA01BKAS005 (study unit)

Lecturers

- Heikki Koskimies, MSc (Agr. & For.)
- Heikki Harmanen, LSc (Agr. & For.)
- Jussi Esala, LSc (Agr. & For.) / Juhani Törmä, MSc (Agr. & For.)

Objectives

Students will be familiar with the phases of development of field plants, cultivation techniques, and the factors influencing the quality and quantity of the harvest. They will kow how to use the equipment used in harvesting and in processing the harvest. They will be competent in making a scheme for cultivation, in making analyses for quality, and they will understand the significance of factors in quality.
Content

- Principles of the production of cereals and phases in development
- Cultivation techniques for field plants: cereals, rape-seed, peas, grasses
- Analyses for determining the quality of cereals
- Computer-aided cultivation scheme
- Machines used in harvesting and processing cereals

Literature / Study Material

- Hyytiäinen et al. 1995. Kasvintuotanto 2. Kirjayhtymä.
- Esala et al. 1989. Leipäviljan tuotanto. Tieto tuottamaan 53. Maaseutukeskusten liitto.
- Ansalehto et al. 1999. Laatuviljan tuotanto. Tieto tuottamaan 80. Maaseutukeskusten liitto
- Ruis 2005. Kansallinen ruisohjelma. 1998. MMM.
- Hakkola et al. 1998. Nurmenviljely. Tieto tuottamaan 77. Maaseutukeskusten liitto.
- Herneen tuotanto. 1993. Maaseutukeskusten liiton julkaisuja 860.
- Franssila et al. 2001. Öljykasvinviljelijän opas. MMM.
- Aikasalo et al. 2000. Ohrasta oluen synty. Käsikirja mallasohran tuottajille. MTK.
- Riesinger P. 2006. Grunder för ekologisk växtodling. Del IV, Växtodling och förädling av foder.

Learning Methods

Contact teaching (75 %), approved assignments and exam (25 %)

Assessment

- Classroom teaching: active particiaption
- Exercises: active participation and successful completion
- Approved assignments and exam

Prerequisites

Orientation into Plant Production

Basics of plant production, 2 op KA01BKAS006 (study unit)

Lecturers

- Leena Riikonen, MSc (Agr. & For.)
- Jussi Esala, LSc (Agr. & For.)

Objectives

Students will be competent in classifying weeds and identifying the most important weeds as seedlings, as well as the most common plant diseases and noxious insects. They will be familiar with various methods of weed prevention and be able to plan plant protection, taking into consideration the economical and environmental aspects of it. Student will also know the impact of herbicides on nature and on health.

Content

- Classification of weeds
- Non-chemical methods for preventing the growth of weeds
- Herbicides, how they work and how to use them
- Prevention of problem weeds
- Growth regulators
- Plant protection plan, plant protection techniques
- Impact of pesticides on nature and health
- Familiarisation with the more common diseases and noxious insects

Literature / Study Material

- Mäki-Valkama (ed.). 2005. Ajankohtaisia kasvinsuojeluohjeita. 14th or 15 edition. Kasvinsuojeluseura.
- Erkamo. 2001. Rikkakasviopas. Kasvinsuojeluseura.
- Hannukkala et al. 1999. Luomupellon kasvinsuojelu. Tieto tuottamaan 84. Gummerrus.
- Pesticide guides

Learning Methods

Lectures (50 %), approved assignment (20 %) and written exam (30 %)

Assessment

- Lectures: active participation
- Approved assignment
- Exam

Further Information Research and development: 1 cr

Animal husbandry, 14 op KA01BKOT (study entity)

- Extent: 14 cr, which comprises the following courses: Basic Knowledge and Skills in Animal Husbandry (4 cr), Biological Foundations of Animal Husbandry (2 cr), Environment, Behaviour and Welfare of Domestic Animals (2 cr), Basics in Nutrition and Feed (2 cr), Cattle Husbandry (2 cr), Pig Husbandry (2 cr).
- Objectives: The aim of the study module in Animal Husbandry is to become familiar with the caring, feeding, breeding and health care of farm animals. In addition to the economy of production, major topics include the welfare of animals, environmental topics and the demands of consumers.

Introduction to animal husbandry – basic knowledge and skills, 4 op KA01BKOT001 (study unit)

Lecturers

Teija Rönkä, MSc (Agr. & For.)

Objectives

Students will be aware of the significance and principles of domestic livestock husbandry and know how to care for and feed common domestic animals. The will be capable of monitoring the health of livestock and the phases of their reproduction cycle. Students will be familiar with legislative policies pertaining to the marking and registration of animals. They will be competent in keeping track of their medication and other aspects of the animals for production monitoring and quality systems. Students will also know how to ensure the hygienic quality of products and to prevent diseases from spreading.

Content

- Common farm animals and breeds
- Reproduction cycles
- Animal identification and registration
- Animal health examinations
- Handling animals
- Medicating animals
- Identifying various types of feed and feeding animals
- Production hygiene
- Milking

Literature / Study Material Hand–outs and other material distributed by lecturer.

Learning Methods

Lectures involving the entire class (25 %), practical training on the school's farm (50 %), independent studying (25 %)

Assessment Active participation, written assignments, and written exam

Biological principles of animal production, 2 op KA01BKOT002 (study unit)

Lecturers Samu Palander, PhD (Agr.)

Samu Palander, PhD (Agr.)

Objectives Students will become familiar with the biology of farm animals and apply this knowledge in further studies.

- Basics of cell biology and
- Anatomy
- Physiology
- Genetics

Literature / Study Material

• Lecture notes

In addition, the following is recommended:

• Happonen P., Holopainen M., Sotkas P., Tenhunen A., Tihtarinen–Ulmanen M. & Venäläinen J. 2005. BIOS 2 Solu ja perinnöllisyys and BIOS 4 Ihmisen biologia. WSOY: Porvoo.

Learning Methods Lectures, assignments, independent study: contact teaching (60 %)

Assessment Written exam

Animal housing, behaviour and welfare, 2 op KA01BKOT003 (study unit)

Lecturers Samu Palander, PhD (Agr.)

Objectives

Students will acquire basic knowledge of how the environment affects the behaviour, welfare, health and production of farm animals.

Content

- Factors associated with the production environment
- Animal behaviour
- Assessing animal welfare
- Legislation and instructions pertaining to animal protection
- Types of production buildings

Literature / Study Material

- Yliaho M. & Teräväinen H. (eds.). 2002. Nauta- ja sikatilan olosuhdeopas. Tieto tuottamaan 97. Maaseutukeskusten liitto.
- Related animal protection legislation
- Lecture notes

Learning Methods Lectures, groupwork, active participation and discussion: contact teaching (50 %)

Assessment Written examination and groupwork

Basics of animal nutrition and feeding, 2 op KA01BKOT004 (study unit)

Lecturers Samu Palander, PhD (Agr.)

Objectives

Students will understand the basic concepts associated with digestion and nutrition, and they will be familiar with feed charts. The knowledge the students acquire in this course provides a foundation for further studies.

Content

- Nutrients and the composition of feed
- Feed values
- Digestion
- Using nutritive substances

Literature / Study Material

- Näsi M. MMKEL 1 Kotieläintuotannon perusteet. Kotieläinten ravitsemuksen ja hoidon perusteet. Lecture hand-out, Part I.
- Feed charts and recommendations. Online publication. Available: www.agronet.fi/rehutaulukot

• Lecture notes

Learning Methods

Lectures, exercises: contact teaching (60 %)

Assessment Written examination

Prerequisites Biological Foundations of Animal Husbandry

Cattle production, 2 op KA01BKOT005 (study unit)

Lecturers Kimmo Nissinen, MSc (Agr. & For.)

Objectives

Students will understand the principles of milk and beef production.

Content

- Annual cycle of cows
- Milking
 - · Composition and quality of milk
 - Feeding
 - Feeding schemes
 - Caring for and feeding young cattle
 - Monitoring cattle
 - Breeding
 - Common cattle diseases

Literature / Study Material

- Aspila et al. 2001. Lypsylehmän ruokinta. 5th edition. Maaseutukeskusten liitto.
- Maitotilan laatukäsikirja or Suomalaista laatumaitoa 1994. Alfa Laval Agri Scandinavia.
- Aho. 2003. Vasikoiden hoito-opas. Valio.
- Juga et al. 1999. Kotieläinjalostus. Suomen kotieläinjalostusosuuskunta. Helsinki.
- Rautala 1996. Tavoitteena terve karja. Suomen kotieläinjalostusosuuskunta.

Learning Methods Lectures, calculations: contact teaching (60 %)

Assessment Written exam

Prerequisites

- Basic Knowledge and Skills in Animal Husbandry (KA01BKOT001)
- Biological Foundations of Animal Husbandry (KA01BKOT002)
- Environment, Behaviour and Welfare of Domestic Animals (KA01BKOT003)
- Basics in Nutrition and Feed (KA01BKOT004)

Pig production, 2 op KA01BKOT006 (study unit)

Lecturers Samu Palander, PhD (Agr.)

Objectives

Students will be familiar with the nutrition, feeding, care, breeding, and health care involved in the production of pork and pig husbandry. They will also be familiar with issues pertaining to quality in efficient, environmentally sustainable production.

- Structure and significance of pig husbandry
- Nutrition, production, care and feeding alternatives for pigs

- Basic issues in pig husbandry
- Breeding pigs in Finland
- Preventive health care and common diseases

Literature / Study Material

- Siljander–Rasi H., Nopanen A. & Helin J. (eds.). 1999. Sian ruokinta ja hoito. Tieto tuottamaan 114. Pro Agria MKL and MTT, Gummerus: Jyväskylä. 93 pages.
- Rautala H. (ed.). 1999. Sikalan eläinlääkärikirja. SKJO, Gummerus: Jyväskylä. 208 pages (appl. parts).
- Lecture notes

Learning Methods

Lectures, discussions, independent study: contact teaching (60 %)

Assessment

Written examination

Prerequisites

- Basic Knowledge and Skills in Animal Husbandry (KA01BKOT001)
- Biological Foundations of Animal Husbandry (KA01BKOT002)
- Environment, Behaviour and Welfare of Domestic Animals (KA01BKOT003)
- Basics in Nutrition and Feed (KA01BKOT004)

Environmental information systems, 3 op KA01BYMP (study entity)

Lecturer: Horticulturist Senja Arkko Objectives: Students will be aware of the common environmental problems around the world and the particular problems of their professional field. They will be competent in preventing the development of those problems and in rectifying existing damage. Students will be familiar with field–related administration and legislation, and they will have command of the principles associated with sustainable development and apply them both in their profession and in their free time. Students will understand the diversity of nature and be able to identify biotopes and know how to take care of them. Contents

- World-wide environmental problems and their impact on agriculture and forestry
- Administration and legislation of environmental protection
- Principles of sustainable development
- Field-related environmental problems
- State of the environment in Finland
- Biotopes and taking care of them
- Taking care of the built landscape, environmental protection

Literature/study material:

- Jaana Gustafson & Eeva Nuotio (eds.). 1998. Ympäristön ehdoilla? Maaseudun mahdollisuudet ja haasteet. Turun yliopiston täydennyskeskuksen julkaisuja A: 63.
- Harri Hakala & Jari Välimäki. 2003. Ympäristön tila ja suojelu Suomessa. Gaudeamus.
- Juha Tiainen, Mikko Kuussaari, Ilkka P. Laurila, Tuuli Toivonen (eds.). 2004. Elämää pellossa. Suomen maatalousympäristön monimuotoisuus. Edita.
- Online study

Learning methods

- Contact teaching: (40 %)
- Independent study (60 %)

Arviointi

- Lectures: active participation
- Presentations: active participation
- Approved completion of assignment

Private forestry, 6 op KA01BMET (study entity)

Objectives: Students will be aware of the significance of the forest in the environmental, national and farming economies. They will learn basic knowledge of the biological, technical, and social factors associated with forestry. Students will also possess basic skills in forestry work.

Silviculture, 3 op KA01BMET001 (study unit)

Lecturers

Hannu Humalamäki and Juha Tiainen

Objectives

Students will be familiar with the biological, technical and economical principles of forestry and know how to independently perform forestry and logging work.

Content

- Multi–goal use of the forest
- Forestry and manual logging work
- Impact of the soil and climate on the growth of forests
- Biological characteristics of various tree species and their care
- Methods for growing and renewing forests and how to apply them

Literature / Study Material

- Tapion Taskukirja. 24th edition. Metsälehti 2002.
- Online study

Learning Methods

Lectures (30 %), practical work assignments (30 %), approved exercises (30 %) and exam (10 %).

Assessment

- Active participation in lectures and practical work
- Approved exercises
- Exam

Further Information Research and development: 1 cr

Forest management, 3 op KA01BMET002 (study unit)

Lecturers Juha Tiainen

Objectives

Students will be familiar with the more common methods of forest surveying and know how to systematically utilise forestry data in decision-making situations.

Content

- · Concepts and methods of forest surveying
- Compiling forestry schemes and utilising schemes in forestry
- Forestry budgeting

Literature / Study Material

- Tapion Taskukirja. 2002. 24th edition.
- Online learning
- Learning Methods
 - Lectures (30 %)
 - Practical work assignments (30 %)
 - Approved exercises (40 %)

Assessment

- Active participation on lectures and practical work
- Approved exercises

Further Information Online studies: 1 cr

Agricultural technology, 11 op KA01BTEK (study entity)

Students will be competent in safely using the more common farm machinery and equipment and know how to plan and carry out maintenance. Students will be familiar with the technology in farm machinery and equipment and understand the significance of agricultural technology in farming. They will have basic knowledge of how to work with metal. Students will also be aware of farm work as a whole, as a chain of work.

Use and maintenance of farming machines, 4 op KA01BTEK001 (study unit)

Lecturers

- Paavo Juutila
- Jouni Korhonen
- Juha Ketola
- Jussi Esala

Objectives

Students will be able to connect different machines and trailers to a tractor and use them correctly being aware of safety regulations. They will be familiar with the dangers of working with various machines and the traffic regulations associated with them. Students will know how to prepare in advance for periodic servicing and other maintenance of machines, as well as to service machines properly. They will be aware of issues pertaining to waste management. Students will also gain knowledge about fuels and lubricants and know how to use them properly.

Content

- Using tractors and the machines connected to them
- Using a tractor and trailer
- Work safety
- Knowledge and skills in maintenance of farm machinery
- Traffic legislation and farm machinery
- Fuels and lubricants
- Basics in welding
- Basics in working with metal

Literature / Study Material

To be announced at the beginning of course.

Learning Methods

- Lectures (60 %)
- Assignment and other independent study (40 %)

Assessment

Active participation in exercises and approved assignments and exam.

Fundamentals of agricultural technology, 7 op KA01BTEK002 (study unit)

Lecturers

Jussi Esala, LSc (Agr. & For.)

Objectives

Students will acquire basic knowledge of motors, transmissions, hydraulics, electrical equipment and control units used in agricultural machines. They will be familiar with the electrotechnology in vehicles, the basic features of various controls, and be introduced to ergonomics. Students will also be competent in determining the necessary size of machines and tractor for doing field work.

- Basic structure of motors for tractors and machinery
- Transmissions
- Hydraulics
- Control units

- Electrotechnology in vehicles
- Machanisation schemes
- Work standards
- Calculations with the TTS-kone computer programme

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Contact teaching (50 %)
- Assignment and other independent study (50 %)

Assessment

Active participation in the lessons and completion of the assignment and exam

Basics of farm building, 6 op KA01BRAK (study entity)

- Credits: 6 cr, which comprise the following courses: Construction on a Farm (4 cr), Renovating Buildings (2 cr).
- Objectives: Students will be introduced to the construction of buildings on a farm, the construction process, the renovation of existing buildings, as well as the cost estimation and schedules for construction projects.

Contracting, 4 op KA01BRAK001 (study unit)

Lecturers

Construction Engineer Tiina Haapasaari

Objectives

Students will acquire the skills needed to work as a builder in construction projects on farms. They will be familiar with the regulations and guidelines concerning construction and the impact zoning has on construction. Students will know how to apply for permits and the main principles of designing farm buildings. They will be familiar with the costs involved in renovating farm buildings and know how to estimate costs and schedules based on drafts.

Content

- Quality farm construction
- Construction-related permits and applying for them
- Contracting parties in a construction project, phases in a construction project
- Impact of zoning on construction
- Making offers, types of contracting and contracting agreement
- Designing farm buildings
- Regulations and guidelines associated with farm construction
- Filling out applications for financing, making cost estimations, calculating labour input, and making a general schedule

Literature / Study Material

- Lecture hand-outs
- Land Use and Building Act + amendment
- Building regulations
- Maatilarakennusten suunnitteluohjeet (RT MTH-20919)
- Maaseuturakennusten taloudelliset rakenteet (RT MTH-20921 MRO F1)
- Cost calculation programme by the Ministry of Agriculture and Forestry
- Programme for making schedules
- Mäki et al. 2004 (or newer). Ratu aikataulukirja. Rakennustieto.

Learning Methods Contact lessons (60 %), assignments and independent study

Assessment Assignments

Repair of buildings, 2 op KA01BRAK002 (study unit)

Lecturers

Construction Engineer Tiina Haapasaari

Objectives

Students shall be introduced to the heritage and types of agricultural buildings, as well as how to maintenance them. They will be familiar with the structures of buildings, materials and construction methods such that they understand how to combine today's building regulations and the heritage of old buildings. Students will be competent in choosing appropriate methods for renovating buildings.

Content

- Rural building heritage
- Building conservation
- Work safety
- Renovating farm buildings damaged by moisture and decay
- Foundations, outdoor walls, intermediate floors, roof structures, indoor structures

Literature / Study Material

- Lecture hand–outs
- Kaivonen J. 2002. Rakennusten korjaustekniikka ja talous. Rakennustieto.
- Jormalainen P. 1999. Korjausrakennustyöt. Opetushallitus, RAK.
- Other material distributed by the teacher

Learning Methods

Contact teaching (60 %), assignments, independent study

Assessment Written exam

Agricultural economics, 11 op KA01BBEK (study entity)

- Credits: 11 cr, which comprise the following courses: Foundations in Agricultural Economics (5 cr), Taxation and Farms (3 cr), Foundations of Farm Production (3 cr).
- Objectives: Students will gain the knowledge and skills needed in managing an agricultural enterprise. They will be competent in filling out tax forms for farms and, reading field-related literature, and interpreting profitability acounting.

Basic principles of farm economics, 5 op KA01BEKO001 (study unit)

Lecturers Eliisa Kallio and Jyrki Rajakorpi

Objectives

Students will understand economic concepts and policies associated with agriculture as well as the principles of calculating costs, profit and profitability. They will be competent in obtaining and utilising information based on feasibility studies. Students will also become familiar with the working environment of an agrucultural entrepreneur and the changes therein, as well as with the administrative aspects of agriculture and professional and commercial organisation of the field. They will also be introduced to the main concepts of agricultural policies in the EU.

- Economic concepts associated with agriculture
- Calculating costs, profit and profitability
- Managing a business
- Information acquisition
- Profitability accounting and parametres
- Principles of agricultural policies
- Significance of agriculture in society
- Components of agricultural policies
- WTO negotiations
- Agricultural policies in the EU

Literature / Study Material

- http://www.mtt.fi/mttl/kirjanpitotilat.html.
- Karhula, Ylätalo, Ryhänen & Latukka 2002. Maitotilojen taloudellinen tulos ja kannattavuus 2000–2010. Dept. of economics: University of Helsinki. Publication 37: pp. 157–166.
- Kola, J. 2003. Maatalouspolitiikan perusteet. MPOL 1. Dept. of economics: University of Helsinki.
- Lecture notes and other material provided by lecturer.

Learning Methods

ontact teaching (50 %) and independent study (50 %)

Assessment

- Active participation in lectures
- Approved assignments and exams

Tax management of the farm, 3 op KA01BEKO002 (study unit)

Lecturers

Eliisa Kallio and Juha Tiainen

Objectives

Students will familiarise themselves with the regulations set forth in the Income Tax Act and the accounting and planning involved in taxation. Students will understand the significance of planning taxation in the fields of agriculture and forestry, and they will be competent in filling out tax forms pertaining to forestry operations.

Content

- Acts and regulations pertaining to taxation in agriculture
- Tax accounting, filling out tax forms and VAT forms in the field of forestry based on a given example
- Making appeals pertaining to taxation
- Planning taxation for farm operations

Literature / Study Material

- Taxation in agriculture
- Instructions for filling out tax forms (latest edition).
- Tax administration publication 53.03 at http://www.vero.fi
- Accounting book
- Tax forms
- Tapion taskukirja 2002
- Lecture notes and other material provided by the lecturer

Learning Methods

- Contact teaching (50 %)
- Independent study (50 %)

Assessment

- Active participation in lectures
- Taxation calculations
- Approved assignments and exam

Applied production analysis, 3 op KA01BEKO003 (study unit)

Lecturers Jyrki Rajakorpi

Objectives

Students will be familair with operations management, and they will be competent in applying their knowledge and skills in managing crops and animal husbandry economically. They will have knowledge of the factors affecting the profitability of growing crops and animal husbandry.

- Basics of operations management
- Economics associated with growing crops
- · Economics associated with milk and beef production
- · Economics associated with pork production
- Economics associated with poultry and egg production
- Economical issues associated with engineering and work

Literature / Study Material

- Ryhänen, Sipiläinen & Latukka 2003. Maatalousyrityksen tuotannon suunnittelu ja kehittäminen. University of Helsinki: Dept. of Economics and Management. Teaching material: 13–53.
- Kay & Edwards 2004. Farm management. McGraw-Hill: Boston. pp. 97-146.
- Turkki 2003. Tuotantoekonomia. University of Helsinki: Dept. of Économics and Management. Leaflet series 4. 2nd edition. pp. 10–109. http://www.mtt.fi/tutkimus/talous/kirjanpitotilat1.html
- Other material distributed in the lectures

Learning Methods

- Contact teaching (50 %)
- Independent study (50 %)

Assessment

- Students will be able to achieve a grade of 1 or 2 if they are familiar with the phenomena discussed in the course and their command of the practical applications is at a satisfactory level.
- Students will be able to achieve a grade of 3 if they are familiar with the phenomena discussed in the course, are able to describe those phenomena well and they have good command of the practical applications. Their advanced understanding of the phenomena should be at a satisfactory level.
- Students will be able to achieve a grade of 4 or 5 if they are familiar with the phenomena discussed in the course and are able to describe them. They should have excellent command of the practical applications and have an advanced understanding of the phenomena. Additionally, they should be able to examine the phenomenon in question from various viewpoints and in several different environments.
- Exam: 60 %, essay: 20% and introduction: 20 %

Business economics and marketing, 9 op KA01BLII (study entity)

The aim of the Business Economics Module is to prepare students for a career in entrepreneurship, or to work within the operations and development of enterprises.

Introduction to bookkeeping, 3 op KA01BLII001 (study unit)

Objectives

Student will have command of double–entry, performance–based bookkeeping as well as the structure and content of financial statements. They will also have command of single–entry bookkeeping and compiling financial statements based on it.

Content

- Accounting Act
- Logic behind double-entry bookkeeping
- Performance-based bookkeeping
- Structure of financial statements for a business
- Techniques for making simple entries in double-entry bookkeeping

Literature / Study Material Material provided by the lecturer.

Learning Methods Lectures and assignments

Assessment Examination, which involves a small-scale bookkeeping problem.

New venture strategies in rural small business, 3 op KA01BLII002 (study unit)

Objectives

Students will be competent in making a business plan and necessary calculations for a new small company. They will be capable of choosing an appropriate type of company and understand how the various types of companies are established.

Content

- Working as an entrepreneur and the impact of the entrepreneur's personality on business operations
- Structure and content of a business plan
- Operations in the markets
- Calculating the break-even point
- Profit and financial planning
- Various types of companies and choosing the appropriate one
- Establishing a company

Literature / Study Material

- Erkki Laitila: Ideasta toimivaan yritykseen (www. yrittajakoulu.com)
- Other material provided by the lecturer
- Guidebooks for establishing a company (Employment and Economic Development Centre or other) as indicated by the lecturer

Learning Methods Lectures and assignments

Assessment Examination

Introduction to marketing, 3 op KA01BLII003 (study unit)

Lecturers

Anu Katila

Objectives

Students will understand the significance of comprehensive marketing and be familiar with the basic concepts and competitive tools.

Content

- Significance and purposes of marketing
- Adopting a marketing-based way of thinking
- Competitive tools in marketing

Literature / Study Material

• Lahtinen ja Isoviita. 2001. Asiakaspalvelun ja markkinoinnin perusteet. Avaintulos. – Other material distributed by the lecturer

Learning Methods

Lectures, group work, independent study, and possibile field trip

Assessment Active participation in contact teaching, assignments and an exam

Further Information Research and development: 1 cr

Basics of development of rural areas, 6 op KA01BKEH (study entity)

• Ojectives: Students will be familiar with the various types of rural communities as places to live and practise business. They will understand the principles associated with rural policies and programmatic development work, and they will be familiar with rural advisory boards and developmental organisations and their duties. Students will also be familiar with various types of and procedures for negotiations. They will be competent in enhancing interaction between people, understand the various values, attitudes and behaviour of individuals and

the psychological foundations associated with them. Students will be competent in using conference and negotiation technology and be able to manage various meetings and negotiations, as well as to effectively present their opinions and arguments in negotiations and meetings.

Basics of rural extension and project work, 3 op KA01BKEH001 (study unit)

Lecturers

Agrologist Juhani Suojaranta

Objectives

Students will be familiar with various types of rural communities as places to live and do business. They will understand rural policies and programmatic development work. Students will also learn about organizations that develop rural areas and offer consultation. They will be familiar with various types and procedures of consultation and know how to evaluate the outcome of it.

Content

- Types of rural communities as places to live and work
- Programmatic development work and the principles of rural policies
- Organisations involved in consultation and development of rural areas
- Various types and procedures of consulation, as well as client groups
- Evaluating the outcome of consultation work

Literature / Study Material Material provided by the lecturer.

Learning Methods

- Contact teaching (50 %)
- Assignments and field trips (20 %)
- Independent study (30 %)

Assessment

Participation in lectures and field trips, and an exam.

The techniques of negotiation and meetings and the psychology of customer service, 3 op KA01BKEH002 (study unit)

Lecturers

- Theme 1: Negotiations and Conference Technology / Agronomist Juhani Suojaranta
- Theme 2: Psychology of Service / Pia Lahdenmaa, MA

Objectives

- Theme 1: Negotiations and Conference Technology: Students will be competent in managing various conferences and negotiations. They will be familiar with the various essentials of conferences and negotiations, as well as the principles of how organisations work.
- Theme 2: Psychology of Service: Students will deepen their knowledge of human nature and acquire a more advanced knowledge of the basic laws governing human behaviour. They will become familiar with the factors affecting attitudes and motivation, as well as those associated with work psychology. Students will be competent in applying their knowledge in their future profession and various customer service situations.

Content

- Theme 1: Negotiations and Conference Technology working in organisations, duties of conference participants, addressing conference participants, voting, elections, aims and tactics of negotiations, interaction during negotiations, and follow–up.
- Theme 2: Psychology of Service analysis of human behaviour espercially from the point of view of the service sector and familiarisation with the following topics: psychology of customer service, a person's individuality and personality, behaviour and motivation, coping at work, and occupational well-being.

Literature / Study Material

- Theme 1: Negotiations and Conference Technology lecture material.
- Theme 2: Psychology of Service material provided by the lecturer.

Learning Methods

- Theme 1: Negotiations and Conference Technology contact teaching (30 %), assignments (30 %), independent study (40 %).
- Theme 2: Psychology of Service contact teaching (60 %), assignments and independent study (40 %).

Assessment

- Theme 1: Negotiations and Conference Technology participation in contact teaching and assignments
- Theme 2: Psychology of Service participation in contact teaching, approved assignments and exam.

THE GROWING SEASON, 10 op KA01BKASVUK (study entity)

- Lecturers: Senja Arkko, Heikki Harmanen, Hannu Humalamäki, Heikki Koskimies, Leena Riikonen, Juha Tiainen, Anna Tall, Jussi Esala and guest lecturers
- Objectives: Students will observe what happens in the fields, garden and forest during the growing season. They will learn to identify the developmental stages of plants, the need for plant protection, sa well as valuable natural areas. Students will be aware of the factors that influence harvest and the quality of harvests, as well as those influencing the growth of forests. They will know how to assess the quality of work in various stages of cultivation and the factors affecting it. Students will also be familiar with the central stages in testing sprayers.
- Contents: Species of plants for field and garden cultivation, sample garden, weeds, diseases, and plant pests, need for plant protection, caring for valuable natural areas, forestry skills, landscape designing, familiarisation with research activities, evaluation of cultivation, testing sprayers, field trips to companies in the field of farming equipment and the forestry industry.
- Literature/study material: Mäki–Valkama (toim.) 2005. Ajankohtaisia kasvinsuojeluohjeita. Kasvinsuojeluseura, Erkamo 2001. Rikkakasviopas. Kasvinsuojeluseura. Värikuvakasviot, Tapion Taskukirja. 2002, other material provided by the teacher
- Learning methods: Lectures and guided exercises (80 %), independent study (20 %)
- Assessment: 1. Active participation, 2. Continuous assessment, 3. Reports

ALTERNATIVE PROFESSIONAL STUDIES, 40 op KA01CVA (study entity)

Optional Professional Studies allow students to deepen and/or expand their professional knowledge. Students must choose optional professional courses or modules amounting to 40 credits from the selection offered. Students usually complete their chosen optional courses during their third and fourth years of study.

Crop production, 27 op KA01CKAS (study entity)

- Students can combine courses in the Plant Production Module that will provide them with sufficient knowledge and skills to cultivate crops or work in jobs involving consultation in plant production, research, or as a field-related official. The Plant Production Module comprises professional studies (12 cr), which are compulsory for everyone and which are completed during students' first and second years of study, and optional professional courses, 17 credits of which are determined in advance. The total number of credits for the optional professional courses should be at least 25. The topic of students' final thesis should be associated with plant production. Students are encouraged to choose their place of internship for specialisation where they are able to begin their thesis work.
- Credits: 25, which comprise the following courses: compulsoty studies (17 cr) include Water Systems for Fields (2 cr), ereal Production and Seed Maintenance (3 cr), Planning Cultivation (3 cr), Field Crop Diseases and Pests (3 cr), Foundations of Organically Grown Plants (3 cr), Outdoor Gardening (3 cr). Optional courses (8 cr) include Cultivation of Grassland Areas (3 cr), Potato Production (3 cr), Rare Field Crops (2 cr), Living Land (2 cr), Cultivation Systems (2 cr), Plant Production Facilities (2 cr).
- Objectives: The Module deepens students' overall knowledge of plant production on a farm.

Field drainage and irrigation, 2 op KA01CKAS001 (study unit)

Lecturers Heikki Harmanen, LSc (Arg. and For.)

Objectives

Students will be familiar with the impact the climate in Finland has on the need to drain and irrigate crops. They will also be familiar with various drainage and irrigation systems and their advantages and practical use in field cultivation. Students will understand the impact of irrigation on the amount and quality of the harvest. They will be competent in utilising field-related research.

Content

- Factors influencing drainage and irrigation
- Methods of drainage, their advantages and progression of projects
- Methods of irrigation

Literature / Study Material

- Heinonen et al. (eds.). 1992. Maa, viljely ja ympäristö (appl. parts). WSOY. (Saavalainen (toim.) 1981. Salaojittajan käsikirja, osa 1a. Suomen olosuhteet kuivatusta silmällä pitäen. Salojituksenkannatusyhdistys).
- Pajula ja Triipponen (eds.). Selvitys Suomen kastelutilantesta. Suomen ympäristö 629. (OR Sadetusopas 1979. ProAgria).
- Pajula and Järvenpää (eds.). 2007. Maankuivatuksen ja kastelun suunnittelu. Suomen ympäristökeskuksen raportteja 23/2007, 187 s. Julkaisu on saatavana vain verkkojulkaisuna.
- Peltomaa. 1999. Salaojien kunnossapito−opas (also online). Salaojakeskus.
- Saavalainen (ed.). 1983. Salaojittajan käsikirja 1B kuivatuksen perusteet.
- Salaojittajan käsikirja. 1984. Part 2a: Salaojojituksen suunnittelu.
 Salaojittajan käsikirja. 1991. Part 3: Salaojitustöiden toteuttaminen, salaojitusten kunnossapito, täydennysojitus.
- Saavalainen Pieni. Salaojituskirja.

Learning Methods

- Lectures (45 %)
- Distance learning and independent study (55 %)
- Exam

Assessment

- Exam (50 %)
- Assignment (50 %)

Prerequisites

Compulsory courses for Plant Prodcution must be completed.

The crop and seed production, 3 op KA01CKAS002 (study unit)

Lecturers

- Jussi Esala
- Heikki Harmanen
- Heikki Koskimies
- Anna Tall

Objectives

Students will understand the physiological foundations of cereal crops and know how to time cultivation appropriately. They will be competent in choosing the right species of cereals as regards the growing conditions and the cultivation techniques those species require. Students will also be familiar with issues concerning seed production, handling and storing cereals and the related equipment.

- Plant physiology and morphology
- Crop formation and physiology
- Species
- Seed maintenance
- Seed production and the regulation of it, quality of seed grain
- Cereal business
- Storing and preserving cereals and related equipment

• Quality of plant production on a farm

Literature / Study Material

- Material and literature provided by the lecturer
- Peltokasvilajikkeet 2004. Tieto tuottamaan 105. Pro Agria
- Online material

Learning Methods

- Contact teaching (65 %)
- Approved assignments and exam (35 %)

Assessment

- Active participation in contact teaching
- Active participation in assignments
- Approved exam

Prerequisites Cultivation of Field Crops (KA01BKAS005)

Cropping and cirtilization planning, 3 op KA01CKAS003 (study unit)

Lecturers

Heikki Harmanen, LSc (Arg. and For.)

Objectives

Students will have command of how to effectively compile and use a crop management programme and cultivation plan.

Content

Students will apply advanced skills in utilising a crop management programme. Students may compile a basic or specified plan or one based on the criteria for organically grown crops. Students will compile a plan pertaining to how a field is used, and they will determine the plant species and subspecies to be grown with regard to the soil and climate conditions. When planning the cultivation cycle, students will consider issues pertaining to plant protection and possibilities of increasing the quality of the crop. Students will also learn accounting for cultivation as required by authorities.

Literature / Study Material

- Previously learned material from a farm
- Provided guidelines
- Guidebooks for applying for subsidising from the Ministry of Agriculture and Forestry: Ympäristötuen ja luonnonhaittakorvauksen sitoutumisehdot and Luonnonmukainen viljely

Learning Methods Problem–based learning

Assessment Continuous assessment and final assessment based on an assignment

Prerequisites Compulsory courses for Plant Production must be completed.

Diseases and pests of cultivated plants, 3 op KA01CKAS004 (study unit)

Lecturers Leena Riikonen, MSc (Agr. and For.)

Objectives

Students will understand the classification of plant diseases and pests, and also be familiar with the factors influencing the developmental rhythm and life span of diseases and pests. Students will also be able to identify plant diseases and pests and choose a suitable disease–/pest–control strategy.

- Contagious and non-contagious plant diseases
- Methods to protect plants aganst diseases
- Species-specific diseases
- Categorisation of plants and how they grow
- Methods to protect plants against pests
- Species–specific pests
- Plant protection
- Gene technology

Literature / Study Material

- Mäki−Valkama (ed.). 2005. Ajankohtaisia kasvinsuojeluohjeita. 14th or 15th edition. Kasvinsuojeluseura.
- Hannukkala et al. 1999. Luomupellon kasvinsuojelu. Tieto tuottamaan 84. Gummerrus.
- Valkonen, Bremer & Tapio 1996. Kasvi sairastaa. Oppi kasvitaudeista. Yliopistopaino.
- Tasapainoinen kasvinsuojelu−oppaat. Kasvinsuojeluseura.

Learning Methods

- Lectures (40 %)
- Approved assignments (30 %)
- Approved exam (30 %)

Assessment

- Active participation in lectures
- Approved assignments
- Approved exam

Prerequisites Introduction to Plant Protection (KA01BKAS006)

Grassland management, 3 op KA01CKAS005 (study unit)

Lecturers

- Heikki Harmanen, LSc (Agr.)
- Jussi Esala, LSc (Agr.)
- Agrologist Olavi Koskimäki

Objectives

Students will gain an overall understanding of sodding in a farmyard area and for grazing. They will be competent in designing and assessing sodding, and they will be familiar with cultivation techniques and the quality of grass for grazing. Students will also know how to influence the quality and quantity of grass. They will also be familiar with the machines used to harvest grass and their impact on the quality of the grass.

Content

- Planning sodding
- Methods for sodding
- Sodding technology
- Quality of sodding and its nutritional value
- Methods for preserving sodding
- Harvesting and storing grass

Literature / Study Material

- Material distributed during lectures
- ProAgria. 1998. Nurmenviljely. 2nd edition.
- Jaffner 1991. Lönsammare vallodling. LTs förlag. Stockholm
- Online material from the Finnish Grassland Society
- ARTTURI online service (MTT Agrifood Research Finland and VALIO)

Learning Methods

- Contact teaching (40 %)
- Approved assignments (40 %)

• Approved exam (30 %)

Assessment

- Active participation in contact teaching
- Approved assignments
- Exam

Prerequisites Cultivating Field Crops (KA01BKAS005)

Potato production, 3 op KA01CKAS006 (study unit)

Lecturers

Heikki Harmanen, LSc (Agr. and For.)

Objectives

Students will familiarise themselves with the various forms of potato production and their cultivation techniques. They will also learn about treatment measures, plant protection, storage, machinery, preparing potatoes for commercial use, quality and quantity of the crop, and the factors influencing profitability. In addition, students will also be introduced to production control and regulations as well as research and other field–related issues.

Content

- The potato as a plant: physiology and quality
- Production control and regulations
- Extensiveness and methods of production
- Potato species and cultivation techniques
- Issues pertaining to plant protection
- Harvesting and storing potatoes
- Preparation for commercial use
- Field–related research

Literature / Study Material

- Ahvenainen et al. 2001. Laatuperunan tuotanto. ProAgria.
- Perunan tuotanto. 1992. ProAgria.
- Seppänen et al. (ed.). 1993. Perunan kasvinsuojelu. ProAgria.
- Perunan tasapainoinen kasvinsuojelu. Annual publication by the Kasvinsuojeluseura.
- Kangas et al. 1997. Perunalajikkeet.

Learning Methods

Lectures, distance learning assignments, field trip and exam

• An assignment from the course Planning Cultivation on a Potato Farm may also be integrated into this course, which will amount to 3+3 cr.

Assessment

- Written exam (50 %)
- Distance learning assignments (50 %)

Prerequisites

Compulsory courses in Plant Production must be completed.

Sugar beet production, 2 op KA01CKAS007 (study unit)

Further Information ATTENTION ! THE COURSE IS NOT AVAILABLE.

Actual special field crops, 2 op KA01CKAS008 (study unit)

Lecturers To be announced.

Objectives

Students will be aware of the possibilities of cultivating rare field crops, the techniques used in cultivating and harvesting them, storage, and preparing them for commercial purposes. In addition, students shall be familiar with the various factors that influence the quality and quantity of the crop.

Content

- Significance of rare field crops
- Cultivation and harvesting of chosen rare field crops
- Factors pertaining to quality

Literature / Study Material

- Obtained information from various sources
- Students' own written material
- Charts

Learning Methods

- Contact teaching (45 %)
- Approved assignments (35 %)
- Approved exam (20 %)

Assessment

- Active participation in contact teaching
- Active participation in group work
- Approved assignments and exam

Prerequisites Cultivating Field Crops (KA01BKAS005)

Living soil, 2 op KA01CKAS009 (study unit)

Lecturers Guest lecturers

Objectives

The aim of the course is to deepen the students' knowledge of the biological processes in soil and of the chemical and physical factors involved in those processes.

Content

- Soil structure
- Soil microbes
- Soil nutrients
- Impact of the cultivation cycle on the soil

Literature / Study Material

- Lectures
- Literature announced by the lecturer

Learning Methods

- Lectures (40 %)
- Approved assignment (25 %)
- Approved exam (35 %)

Assessment

- Active participation in lectures
- Approved assignment
- Exam

Prerequisites Soil and Meteorology (KA01BKAS003)

Different cropping systems, 2 op KA01CKAS010 (study unit)

Lecturers Guest lecturers

Objectives

The aim of the course is to provide students with basic knowledge of and competency in comparing various cultivation systems.

Content

- Traditional cultivation systems
- IP cultivation
- Organic farming
- Biodynamic farming

Literature / Study Material

- Lectures
- Literature assigned by the lecturer

Learning Methods Lectures and approved journal

Assessment

- Active participation in lectures
- Approved journal

Plant breeding, 2 op KA01CKAS011 (study unit)

Further Information ATTENTION ! THE COURSE IS NOT AVAILABLE

Basics of domestic planning, 3 op KA01CPUU001 (study unit)

Lecturers Horticulturalist Senja Arkko

Objectives

Students will be competent in creating and caring for their garden in a productive and sustainable way.

Content

- Instructions for landscaping
- Planting, caring for, and growing ornamental and useful plants
- Plant protection

Literature / Study Material Iris Kuokkanen & Leena Nurmi. 1995. Satoisa kotipuutarha.

Learning Methods

- Contact teaching (30 %)
- Independent study (70 %)

Assessment

- Active participation n lectures
- Approved journal completed by the given deadline

Further Information Location: School of Agriculture and Forestry, Ilmajoki

Vegetable and Berry Production, 3 op KA01CPUU002 (study unit)

Lecturers

Horticulturist Senja Arkko

Objectives

Students will be familiar with the sphere of open-field cultivation, possibilities, cultivation methods, profitability and marketing.

Content

- Cultivating and marketing open-field vegetables, profitability
- Cultivating and marketing garden berries, profitability
- Methods and implementation of vegetable cultivation

Literature / Study Material

- Irma Voipio. 2001. Vihannekset. Lajit, viljely ja sato. Publication 316 of the Puutarhaliitto.
- Other material indicated by the lecturer

Learning Methods

- Contact teaching (30 %)
- Independent study (70 %)

Assessment

- Active participation in lectures
- Approved assignments and exam

Further Information Location: School of Agriculture and Forestry, Ilmajoki

Greenhouse Production, 2 op KA01CPUU003 (study unit)

Lecturers Horticulturist Senja Arkko

Objectives Students will become familiar with greenhouse cultivation, it possibilities and methods in Finland.

Content

- Scope and significance of greenhouse cultivation
- Subsidies and opportunities in EU Finland
- Cultivation technology
- Field trips

Literature / Study Material Material as indicated by the lecturer.

Learning Methods

- Contact teaching (50 %)
- Independent study (50 %)

Assessment

- Active participation in lectures
- Active participation in field trips
- Approved exam

Organic farming, 11 op KA01CLUO (study entity)

- Credits: 9–11, which comprise the following courses: Introduction to Organically Grown Plants (3 cr), Organically Grown Field Crops (2 cr), Organic Animal Husbandry (2 cr), Organic Home Gardening (2 cr), and Organic Gardening (2 cr)
- Objectives: Students will understand the principles associated with organically growing field crops and garden plants as well as organic animal husbandry.

Organic farming, 3 op KA01CLUO001 (study unit)

Lecturers

- Leena Riikonen, MSc (Agr. and For.)
- Kimmo Nissinen, MSc (Agr. and For.)

Objectives

Students will learn the possibilities and the basic principles of organic farming. They will also be able to analyse the economic results and manage the marketing of organic products.

Content

- · Basics of ecology
- Extensiveness of organic crop production
- Specifications pertaining to organic crop production
- Soil fertility, crop rotation, fertilization, plant protection
- Economy and marketing
- Organic animal husbandry

Literature / Study Material

- Rajala, 2004. Luonnonmukainen maatalous. University of Helsinki: Maaseudun tutkimus- ja koulutuskeskus. OR
- Källander & Bovin 1993. Luonnonmukainen maanviljelys. Kirjayhtymä.

Learning Methods

- Lectures (45 %)
- Approved assignment (20 %)
- Exam (35 %)

Assessment

- Active participation in lectures
- Approved assignment
- Exam

Further Information Online studies: 1 cr

Organic crop husbandry, 2 op KA01CLUO002 (study unit)

Lecturers Leena Riikonen, MSc (Agr. and For.)

Objectives

Students will be familiar with organic cultivation techniques for common field plants, and be able to make an production plan for organically grown crops for a real farm. Students will also become familiar with production guidelines for organically grown crops and the required documentation.

Content

- Organic farming of common field plants
- Current issues in organic farming
- Regulations and documentation of organic farming
- Production plan for organic farming

Literature / Study Material

- Ansalehto et al. 2000. Luomuviljan tuotanto. Tieto tuottamaan 86.
- Rajala 2004. Luonnonmukainen maatalous. University of Helsinki: Maaseudun tutkimus− ja koulutuskeskus. OR
- Källander & Bovin 1993. Luonnonmukainen maanviljely. Kirjayhtymä.
- Koskimies et al. (eds.). Luomutilan valkuaiskasviopas 2007.
- Instructions for growing plants organically
- Kasvintuotanto 2007. Kasvintuotannon tarkastuskeskus.
- Other literature as indicated by the lecturer.

Learning Methods

- Lectures (40 %)
- Approved assignments (30 %)
- Exam (30 %)

Assessment

- Active participation in lectures
- Approved assignments
- Written exam

Prerequisites Introduction to Growing Plant Organically (KA01CLU0001)

Further Information Research and development: 1 cr

Organic animal husbandry, 2 op KA01CLUO003 (study unit)

Lecturers Lecturer N.N.

Objectives

Students will be competent in planning organic animal husbandry for a farm according to prevailing guidelines and regulations.

Content

- · Principles of organic animal husbandry
- · Guidelines and regulations pertaining to organic animal husbandry

Literature / Study Material

- Andersin et al. 1998. Kotieläintilan luomuopas. Tieto tuottamaan 78.
- Control regulations for organic animal husbandry
- Granstedt et al. 1998. Ekologiskt lantbruk: växtförädling, djurhållning, trädgård, ekonomi: fördjupning. NoK/LT. Stockholm. pp. 97–262.

Learning Methods

- Active participation in lectures (60 %)
- Completed assignments and exam (40 %)

Assessment

- Active participation in lectures
- Approved assignments
- Exam

Prerequisites Introduction to the Production of Organically Grown Plants (KA01CLUO001)

Organic home gardening, 2 op KA01CLUO004 (study unit)

Lecturers Horticulturist Senja Arkko **Objectives**

Students will learn the principles and techniques of organic home gardening.

Content

- Caring for the soil
- Crop rotation
- Composting
- Plant protection

Literature / Study Material

- Material provided by the lecturer
- List of websites
- Other material

Learning Methods

- Contact teaching (30 %)
- Independent study (70 %)

Assessment

- Active participation in lectures
- Approved completion of assignments

Further Information Location: School of Agriculture and Forestry, Ilmajoki

Organic gardening, 2 op KA01CLUO005 (study unit)

Lecturers Horticulturist Senja Arkko

Objectives

Students will learn the principles and techniques of professional organic gardening in Finland.

Content

• Opportunities, methods and tools for professional organic growing of open-field vegetables and berries in Finland.

Literature / Study Material

- Rajala 1995 (or later). Luonnonmukainen maatalous. University of Helsinki: Maaseudun tutkimus- ja koulutuskeskus.
- Other material as indicated by the lecturer.

Learning Methods

- Contact teaching (40 %)
- Independent study (60 %)

Assessment

- Active participation in lectures
- Completed assignment
- Exam (joint module exam)

Environment and rural enterprises, 32 op KA01CYMP (study entity)

• Objectives: Students will advance their knowledge of the rural environment. They will become familiar with the legislation pertaining to the management of the environment and understand the interactive relationship between the environment and society. They will form a comprehensive viewpoint of the impacts farms and urban areas have on the environment and be familiar with the methods for decreasing those impacts.

- Compulsory courses in the Rural Environment Module include The Environment and Farming (3 cr), Environmental Ecology (3 cr), Environmental Protection Legislation (3 cr).
- To specialise in the rural environment, students must complete a total of at least 25 cr of course work.

Environment and agriculture, 3 op KA01CYMP001 (study unit)

Lecturers Irma Saarela

Objectives

Students will acquire a comprehensive understanding of the objectives and opportunities the Rural Environment Module provides to enhance their knowledge as experts in rural environment issues. They will also understand the concepts associated with environmental economics and the significance of them. Students will know how to prevent the environmental risks associated with farming and to choose the appropriate measures in doing so.

Content

- Becoming aware of one's environmental values, traditions and ethical issues
- Obtaining information
- Administrative issues pertaining to the farming environment
- Methods of control
- Ecological efficiency, life span evaluation
- Environmental indicators

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Contact teaching (10 %)
- Online assignments (80 %)
- Online exam (10 %)

Assessment Approved exam and assignments

Environment ecology, 3 op KA01CYMP002 (study unit)

Lecturers Irma Saarela

Objectives

Students will become familiar with the basic concepts of ecology, both in theory and in practice. They will also gain knowledge of the foundations, history and current situation of original environmental protection. Students will acquire information about ecology from various sources.

Content

- Basic concepts of ecology
- Chemical and physical environment
- Population, community of organisms, ecosystems

Literature / Study Material

- Vuorisalo T. 2002. Ympäristöekologia.
- Study Guide (online)

Learning Methods

- Contact teaching (5 %)
- Online assignments (15 %)
- Written assignment (80 %)

Assessment

Approved online assignments and written assignment

The legislation of environmentalism, 3 op KA01CYMP003 (study unit)

Lecturers Irma Saarela

Objectives

Students will become familiar with environmental protection legislation, such as environmental administration, and legislation pertaining to waste, air, nature, and water. Special emphassi is placed on how residents can influence the protection of the environment. Additionally, zoning and land use will also be discussed.

Content

- Environmental protection laws
- Structure of the environmental administration and foundations of decision-making
- Acquiring information about environmental protection laws

Literature / Study Material

- Hakkarainen E. & Kvist T. 2000. Ympäristönsuojelulainsäädännön perusteet.
- Study Guide (online)

Learning Methods

- Contact teaching (5 %)
- Online assignments (15 %)
- Exam (80 %)

Assessment Approved online assignments and exam

Environmental questions of field crop production, 2 op KA01CYMP004 (study unit)

Lecturers

Heikki Koskimies and Leena Riikonen

Objectives

Students will deepen their knowledge of leachate in field cultivation and the impact it has on the environment. They will also be knowledgeable of the methods for decreasing the impact it has on the environment.

Content

- Using resources efficiently
- Environmental impacts of nutrient-full leachate
- Diversity of a natural field and methods to increase diversity
- Impacts of cultivation on the environment
- Significance of an environmental support system

Literature / Study Material

- Current environmental research on field cultivation
- Material pertaining to leachate management methods
- More detailed explanation of the material to be discussed at the beginning of the course

Learning Methods

- Contact teaching (30 %)
- Online assignments (40 %)
- Journal (30 %)

Assessment

- Active participation (lectures, online assignments)
- Approved journal

Environmental questions of animal husbandry, 2 op KA01CYMP005 (study unit)

Lecturers

- Heikki Koskimies
- Samu Palander

Objectives

Students will learn about the more significant environmental problems associated with livestock husbandry and how to solve these problems while at the same time taking into consideration economic issues, the well–being of the animals as well as the quality of products.

Content

- Cycle of nutrients
- Chemistry of ammonia
- Environmental impact of feed production, pasture farming and feeding animals
- Balancing feeding
- Environmental impact of the removal, storage and spreading of manure, remnants of antibiotics and parasite medication, as well as microbes which may affect the quality of foodstuff

Literature / Study Material

- Puumala M. & Grönroos J. (eds.). 2004. Kotieläintalouden ympäristökuormituksen vähentäminen. Toimenpiteiden kustannukset ja toimivuus. Suomen ympäristö 708. Finland's environmental administration.
- Luomajärvi U. & Kaski H. 2000. Typpi talteen kotieläintilalla. Seinäjoki University if Applied Sciences. IMO.
- Other material indicated by the lecturer.

Learning Methods

- Contact teaching (25 %)
- Exercises and distance learning assignments (50 %)
- Exam (25 %)

Assessment

Approved assignments and exam

Nutrient budgets of the farm and development of nutrient management, 2 op KA01CYMP006 (study unit)

Lecturers

Leena Riikonen, MSc (Agr. and For.)

Objectives

The aim of the course is to familiarise students with the calculation and analysis of nutrient budgets. Students will also acquire skills to develop the nutrient budget of a farm.

Content

- Trade balance
- Field balance
- Livestock and manure balance
- Analysis of balances
- Development of the nutrient budget of a farm

Literature / Study Material

Myyrinmaa et al. 2001. Ravinnetaseopas. Kestävä kehitys Vantaanjoella. Uusimaa Regional Environment Centre.

• Other material as indicated by the lecturer.

Learning Methods

- Contact teaching (45 %)
- Approved assignment (20 %)
- Approved exam (35 %)

Assessment

- Active participation in lectures and exercises
- Approved assignment
- Exam

Prerequisites Compulsory courses in plant production and animal husbandry

Ecology, 3 op KA01CYMP008 (study unit)

Lecturers Horticulturist Senja Arkko

Objectives

Students will learn about the structure of the ecosystem and the basic characteristics of its activity, as well as about the interaction of the organic and inorganic species in nature.

Content

- Ecosystems
- Populations
- Environmental impacts

Literature / Study Material

• Vuorisalo. 2002. Ympäristöekologia. Ympäristönsuojelun ekologiset perusteet ja alkuperäisen luonnon suojelu. 5th edition. University of Turku: Centre for Extension Studies.

Learning Methods

- Contact teaching (30 %)
- Independent study (70 %)

Assessment

- Active participation in lectures
- Approved assignments

Further Information

Location: School of Agriculture and Forestry, Ilmajoki

Rural water resources management, 8 op KA01CYMP009 (study unit)

Lecturers

Construction Engineer Tiina Haapasaari and guest lecturers

Objectives

Students will learn to do preliminary reports and field investigations needed to carry out water management planning. They will also learn to determine the amount and quality of sewage, and become familiar with the operational principles, prerequisites and the efficiency of purification of sewage disposal methods. Students will compile a treatment plan and cost estimate, as well as learn about servicing processing systems. They will also familiarise themselves with the various alternatives for obtaining household water and the stipulations pertaining to water management.

Content

- Water management legislation
- Various sewage treatment methods
- Evaluation of the quality and amount of sewage
- Compilation of a plan and cost estimate
- Servicing water treatment methods

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

• Lectures (40 %)

• Assignments and independent study (60 %)

Assessment Approved assignments and exam

Prerequisites

- Field Water Management (KA01CKAS001)
- Water and Waste Management in Rural Areas (KA01CRAK002)

The environmment quality systems, 4 op KA01CYMP010 (study unit)

Lecturers Erkki Laitila

Objectives

Students will learn to create a quality and environmental management system for farms and small, rural enterprises. Using the quality and environmental management system, one can identify an organisation's needs for development and improve operations while abiding by the principles of sustainable development. Students will learn to apply management systems as a tool for managing a company, and in so doing will be able to identify an organisation's needs in quality and environmental issues and improve operations while abiding by the principles of sustainable development. Students will eave on the systems are a quality environmental management system for farms and small, rural enterprises, which complies with the standards in the ISO Quality Management Systems.

Content

- Quality and environmental managements systems
- Policies, viewpoints, objectives, procedures, and metres concerning quality and environmental managements systems, surveying the current situation
- Compiling a work execution plan and making sure objectives are being achieved

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Contact teaching (30 %)
- Online discussions and assignments (60 %)
- Exam (10 %)

Assessment Approved exercises, online assignments and exam

Field course, 2 op KA01CYMP011 (study unit)

Lecturers

Lecturer N.N. and guest lecturers

Objectives

Field work allows students to apply theory to practice and to familiarise themselves with various environmental issues. Field work is usually carried out as a three–day field trip in Finland, but may also take place abroad.

Content

The course is based on a particular theme(s), which may include preserving the diversity of nature, environmental research, ecology, and the preservation of waterways.

Literature / Study Material To be distributed during the course.

Learning Methods The course contains some lectures, but the main emphasis is on field work.

Assessment Active participation in exercises, journal

Animal husbandry, 29 op KA01CKOT (study entity)

Objectives: Students choose at least 25 cr worth of courses from the elective course available in the Animal Husbandry module, which will provide them with extensive knowledge of the trends in animal husbandry and field–related duties. Students may also choose specialisation courses in the area of production to include in the 25 credits.

Specialising in pic production, 6 op KA01CKOT001 (study unit)

Lecturers

Samu Palander, PhD (Agr. and For.)

Objectives

Students will acquire a comprehensive understanding of pig husbandry and become competent in entrepreneurship in the field or working as a consultant.

Content

- Current issues in nutrition and care
- Production monitoring
- Nutrition and feed formulation
- Breeding
- Current issues in healthcare
- Building and production technology

Literature / Study Material

The course literature/study material is the same as that in the Introduction to Pig Husbandry course. Additional material includes field-related articles, research results and other material discussed in the lectures.

Learning Methods

Lectures, discussions, independent information acquisition, problem-solving assignments, reports, and literature.

- Contact teaching (40 %)
- Independent study (60 %)

Assessment

Active participation, assignments and written examinations

Prerequisites

- Introduction to Nutrition and Feed (KA01BKOT004)
- Introduction to Pig Husbandry (KA01BKOT006)

Specialising in cattle production, 12 op KA01CKOT002 (study unit)

Lecturers

- Samu Palander, PhD (Agr. and For.)
- Teija Rönkä MSc (Agr. and For.)
- Kimmo Nissinen, MSc (Agr. and For.)

Objectives

Students will become familiar with cattle husbandry and acquire competency in becoming an entrepreneur in the field or working as a consultant.

Content

- Current issues in dairy and beef cattle husbandry
- Production monitoring
- Nutrition and feed formulation
- Breeding
- Current issues in healthcare
- Building, production and dairy technology

The Cattle Husbandry specialisation course also includes the Grass Crop Cultivation course.

Literature / Study Material

The course literature/study material is the same as that in the Introduction to Cattle Husbandry course. Additional material includes field-related articles, research results and other material discussed in the lectures.

Learning Methods

Lectures, discussions, independent information acquisition, problem-solving assignments, reports, and literature.

- Contact teaching (40 %)
- Independent study (60 %)

Assessment

Active participation, assignments and written examinations

Prerequisites

- Introduction to Nutrition and Feed (KA01BKOT004)
- Cattle Husbandry (KA01BKOT005)

Specialising in poultry production, 6 op KA01CKOT003 (study unit)

Lecturers

Samu Palander, PhD (Agr. and For.)

Objectives

Students will acquire an comprehensive understanding of poultry husbandry as an ever–increasing field of production. They will acquire readiness to work as an entrepreneur or employee in the field.

Content

- Structure and significance of poultry husbandry
- Production, nutrition and caring of hens, chicks and chicken bred for meat
- Reproduction and incubation technology of poultry
- Production environment
- Health and well-being of poultry
- · Building technology
- Current issues in poultry husbandry as interest arises

Literature / Study Material

- Andersson P. 1988. Siipikarjan taudit.
- Andersson P., Eklund K. & Sukki M.-L. 1984. Siipikarjatalous. Ross-broilerien hoitokäsikirja. Suomen broiler Oy.
- B.U.T. 8 Performance Guide.
- Current field-related articles and research results.
- Other material as indicated during lectures.

Learning Methods

Lectures, discussions, independent information acquisition, problem-solving assignments, reports, and literature.

- Contact teaching (40 %)
- Independent study (60 %)

Assessment

Active participation, assignments, and examination

Prerequisites Introduction to Nutrition and Feed (KA01BKOT004)

Other special topics of animal production, 3 op KA01CKOT004 (study unit)

Lecturers Samu Palander, PhD (Agr.and For.)

Objectives

The aim of the course is to familiarise students with the less common branches of animal husbandry.

Content

The course involves discussion of the significance of farming sheep, goats, fur animals, bees, fish and game, the products made from these animals and production. Feeding, breeding and treatment of the animals is also discussed.

Literature / Study Material As indicated by the lecturer

Learning Methods

Lectures, assignments and final feedback, written and oral presentations about a chosen topic (poster and presentation of it), and active participation.

- Contact teaching (20 %)
- Independent study (80 %)

Assessment

Active participation, completed assignments and presentations

Prerequisites

Introduction to Nutrition and Feed (KA01BKOT004)

Horse management 1, 2 op KA01CKOT005 (study unit)

Lecturers

Agrologist and Horse Trainer Arja Ala-Kauppila

Objectives

The aim of the course is to familiarise students with horse management. The course deals with the fundamentals of stable conditions, feeding and healthcare, behavior of horses, and the handling and treatment of horses.

Content

The course deals with the fundamentals of stable conditions, feeding and healthcare, behavior of horses, and the handling and treatment of horses.

Literature / Study Material

- Saastamoinen, Hyyppä & Laine 1999. Hevosen kasvatus, ruokinta ja hoito. Maaseutukeskusten liitto.
- Other material as indicated by the lecturer.

Learning Methods

Lectures, exercises, assignment

Assessment

- · Active participation in contact teaching
- Approved assignment
- Exam

Further Information

NB! This course may be taken as an elective course. It is not a part of the joint studies for the Animal Husbandry track.

Maintaining animalhealth, 9 op KA01CTER001 (study unit)

Lecturers Vera Hakala

Objectives

Students will become familiar with the anatomy, physiology and immunology of domestic animals. They will be aware of the factors that threaten the health of an animal. Students will also have the opportunity to learn about the work veternarians do with domestic animals.

- Basic information about the anatomy, physiology and immunology of domestic animals
- Species-specific behaviour and its impact on health
- Legislation pertaining to animal husbandry and medication
- Preventing illnesses due to living conditions

• Familiarisation with the work of a veternarian

Literature / Study Material

- Lecture notes
- Mälkiä P., Ahlfors K. & Teräväinen H. 2000. Tuotantoeläinten hyvinvointi.
- Valros A., Teräväinen H. and Helin J. Hyvivoiva tuotantoeläin. Tieto tuottamaan series. Maaseutukeskusten liitto.
- Evira's guidebooks: Tavoitteena terve ja hyvinvoiva nauta, sika, hevonen, lammas, vuohi ja kana.
- Legislation related to the topic
- Other material as indicated at a later date

Learning Methods

Lectures, assigments, field trips and demonstrations

Assessment Written exam and assigments

Applied microbiology, 2 op KA01CTER002 (study unit)

Lecturers Vera Hakala, guest lecturers

Objectives

Students take a look into the world of microbes from the point of view of animal health.

Content Discussion of diseases in animals caused by viruses, bacteria and parasites

Literature / Study Material Lecture notes and independent information acquisition

Learning Methods Lectures and a written report about a microbe of the student's choice.

Assessment Hyv/hyl. Aktiivinen läsnäolo luennoilla, kirjallinen selvitys ja sen lyhyt esittäminen muille

Animal diseases, 3 op KA01CTER003 (study unit)

Lecturers Vera Hakala, guest lecturers

Objectives

Students will be familiar with the more common contagious diseases contracted by domestic animals and the ways these diseases can be prevented.

Content

- Common diseases caused by viruses, bacteria and parasites and how to prevent them
- General discussion of the law on animal diseases

Literature / Study Material

- Material as indicated by the lecturer
- Legislation on animal diseases as applies

Learning Methods Lectures and field trips

Assessment Active participation in field trips and written exam.

Use of medicines in veterinary, 3 op KA01CTER004 (study unit)

Lecturers Vera Hakala

Objectives

Students will acquire an understanding of the more common drugs administered to animals as well as the relationship of animal drugs to the safety of food and the environment.

Content

The contents of the course include a discussion of the general aspects of common drugs. Emphasis is placed on the understanding of the appropriate use of drugs with regard to human beings, animals and the environment. Students will acquire knowledge of the legislation pertaining to the administration of drugs to animals from the viewpoint of the animal caretaker.

Literature / Study Material

- Lecture notes
- Legislation pertaining to drug administration to animals (applicable parts)
- Other material as indicated during lectures

Learning Methods Lectures and literature

Assessment Written exam

Languages of Instruction Finnish

Forestry, 8 op KA01CMET (study entity)

Students may choose additional courses in forestry from the selection of elective courses at Tuomarniemi, Ähtäri . Further info: Head of Degree Programme Juha Tiainen, tel. 040 830 2429

Small/medium –scale wood processing, 8 op KA01CMET001 (study unit)

Lecturers

- Hannu Humalamäki
- Esa Eloranta
- Juhani Joensuu
- Tiina Haapasaari
- Juha Tiainen

Objectives

Students will be familiar with the quality requirements of timber and the significance of quality in the further processing of wood. They will also be familiar with the entire business of wood purchasing and the logistics associated with it. Students will learn how to use circular saw and understand quality requirements of logs and the significance of quality in the sawmill business. They will also be familiar with the principles of designing recreation buildings, construction alternatives and building materials, and they will know how to make drafts of recreation buildings. Students will learn how to build with logs and be familiar with the quality requirements of the raw materials when building with solid wood.

Content

- Logistics of purchasing wood
- Purchasing raw wood and methods of gathering wood
- Quality laying off of logs, planning the place for sawing and preparations for sawing, using and servicing a circular saw, sawing techniques, impact of the quality of the log on the quality of the sawn timber and the profitability of circular sawing
- Designing a small-scale log building, purchasing the logs, preparing them for building and timber work

Literature / Study Material

• Tapion Taskukirja

• Other material as indicated in the lectures

Learning Methods

- Lectures
- Approved practical assignments (2 weeks)
- Field trips (min. 2 trips/student)
- Assignment

Assessment

- Active participation in lectures
- Completed practical work
- Field trips
- Assignments

Prerequisites

- Forest Management (KA01BMET001)
- Forest Planning (KA01BMET002)

Agricultural technology, 25 op KA01CTEK (study entity)

Students may choose individual courses or modules to support their other studies. All of the courses (up to 25 credits worth) together with those in the Plant Production and Animal Husbandry modules enhance students' knowledge and skills in the areas of agricultural machinery trade, teaching and consultation. Students will be competent in choosing appropriate technological solutions for various situations and provide their functional and economical foundations. Students will be aware of the developmental prospects of agricultural technology.

Technology of crop husbandry, 4 op KA01CTEK001 (study unit)

Lecturers Jussi Esala, MSc (Agr. and For.)

Objectives

Students will be familiar with the central factors associated with efficient agricultural technology. They will be competent in making a mechanisation plan for a hypothetical farm.

Content

- Influence of the distance, size and shape of a field section on efficiency
- Efficiency of machines and equipment and the factors affecting it
- Determining the needed power of a machine
- Measuring the size of a tractor
- Logistics on a farm
- Purchasing and subcontracting machines and equipment
- Practical training

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

- Contact teaching (50 %)
- Assignment and other independent study (50 %)

Assessment

- Active participation in assignments
- Approved assignment
- Exam

Prerequisites Introduction to Farming Technology (KA01BTEK002) *Further Information* Research and development: 1 cr

Basics of farm energy management, 3 op KA01CTEK002 (study unit)

Lecturers Jussi Esala, LSc (Agr. and For.)

Objectives

Students will gain knowledge of the appropriate type of energy technology and fuel for farms. They will also be competent in safely using the electric devices on a farm.

Content

- Concepts of energy
- Use of energy in Finland and in agriculture
- Common fuels
- Energy technology in agriculture
- New forms of energy
- Using electric devices safely

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

- Contact teaching (50 %)
- Assignment and other independent study (50 %)

Assessment

- Active participation in lessons
- Approved assignment
- Exam

Control engineering of agricultural machines, 3 op KA01CTEK003 (study unit)

Lecturers

Jussi Esala, LSc (Agr. and For.)

Objectives

Students aill be aware of the significance of control engineering in modern agricultural technology. They will understand how the control systems of the more common agricultural machines function and be able to change the settings on them.

Content

- Basics in control engineering
- Parts of adjusting devices work and how they work
- Adjusting farming machines (examples)
- Precision cultivation technology
- Assessment of control engineering

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

- Contact teaching (40 %)
- Assignment and other independent study (60 %)

Assessment

- Active participation in lessons
- Approved assignment
- Exam
Prerequisites Introduction to Farming Technology (KA01BTEK002)

Environmental technology of agriculture, 4 op KA01CTEK004 (study unit)

Lecturers

- Jussi Esala, LSc (Agr. and For.)
- Antti Pasila, PhD (Agr. Tech.)

Objectives

Students will be aware of the more common technological means to prevent or reduce the impact of agricultural production on the environment.

Content

- Applicable environmental legislation
- Composting manure
- Manure separation
- Biogas devices
- Handling sewage on a farm
- Odour control
- Environment maintenance machines

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Contact teaching (40 %)
- Assignment and other independent study (60 %)

Assessment

- Active participation in lessons
- Approved assignment

Technology of animal husbandry, 5 op KA01CTEK005 (study unit)

Lecturers

Jussi Esala, LSc (Agr. and For.)

Objectives

Students will be aware of the requirements for efficient, cost–effective and precise technology in animal feeding, milking, manure disposal and ventilation, and they will be competent in choosing appropriate technology.

Content

- Production and feeding equipment for concentrated fodder
- Equipment for removing and spreading manure
- Ventilation equipment
- Milking technology
- Production of course feed mixtures and feeding equipment
- Feeding equipment
- Fixtures

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

- Contact teaching (40 %)
- Assignment and other independent study (60 %)

Assessment

- Active participation in lessons
- Approved assignment

Prerequisites

Introduction to Farming Technology (KA01BTEK002)

Research and development of agricultural machinery, 3 op KA01CTEK006 (study unit)

Lecturers

- Jussi Esala, LSc (Agr. and For.)
- Antti Pasila, PhD (Agr. Tech.)

Objectives

Students will familiarise themselves with research in agricultural technology and the methods of measurement therein. They will also be capable of planning test situations.

Content

- Research and measurement of agricultural technology
- Testing machinery
- Development of agricultural technology
- Robotics

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

- Contact teaching (40 %)
- Assignment and other independent study (60 %)

Assessment

- Active participation in lessons
- Approved assignment

Prerequisites Plant Cultivation Technology (KA01CTEK001)

Bioenergy, 3 op KA01CTEK007 (study unit)

Lecturers

- Jussi Esala, LSc (Agr. and For.)
- Hannu Humalamäki, engineer

Objectives

Students will be competent in planning and critically evaluating energy alternatives and technology for a bioenergy plant for a farm.

Content

- Forms of field energy
- Forms of forest energy
- Organising energy production
- Bioenery technology
- Entrepreneurship in bioenergy

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Contact teaching (50 %)
- Assignment and other independent study (50 %)

Assessment

- Active participation in lessons and field trips
- Approved assignment

Prerequisites

Introduction to Energy Management in Farming (KA01CTEK002)

Further Information

Online studies: 2 cr Location: School of Agriculture and Forestry, Ilmajoki

Farm building, 8 op KA01CRAK (study entity)

- Credits: 8, which comprise the following courses: Foundations in Construction Technology (3 cr), Water and Sewage Maintenance in Rural Areas (3 cr), Building for Plant Production (2 cr)
- Objectives: Students may choose individual courses or modules to support their other studies. According to the courses they choose, students will acquire basic knowledge of construction technology, designing and building water and waste systems for rural areas, and of designing, building and upkeeping buildings for plant production.

Basics of building construction, 3 op KA01CRAK001 (study unit)

Lecturers

Construction Engineer Tiina Haapasaari and Master Builder Juhani Pakkala

Objectives

Students will acquire knowledge of the more common building materials and equipment, including their characteristic use and safety regulations for agricultural buildings. They will also be able to use, maintain and repair instruments and learn the significance of being able to build.

Content

- Building materials and equipment
- Outdoor and indoor painting
- Tools and their safety instructions
- Interpretation of drawings
- Information acquisition

Literature / Study Material

Lecture handouts and other material announced by the lecturer.

Learning Methods Lectures (60%), exercises, and independent study

Assessment Active participation in exercises, written exam

The water supply and sewerage and the waste management, 3 op KA01CRAK002 (study unit)

Lecturers Construction Engineer Tiina Haapasaari

Objectives

Students will be familiar with various sewage systems, water supply and waste management alternatives for rural areas. They will know how the systems work and understand the legislation for handling sewage. Students will also be aware of the principles associated with obtaining clean water.

Content

- Waste management
- Sorting and handling waste
- Obtaining clean water and quality
- Choosing, guaging and designing a purifying system

Literature / Study Material

- Lecture handouts
- Kujala–Räty K. & Santala E. 2001. Haja–asutuksen jätevesien käsittelyn tehostaminen. Suomen ympäristökeskus
- Other material to be announced by the lecturer

Learning Methods

Lectures (60 %), exercises, independent study

Assessment Exam and approved exercises

Plant productions buildings, 2 op KA01CRAK003 (study unit)

Lecturers

Construction Engineer Tiina Haapasaari and Master Builder Juhani Pakkala

Objectives

Students will learn about the more common types of buildings used in plant growing, as well as the design, construction and repairing of those buildings.

Content

- Cold-air drying
- Warm-air drying
- Hay drying
- Silos, rye houses, grain storage, potato storage
- Green houses
- Machine storage

Literature / Study Material

Lecture handouts and material announced by the lecturer.

Learning Methods Lectures (60 %), field trips, exercises, independent study

Assessment Written exam

Agricultural production economics and farm management, 36 op KA01CEKO (study entity)

Students may take courses amounting to 40 credits in the Economics in Agricultural Production module as optional professional courses. Taking the following courses amounting to 30 credits allows students to specialise in economics in agricultural production:

- Economics in Agricultural Production (6 cr)
- Investments and Financing (9 cr)
- Managing an Agricultural Enterprise and Planning Production (15 cr)

The topic of students' thesis and practical training must be related to economics in agriculture. Courses for those students who are not specialising in economics in agricultural production include Virtual Financial Plan and the Contribution Margin Method and The Farmer, Land Use and Legislation. The Economics in Agricultural Production specialisation module (30 cr) provides students with sound knowledge and skills to manage an agricultural enterprise, compile high–quality financial plans for an agricultural enterprise, and to calculate the profitability and solvency of various production alternatives. Students will be competent in making investment and financing calculations.

Agricultural production economics, 6 op KA01CEKO001 (study unit)

Lecturers

To be announced at a later date.

Objectives

Students will be familiar with the production and cost theory. They will be competent in obtaining new, field-related informatin from academic publications, for example, and utilising that information to solve problems in plant production

and animal husbandry. Students will understand the hypotheses behind the research and consider them when utilising the results of the research.

Content

- Theory vs. the real world
- Theory vs. models
- Presenting phenomena mathematically
- Optimization (investment-investment and investment-result relationships)
- Maximizing profit and minimizing costs
- Significance of the operational environment in working economically

Literature / Study Material

- Ryhänen, Sipiläinen & Latukka. 2003. Maatalousyrityksen tuotannon suunnittelu ja kehittäminen. University of Helsinki: Dept. of economics. Handout, pp. 13–53.
- Kay & Edwards. 2004. Farm management. McGraw-Hill. Boston. pp. 97-146.
- Turkki 2003. Tuotantoekonomia. University of Helsinki: Dept. of economics. Series No. 4. 2nd edition. pp. 10–109;
- Lecture notes and other material as indicated during lectures.

Learning Methods

- Contact teaching (50 %)
- Independent study (50 %)

Assessment

Students who understand economical phenomena and are able to describe them and who have satisfactory command of applying theory into practice will receive a grade of 1 or 2. Students who understand economical phenomena and are able to describe them well and who have good command of applying theory into practice, are able to solve economocal problems mathematically and have a somewhat profound understanding of the phenomena will receive a grade of 3. Students who have a profound understanding of economical phenomena, are able to describe them well and have excellent command of applying theory into practice, and are able to examine these phenomena from several different points of view and operational environments will receive a grade of 4 or 5.

• Exam: 100 %

Prerequisites

Introduction to Economics in Agricultural Production (KA01BEKO003)

Financial management and capital budgeting methods in agriculture, 9 op KA01CEKO002 (study unit)

Lecturers

- Matti Ryhänen, PhD (Agr. and For.)
- Margit Torkko, PhD (Tech.) (adult education)

Objectives

Students will be introduced to the typical investments made by agricultural and rural enterprises. They will be competent in making investment calculations and calculating the profitability of investments. Additionally, students will learn about financing and prediction of solvency.

Content

- Investment theories
- Financing theories
- Planning financing and risk management
- Planning investments and calculating investment profitability

Literature / Study Material

- Barry, Ellinger, Hopkin, & Baker. 2000. Financial Management in Agriculture (appl. parts).
- Brealey & Myers. 2003. Principles of Corporate Finance (appl. parts).
- Ryhänen. 2005. WebCT-alustalle tuotettu oppimismateriaali.

Learning Methods

- Contact teaching (50 %: lectures 25 % and guided learning 25 %)
- Independent study (50%: assignments 25 % and exam 25%)

Assessment

Students who are familiar with the basic principles of investing and financing, are able to describe these concepts satisfactorily, and are familiar with practical applications will receive a grade of 1 or 2. Students who have basic command of the theoretical foundations of investing and financing, are able to describe them well and have good command of the practical applications will receive a grade of 3. Students who have strong command of the theories of investing and financing, are able to clearly describe them, have excellent command of practical applications, have a profound understanding of the phenomena associated with investing and financing and are able to examine problems in the field from many different points of view will receive a grade of 4 or 5.

- Exam (50 %)
- Assignements and active participation (50 %)

Prerequisites

- Introduction to Agricultural Economics (KA01BEKO001)
- Introduction to Economics in Agricultural Production (KA01BEKO003)

Whole-farm planning, 15 op KA01CEKO003 (study unit)

Lecturers

- Docent Matti Ryhänen, DSc (Agr. and For.)
- Heikki Harmanen, LSc (Agr. and For.)
- Jussi Esala LSc (Agr. and For.)
- Samu Palander, DSc (Agr. and For.)
- Agronomist Eliisa Kallio

Objectives

Students will develop a profound understanding of how to manage an agricultural enterprise and know how to compile a high–quality financial plan for such an enterprise. They will also know how to calculate profitability and solvency. Students will also understand the policies behind EU funding and how changes in the operating environment affect the financial plan and the choices an agricultural entrepreneur makes.

Content

- Managing an agricultural enterprise
- Strategic and operative management
- SWOT
- Surveying resources
- Examining the aims and possibilities for production
- Managing production planning and the use of planning methods
- Compiling production plans and assessing assets
- Analysing results and choosing the direction of production
- Profit calculations and interpretation
- Calculating solvency

Literature / Study Material

- Ryhänen, Sipiläinen & Latukka. 2003. Maatalousyrityksen tuotannon suunnittelu ja kehittäminen. University of Helsinki: Dept. of economics. Handout, pp. 1–129.
- Kay & Edwards. 2004. Farm management. McGraw-Hill. Boston.
- Olson. 2004. Farm Management: Principles and Strategies. Blackwell Publishing Company: Iowa State Press.
- Barry P.J., Ellinger P.N., Hopkin J.A. & Baker C.B. 2000. Financial Management in Agriculture (appl. parts).
- Guidebooks and instruction booklets
- Websites
- Other material as indicated during lectures

Learning Methods

• Co-operative learning: Students work actively together. The teacher(s) support, assist and encourage them as they learn. Students share their experience and learn from the experiences of others. The teacher(s) share their expertise with the students and the students among themselves (collaboration with teachers of production and technology subjects). Learning is based on problem–solving. Students are guided in making a production plan of their interest (somewhat extensive research), the central results of which they interpret and report about to the

teachers and the entire group.

• Students' work: contact teaching (40 %, includes the entire class and groups) and independent study (60 %).

Assessment

Students write a report, which is approved/revised. Emphasis in evaluation is placed on how the student is able to modify his/her knowledge, skills and plan such that he(she is able to manage production and finances in an optimal way. Students are assessed on a continual basis and involves self–evaluation, peer evaluation, and relfection together with the teachers.

Prerequisites

Economics of Agricultural Production (KA01CEKO001)

Agricultural policy, 6 op KA01CEKO008 (study unit)

Lecturers

Jyrki Rajakorpi, MSc (Agr. and For.)

Objectives

Students will be aware of the scientific foundations, contents and purposes of agricultural policies. They will also be familiar with the foundations, aims and basic principles of the EU's agricultural policies. Students will have an understanding of the international system for agreements and decision–making.

Content

- Scientific foundation, content and purposes of agricultural policies
- international system for agreements and decision-making concerning agricultural policies
- EU and national legislation
- National legislation pertaining to EU funding
- Filling out forms for EU funding
- Significance of planning

Literature / Study Material

- Kola 2003. Maatalouspolitiikan perusteet. University of Helsinki: Dept. of economics. Handout: spring 2003.
- http://www.mmm.fi
- http://europa.eu.int/comm/agriculture/mtr/index_fi.htm
- http://europa.eu.int/comm/agriculture/index_fi.htm.; http://europa.eu.int/comm/dgs/agriculture/index_fi.htm

Learning Methods

- Contact teaching (50 %)
- Independent study (50 %)

Assessment

- Approved assignments
- Approved exam

Computer-aided planning of farm economics, 5 op KA01CEKO007 (study unit)

Lecturers

Agronomist Eliisa Kallio

Objectives

Students will understand the concept of planning production on a farm within the framework of defined limitations to reach the best possible outcome. They will also understand how the planning of production progresses when utilising the contribution margin method.

Content

- Managing an agricultural enterprise
- Accounting and theories of planning
- Entrepreneurship and working as an entrepreenur, significance of entrepreneurship
- Defining the goals of an agricultural enterprise
- Information acquisition
- Planning production according to the contribution margin method

• Determining production alternatives, profitability, and solvency

Literature / Study Material

- Ryhänen, Sipiläinen & Latukka 2003. Maatalousyrityksen tuotannon suunnittelu ja kehittäminen. University of Helsinki: Dept. of economics. Handout, 169 pages.
- Ryhänen & Viitala 2003. Virtuaalinen katetuottomenetelmän mukainen taloussuunnitelma.

Learning Methods

- Co-operative learning
- Contact teaching (lectures, group discussions, feedback): 30 %
- Independent study (70 %)

Assessment

- Active participation in group lessons, feedback sessions
- Approved assignment

Prerequisites

Introduction to Economics in Agricultural Production (KA01BEKO003)

Management and development of rural entrepreneurship, 57 op KA01CLII (study entity)

Students may create a study module for themselves, which provides enough knowledge and skill for developing and managing rural enterprises and auxiliary businesses. Students determine the type of study module themselves. The module must contain separately specified, mandatory studies worth at least 24 ECTS, which pertain to business and management. The topic of the thesis must tie in with the development and management of enterprises. Choosing a place for practical training where students may learn about developing and managing enterprises is recommended.

Marketing planning and management, 3 op KA01CLII001 (study unit)

Objectives

Students will acquire knowledge about planning and managing marketing, and learn about the factors influencing planning and management. They will also learn how to compile a marketing plan.

Content

The course discusses strategic decisions in marketing and the planning of marketing.

Literature / Study Material

- Lahtinen & Isoviita. 1998. Markkinoinnin suunnittelu. Avaintulos.
- Kumar. 2004. Marketing as Strategy. Harvard Business School Press.
- Material distributed during lectures.

Learning Methods

- Lectures, independent and group work
- Contact teaching (50 %)
- Independent study (50 %)

Assessment

Active participation in classes and in completing assignments

Prerequisites Introduction to Marketing (KA01BLII003)

Collection and analysis of marketing information, 3 op KA01CLII002 (study unit)

Objectives

Students will acquire an understanding of the significance of market research. They will be competent in planning and implementing a market research project.

Content

The course outlines the theory and significance of marketing research in a company's decision-making, planning and

implementing marketing research, and reporting about it. The course requires an oral presentation of the research.

Literature / Study Material

- Lahtinen & Isoviita. 1998. Markkinointitutkimus. Avaintulos.
- Lotti. 1998. Markkinointitutkimuksen käsikirja. 4th edition. WSOY.
- Articles assigned by the lecturer
- Online material

Learning Methods

Lectures, carrying out research independently, reporting and oral presentation: 20 % contact teaching, 80 % independent study.

Assessment Progression of the research process, report and oral presentation

Prerequisites Introduction to Marketing (KA01BLII003)

Marketing communication, 3 op KA01CLII003 (study unit)

Lecturers Anu Katila

Objectives Students will acquire basic information and knowledge about marketing communications.

Content

- Sales and customer service
- Advertising
- Public relations
- Sales promotion

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, independent and group work: 50 % contact teaching, 50 % independent study.

Assessment Active participation in classes and assignments

Prerequisites Introduction to Marketing (KA01BLII003)

Double entry bookkeeping by PC, 3 op KA01CLII005 (study unit)

Lecturers Erkki Laitila

Objectives

Students will learn how to do double–entry bookkeeping using a computer programme and in so doing they will develop an understanding of the administration of bookkeeping and the value–added tax system for small businesses and non–profit organisations. Students will also learn how to compile financial statements.

Content

The administration of computerized, performance-based, double-entry bookkeeping and the valued-added tax system

Literature / Study Material As indicated by the lecturer.

Learning Methods Lectures and assignments

Assessment

Active participation in the practical sessions and performance in doing assignments

Prerequisites

Basics in Double-entry Bookkeeping (KA01BLII001)

The legislation of a rural enterprise, 9 op KA01CLII006 (study unit)

Objectives

Students will learn about the principles of commerce, consumer trade and real estate business between entrepreneurs. Additionally, they will become familiar with the maxims governing crucial communal legislation with regard to rural entrepreneurship, and the legislation and regulations pertaining to being an employer.

Content

The course comprises several parts:

- Part 1: Commerce between Entrepreneurs. This part of the course discusses the crucial stipulations and regulations, as well as the general business practices, between entrepreneurs.
- Part 2: Consumer Protection: This part of the course discusses the central stipulations, regulations and the general principles of commerce between entrepreneur and consumer.
- Part 3: Communal Law for Rural Industries: This part of the course discusses the central stipulations, regulations and operational principles of limited companies, cooperatives and associations such that students shall be able to work in managerial and confidential posts in rural enterprises.
- Part 4: Working as an Employer: This part of the course discusses legislation central to employment and the collective agreements and other agreements closely associated with rural entrepreneurship.
- Part 5: Registration of Property and Surrender of Ownership: This part of the course discusses the legislation central to the registration of property and the surrender of ownership, especially from the point of view of rural entrepreneurship.

Literature / Study Material

Each part of the course has its own up-to-date material determined by the lecturer.

Learning Methods Lectures, assignments

Assessment

Students will complete each part of the course separately by submitting a exam-type assignment. The grade students receive for the entire course is the average of the grades received for each of the five parts of the course.

The quality control of a rural enterprise, 3 op KA01CLII007 (study unit)

Objectives

Students will learn about the general contents of the standards and principles for constructing a quality management system, and learn to apply them in constructing quality management systems for farming and rural enterprises.

Content

The course introduces the central contents of the ISO 9000–9004 quality standards, as well as other quality management principles in general. The principles involved in constructing a quality management system based on the ISO 9000 quality standard are also discussed.

Literature / Study Material Current material determined by the lecturer.

Learning Methods Lectures and assignments

Assessment Assignment or exam as assigned by the lecturer.

The taxation of a rural enterprise, 6 op KA01CLII008 (study unit)

Objectives

Students will learn about the principles of value–added taxation for rural enterprises (farming and other businesses), the principles of a company's income tax for various types of companies (taxation concerning farming is discussed in another course), as well as the general principles of other taxation laws (Real Estate Taxation Act and the Capital Transfer

Taxation Act, etc.) pertaining to rural entrepreneurship.

Content

The course is divided into three parts:

- Part 1: Value-added Tax: This part of the course emphasises issues concerning value-added tax in farming and ordinary rural, small business operations.
- Part 2: Trade Taxation and Various Types of Companies: This part of the course emphasises not only the basic principles of the Trade Taxation Law but also taxation pertaining to the various types of companies.
- Part 3: Other Taxation Laws Essential to Rural Entrepreneurship: In particular the Real Estate Taxation Act and the Capital Transfer Taxation Act.

Literature / Study Material

Current material, determined by the lecturer pertaining to legislation and the application of legislation.

Learning Methods Lectures

Assessment

Completion of an exam-type assignment for each part of the course separately. The grade for the entire course is based on a summary of the assignments for each part.

Rural politicsŽsystem, 2 op KA01CLII009 (study unit)

Lecturers

Tarmo Vuorenmaa and Juhani Suojaranta

Objectives

Students will acquire a comprehensive understanding of rural policies, learn about the stages of development in Finnish rural policies, and become familiar with the tools and programmes involved in rural policies. Students will develop a clear pattern of thought concerning rural policies.

Content

- Operational environment for regional and rural policies
- Foundations of rural policies
- Communal policies for rural industries
- Tools and programmes for rural policies

Literature / Study Material

- Eero Uusitalo. 1998. Elinvoimaa maaseudulle. Otava
- Maaseutupolitiikan yhteistyöryhmä. Elinvoimainen maaseutu –yhteinen vastuumme.
- Maaseutupoliittinen kokonaisõhjelma 2005–2008. Publication of the Rural Council 11/2004.
- Also online: http://www.mmm.fi/ytr/Julkaisut_2004/YTR_julkaisu_11_2004.pdf

Learning Methods

- Contact teaching (50 %)
- Independent study (25 %)
- Approved exam (25 %)

Assessment Active participation, approved exam

Prerequisites

Introduction to Rural Development (KA01BKEH)

The rural development scene, 2 op KA01CLII010 (study unit)

Lecturers Tarmo Vuorenmaa and Mikko Mustakallio

Objectives

Students will become familiar with the principles of developing programmes while considering various geographical aspects of development. They will learn about the design, management and the decision-making system associated with

development programmes. Furthermore, students will learn to compile development programmes and implement them, as well as become familiar with various developer organisations.

Content

- Making programs on the international, national, regional and local levels
- Designing, managing and decision-making systems involved in making programs
- Content and implementation of development programmes on the regional and local levels
- Developer organizations as implementers of programs

Literature / Study Material

Lecture material: essays and reports as assigned by the lecturers.

Learning Methods

50 % contact teaching, 25 % independent study, 25 % assignment

Assessment

Active participation and assignment

Prerequisites

Introduction to Rural Development (KA01BKEH)

The know-how of a project work, 3 op KA01CLII011 (study unit)

Lecturers

Mikko Mustakallio, Juhani Suojaranta and Tarmo Vuorenmaa

Objectives

Students will learn about the various stages in planning a project, from the evaluation of the needs for a project and coming up with ideas for it to the actual project plan. They will also become familiar with the various sources of financing and types of projects, as well as managing budgets and compiling financial plans. Students will learn about the various stages of project work and how to work in co-operation with various stakeholders. Students will acquire skills in compiling internal and external announcements/reports and learn about the principles of engaging project workers. They will also acquire know-how in evaluating how well the objectives of the project have been achieved.

Content

- Compiling a project plan
- Sources of financing, budgeting and financial planning
- Types of projects
- Organizing, managing and implementing projects
- Internal and external announcements/reports, organising training and briefings
- Evaluation of projects

Literature / Study Material

- Lecture material
- Guidebooks on implementing projects
- Examples of projects
- Assigned reports

Learning Methods

- Contact teaching and field trips (50 %)
- Independent study (20 %)
- Assignment (30 %)

Assessment Active participation, assignment

Prerequisites Introduction to Rural Development (KA01BKEH)

Leadership, 6 op KA01CLII012 (study unit)

Objectives

Students will acquire the basic skills needed in strategically managing the various aspects of an SME business and its personnel.

Content

- Module 1: Strategic Management and Management Systems, which comprises the foundations of strategic business analysis and organising business activities, as well as constructing a system of management.
- Module 2: Managing Personnel, which comprises the basic theories associated with managing people and the foundations of current applications used in management.

Literature / Study Material As indicated by the lecturer.

Learning Methods Lectures, assignments, analyzing various cases of management

Assessment Exam

Communication skills, 3 op KA01CLII013 (study unit)

Lecturers Lecturer N.N.

Obiectives

Students will develop skills in dealing with various situations when communicating with others.

Content

- Presentations
- Skills in expressing oneself
- Confronting the media
- Customer service

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Groupwork and independent assignments, lectures, journal; 60 % contact teaching and 40 % independent study.

Assessment Active participation in lessons and assignments

Introduction to Economics and regional sciences, 6 op KA01CALU001 (study unit)

Objectives

Students will understand the general principles of the national economy and have command of the related concepts. They will acquire a general view of the current international economic situation. They will also be familiar with regional administration and regional planning in Finland.

Content

The course is divided into three parts:

- Part 1: Foundations of National Economy concepts, the international and domestic economies.
- Part 2: Foundations of Regional Planning Regional administration and planning in Finland, especially from the viewpoint of rural industries.
- Part 3: Current Economic Development general view of the current economic situation on the international and national levels, future prospects based on current theories and research as regards development of rural entrepreneurship.

Literature / Study Material

- Textbook on national economy as indicated by the lecturer (several alternatives provided)
- Online material concerning regional administration and planning as indicated by the lecturer

- Material pertaining to the organisation and distribution of duties in regional administration as indicated by the lecturer
- Material pertaining to the current economic situation on the national and international levels as indicated by the lecturer

Learning Methods Lectures, assignments

Assessment

Approved exam-type assignment for each part of the course, the average of which determines the grade for the entire course.

Marketing of farm products and supplies, 2 op KA01DEKON10 (study unit)

Objectives

Students will become familiar with the structure and essential characteristics of agricultural commerce as well as the more common product groups.

Content

- Marketing and purchasing systems in agricultural commerce
- Logistics
- Selling machines and gardening products
- Selling fodder and cereals

Learning Methods

- Contact teaching (60 %)
- Approved exam (20 %)
- Independent study (20%)

Assessment

- Active participation in lessons
- Exam

Master Assistant training, 3 op KA01CLII014 (study unit)

Objectives

Students will enhance their knowledge of agricultural commerce of various product groups, sales and customer service.

Content

- Sales and customer service
- Periodical financing
- Installment purchases
- Selling production equipment
- Selling cereals and seeds
- Machines, tractors and harvesters

Learning Methods

- Online material
- Assignments

Assessment

- Approved assignments (4/6 assignments)
- Students receive a separate 'top salesperson diploma' (K-instituutti)

Rural nature-based tourism, 36 op KA01CMATK (study entity)

Rural Tourism, worth a maximum of 36 ECTS, will be offered to students for the first time beginning in autumn 2008. The module may be completed as specialisation studies in the forestry degree programme at Tuomarniemi in Ähtäri or at the School of Food Management in Kauhajoki.

Introduction to tourism, 4 op KA01CMATK01 (study unit)

Lecturers

Arja Kortesluoma and Sirpa Välilehto

Objectives

Students will become familiar with the special features of the tourism industry, the factors affecting the industry, and with the profession as a way of life. They will learn about the development of the field, the regional impacts of tourism, various types of businesses and jobs in tourism. With regard to domestic tourism, students will become familiar with the various sub-sectors and services therein.

Content

- Concepts and phases of development in tourism
- Impact of tourism, tourism and the environment, sustainable development, environmentally friendly travel
- Regional aspects of travel and types of travel destinations
- Regional structure of tourism in Finland
- Businesses in tourism

Literature / Study Material

- Vuoristo & Santasalo: Suomen matkailun aluerakenne.
- Vuoristo K–V. 2003. Matkailun muodot. 3rd edition. WSOY.
- Hemmi J. 2005. Matkailu, ympäristö, luonto. Gummerus.
 Vuoristo & Vesterinen. 2001. Lumen ja suven maa. Suomen matkailumaantiede.
- Parviainen J. 1997. Matkailuyrityksen ympäristöopas.
- Borg et al. 2002. Elämyksestä elinkeinoksi.
- Swarbrooke. 2000. Sustainable Tourism Management.
- Other material: handouts, articles, etc. to be announced at the beginning of the course

Learning Methods

- Lectures
- Case studies
- Group work and assignments
- Independent study and assignments
- Studies
- Guest lecturers and other speakers AND/OR field trips

Assessment

- Active participation in acontact teaching
- Assignment: pass/fail
- Exam: grading based on a scale of 1 to 5

Rural tourism, 4 op KA01CMATK02 (study unit)

Lecturers

Arja Kortesluoma, (J. Rintala, S. Välilehto, and guest speakers)

Objectives

Students will become familiar with the field of rural tourism as a way to make a living as a self-employed person. They will identify the special features of rural tourism and its extensive demand. Students will also be familiar with the various sub-areas of rural tourism and the knowledge and skills needed in the field.

Content

- Definition and concepts of rural tourism, phases of development, impact of rural tourism and future prospects
- Entrepreneurship in rural tourism, special features of it, services and businesses
- Accommodation services, restaurant services, auxiliary services, conference and party services, programme services (activities, traditions and well-being, etc.)
- Customer service in rural tourism, customer contacts, quality control systems (Maakuntien parhaat, Laatutonni, Malo, PS, Hyvää Suomesta)

Literature / Study Material

- Martikainen R. Maaseutumatkailu. Business report
- Hemmi J. 2005. Matkailu, ympäristö, luonto. Gummerus.
- Maaseutumatkailun teemaryhmä: Maaseutumatkailun strategia ja kehittämisohjelma.
- Verhelä & Lackman. Matkailun ohjelmapalvelut. Business reports by the Ministry of Employment and the Economy: Maaseutumatkailu, Ohjelmapalvelut (latest issues).
- Synergos. 2006. Maaseutumatkailun kuluttajatutkimus.
- Other material: reports, studies, publications, handouts and articles (to be announced at the beginning of the course)

Learning Methods

- Lectures
- · Guest lecturers and other speakers
- Field trips
- Case studies
- Group work
- Assignments
- Utilisation on printed and online material

Assessment

- Active participation in contact teaching sessions
- Assignment
- Grading based on a scale of 1 to 5

Further Information

Location: School of Agriculture and Forestry, Ilmajoki

The product development of a small/medium –scale rural tourism enterprise, 4 op KA01CMATK03 (study unit)

Lecturers

Arja Kortesluoma, (Jaana Rintala, Sirpa Välilehto)

Objectives

Students will understand the entire process of development for tourism products, the multi-phase and continual nature of the process, and the various sub-areas associated with it. Students will acquire knowledge of how to develop a product based on their own ideas for rural and nature tourism with the concept of comprehensive, customer-oriented productisation process in mind.

Content

- Tourism product, service product, programme services, trends in demand, product development, phases in product development
- Customer-oriented development of a service product: the product, price, marketing and distribution
- Segmentation and target groups
- Product descriptions
- Quality of a tourism/service product
- Outer appearance of a product
- Test marketing and practical testing
- Pricing a tourism product as part of product development
- Influence of segmentation on the price of a tourism product

Literature / Study Material

- Boxberg & Komppula: Matkailuyrityksen tuotekehitys. Edita.
- Boxberg et al. 2001. Matkailutuotteen markkinointi– ja jakelukanavat. Edita.
- Suontausta & Tyni. 2005. Wellness-matkailu hyvinvointi matkailun tuotekehityksessä. Edita.
- Other literature: field-related reports, studies, publications, handouts, articles (to be announced at the beginning of the course)

Learning Methods

- Lectures
- Case studies
- Group work and assignments
- Independent study and assignments
- Utilisation of printed and online material

- Practical exercises
- Guest speakers from the working world or field trips

Assessment

- Active participation in contact teaching sessions
- Assignment
- Exam
- Grading based on a scale of 1 to 5

Prerequisites

- Introduction to Tourism (KA01CMATK01) AND/OR
- Rural Tourism (KA01CMATK02)

Further Information

Location: School of Agriculture and Forestry, Ilmajoki The course will take place on Thursdays in the third semester as follows:

- Thurs. 22.1.2009, 4:00 pm-8:30 pm
- Thurs. 29.1.2009, 12.2.2009, 19.2.2009, 5.3.2009, and 12.3.2009, 2:30 pm-7:30 pm
- More detailed schedule to be announced at the beginning of the course

The legislation and product safety in rural tourism, 2 op KA01CMATK04 (study unit)

Lecturers

Arja Kortesluoma

Objectives

Students will have command of the legislation pertaining to running a business in rural tourism. They will be familiar with the opportunities and limitations legislation sets for rural tourism and know how to apply their knowledge to their work.

Content

- Acts and decrees influencing the establishment business in tourism
- Package trip products, package trip legislation, legislation pertaining to businesses offering package trips
- Travel and consumer protection
- Safety of travel services, risk analysis
- Safety documents required by the Finnish Consumer Agency
- Responsibilities and liabilities of a business
- Tort Liability Act

Literature / Study Material

- Huovinen U. 2002. Matkailun lainsäädäntö. Edita.
- Maaseutumatkailun teemaryhmä: Tunne turvaa.
- Guidelines of the Finnish Consumer Agency pertaining to the promotion of the safety of programme services
- Finnish Consumer Agency website
- National Supervisory Authority for Welfare and Health: Alkoholiasiat ravintolassa
- Other material to be announced at the beginning of the course

Learning Methods

- Lectures
- Assignments
- Case studies
- Online study
- Studies

Assessment

- Active participation in contact teaching sessions
- Assignment AND/OR
- Exam
- Grading based on a scale of 1 to 5

Prerequisites

- Product Development in Rural SME Tourism Enterprises (KA01CMATK03)
- Marketing and Distribution of a Tourism Product (KA01CMATKO5)

The marketing and distribution channels of a tourism, 4 op KA01CMATK05 (study unit)

Lecturers

Arja Kortesluoma

Objectives

Students will become familiar with the more significant tools used in customer–oriented marketing of travel services and segmented marketing communication. Students will be knowledgeable of the various sub–sections of marketing communications and the measures used in marketing travel. They will also be aware of the various marketing ans sales organisations in tourism, the various distribution channels available and the special demands they impose on tourism products.

Content

- Introduction to marketing travel services
- Marketing images and services
- Customer–oriented approach to marketing
- Significance of marketing in product development
- Competitive tools in marketing
- Marketing plans as tools for a travel business
- Demands a tourism product sets on the way marketing is communicated
- Distribution channels for tourism products
- Operational environment for marketing travel
- Travel agencies as a channel for selling travel services
- Tourism community and networks
- Travel organisations and channels for marketing travel services, modes of co-operation, project work in tourism as an operational model, collaborating organisations in the field of tourism, regional tourism organisations

Literature / Study Material

- Boxberg et al. 2001. Matkailutuotteen markkinointi- ja jakelukanavat. Edita.
- Komppula R. 2000. Matkailuyrityksen sitoutuminen verkostoon. Tapaustutkimus Pohjois–Karjalan maakunnallinen matkailuverkosto. University of Lapland.
- Santala & Vesterinen & Moilanen. 2004. Matkailun kehittämisen alueellinen työnjako ja vastuut. Ministry of Employment and the Economy.
- Lahtinen & Isoviita. 2004. Markkinoinnin perusteet. Avaintulos.
- Other material: field-related reports, studies and publications, handouts, articles, etc. (to be announced at the beginning of the course)

Learning Methods

- Lectures
- Case studies
- Group work and assignments
- Independent study and assignments
- Guest speakers/field trips
- Utilisation of printed and online material

Assessment

- Active participation in contact teaching
- Assignment
- Exam
- Grading based on a scale of 1 to 5

Prerequisites

- Product Development in Tourism Enterprises (KA01CMATK03)
- Economics and Marketing (KA01BLII)
- Marketing Research (KA01CLII002)
- Marketing Communications (KA01CLII003)

Hygiene proficiency and in-house control in tourism business, 2 op KI15CMATK01 (study unit)

Lecturers

Seija Pihlajaviita, MSc (Agr. and For.)

Objectives

Students will acquire basic knowledge in hygiene and the legislation concerning in-house control for tourism businesses. Students will also understand the significance of keeping their knowledge of hygiene up tp date.

Content

- Hygiene proficiency test
- In-house control in tourism businesses and legislation

Literature / Study Material

- Pönkä A. 1996. Omavalvonta ja hygienia ravitsemisliikkeissä. Keuruu: Otava.
- Pönkä A. 1999. Ruokamyrkytykset ja elintarvikehygienia. Jyväskylä:Gummerus Kirjapaino Oy.
- Other material to be announced at the beginning of the course

Learning Methods

Lectures and assignments (e.g. planning/updating in-house control)

Assessment

- Active participation in contact teaching
- Assignments
- Hygiene proficiency test
- Grading based on a scale of 1 to 5

Food Experience as Tourist Experience, 2 op KI15CMATK02 (study unit)

Lecturers

Tuija Pitkäkoski, LSc (Econ. and Bus. Adm.)

Objectives

The aim of this course is to provide students with insight and understanding of the creation and characteristics of the processes involved in experiences from the consumer's point of view. Students will understand the importance and meaning of experiences as competitive factors in a company in the field of tourism.

Content

Focus in the course lies in experience itself and the factors that are essential in producing experiences. Tourist behaviour and decisions concerning purchases are viewed from the experiential marketing point of view. Examples from companies in tourism provide students with an opportunity to make comparisons and acquire profound understanding of the meaning of experience.

Literature / Study Material

Research articles and other material pertaining to travel experiences and tourists to be announced at the beginning of the course.

Learning Methods

- Contact teaching (60 %)
- Assignment (40 %)

Assessment Assignment graded on a scale of 1 to 5.

Production of Food Experiences, 4 op KI15CMATK03 (study unit)

Lecturers

- Päivi Saarimäki, BBus (Hospitality Management)
- Tuija Pitkäkoski, LSc (Econ. and Bus. Adm.)

Objectives

Students will acquire insight into food and creating meals, as well as the holistic principals in creating culinary experiences. They will develop their insight through the creation of customer–oriented experiences. They will understand the principles associated with producing holistic, harmonized impressions around culinary experiences.

Content

- Choice, processing and preparation of food
- Food and food service displays
- Culinary culture and the experience of tourists
- Balancing the use of colors, composition and choice of ingredients
- Skills in table setting and food displays

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Contact teaching and exercises (50 %)
- Assignment (30%)
- Field trips (20 %)

Assessment

- Lectures and field trips
- Approved completion of exercises and assignment
- Grading based on a scale of 1 to 5

Prerequisites Hygiene Proficiency and In-house Control in Tourism Businesses

Hiking, 3 op KB02CMOEV1 (study unit)

Objectives

Students will advance the skills and knowledge they learned in the course The Outdoors and Wilderness Skills. They will develop their skills in working as guides, planning outdoor excursions and working as the leader of a group.

Content

The course involves going on a hike and making the plans for the excursion.

Literature / Study Material Material provided by the lecturer.

Learning Methods Planning and going on a hike.

Assessment Participation in the course is compulsory and grading is based on a pass/fail basis.

Prerequisites The Outdoors and Wilderness Skills

Further Information Highly recommended to foreign students.

Survival skills in forests, 3 op KB02CMOLL3 (study unit)

Objectives

Students will learn the written and unwritten rules of hiking in the woods and other parts of nature.

Content

Emphasis in the course is placed on developing various skills for surviving in the outdoors using maps and through orienteering. Students will also learn about safety in the wilderness. The course takes a practical approach to learning.

Literature / Study Material Material provided by the lecturer. *Learning Methods* Lectures, practical exercises

Assessment

Participation in the course is compulsory and grading is based on a pass/fail basis.

Nature tourism, 4 op KB02CLVLM1 (study unit)

Lecturers Sirpa Välilehto, LA

Objectives

Students will become familiar with nature as an environment for recreational activities, the production of recreation services, as well as with the opportunities and practices associated with tourism businesses.

Content

- Forests, waterways, mires, birds and nature as hobbies
- Wilderness tourism, special groups, gathering ingredients from nature and using them to create culinary experiences
- Creating recreation services
- Management of recreation areas

Literature / Study Material

- Hall C. M. and Härkönen T. 2006. Lake Tourism.
- Hemmi J. 2005. Matkailu, ympäristö, luonto.
- Järviluoma J. & Saarinen J. (eds.). 2001. Luonnon matkailu– ja virkistyskäyttö tutkimuskohteena. Metsäntutkimuslaitoksen tiedonantoja 796.
- Sievänen T. (ed.). 2000. Luonnon virkistyskäyttö 2000. Metsäntutkimuslaitoksen tiedonantoja 802.
- Pouta E. & Heikkilä M. (eds.) 1998. Virkistysalueiden suunnittelu ja hoito.
- Kukkola J., Renfors T., Kallioniemi K. 2002. Suo mahdollisuutena matkailussa.
- Savonlinnan koulutus- ja kehittämiskeskuksen julkaisuja 9/2003. Oi jos Suomen järvet matkakohteeksi muuttuisi.
- Vähätalo L. & Ruotsalainen M. 1996. Metsästä elämyksiä. Opas metsämatkailupalvelun toteuttamiseen.

Learning Methods

Lectures, excursions, company visits and assignments

Assessment

- Exam (K5 T1)
- Participation in field trips and excursions
- Approved completion of assignments

Prerequisites Introduction to Tourism

Rural Landscaping and Construction, 30 op KA01CMARA (study entity)

- Credits: 30 ECTS, which comprise the following courses: Planning and Landscaping a Yard (5 ECTS), Computerized Landscaping (5 ECTS), Construction Sites and Contracting (3 ECTS), Machines for Landscaping and Maintaining Green Areas (3 ECTS), Responsible Economic Activities (3 ECTS), Caring for the Nature and Landscape in the Countryside (5 ECTS), The Rural Environment as a Recreation Area (3 ECTS), Maintaining and Preserving the Landscape, Milieu and the Built Environment (3 ECTS).
- Objectives: Students may compile a number of courses together, which will provide them with the necessary knowledge and skills to work in various rural industries and enterprises, as farmers, private landscaping contractors and employees, providers of rural holiday and adventure holiday services, providers of consultation, and as employees for public and private maintenance services. There are no compulsory courses in the module; rather, students may freely choose the desired courses. If a student wants to specialise in landscaping and the building of landscapes, then (s)he must complete all of the courses in the module.
- Lecturers: Landscape Architect Marketta Nummijärvi, Master of Science and Gardener Kari Peltonen, Horticulturist Senja Arkko, Horticulturist Riitta Mäki, Horticulturist Maarit Kallioniemi.

Planning and Landscaping Grounds, 5 op KA01CMARA01 (study unit)

Lecturers

Senja Arkko, Marketta Nummijärvi and Kari Peltonen

Objectives

Students shall learn to design appropriate, purpose–built grounds areas and create and maintain them in a sustainable way. They will acquire knowledge needed to survey, excavate and land fill, and they will be aware of the alternatives for the foundation and surfacing of grounds structures and road areas. Students will also learn to consider the logistics of industrial buildings and to plant vegetation accordingly. They will be able to compile the documents and illustrations necessary for planning. One important objective is to compile a grounds landscaping plan, including instructions for implementation, of a location chosen by the student.

Content

- Principles for landscaping
- History and traditions of landscaping in Finland
- Instructions for building green areas
- Study of ornamental plants, planting and instructions for care
- Using traditional plants

Literature / Study Material

- Soini T. Viherrakentajan käsikirja.
- Mettala–Willbeg. 1998. Pihanrakentajan käsikirja.
- Other material and websites as indicated by the lecturer.

Learning Methods

- 35 h contact teaching (25 %)
- Distance learning and independent study (75 %)

Assessment

- Active participation in lectures
- Approved landscaping plan with instructions for implementation

Computerised Landscaping, 5 op KA01CMARA02 (study unit)

Lecturers

- Gardner Kari Peltonen, MSc
- Horticulturist Maarit Kallioniemi

Objectives

Students will become familiar with various design software and learn how to use them. Practical work involves completing assignments using design software.

Content

The course involves utilising the computer and its applications as a tool for landscape design.

Literature / Study Material As indicated by the lecturer.

Learning Methods

- 35 h contact teaching (15 %)
- Distance learning and independent study (85 %)

Assessment

Lectures, assignments and distance learning

Construction Sites and Contracting, 3 op KA01CMARA03 (study unit)

Lecturers Gardener Kari Peltonen, MSc

Objectives

Students will be familiar with the principles of contracting such that they know their rights and responsibilities as an employee, supervisor and contractor on a landscaping site. They will also be prepared to work in cooperation with builders in various fields and find information in contracting documents essential for carrying out construction.

Content

The course involves the discussion of practices in landscape contracting.

Literature / Study Material

- Eskola R. 2003. Viheralueiden rakennuttaminen ja valvonta, alueurakointi, kilpailuttaminen ja asiakirjamallit.
- General terms of contract. 1998. Rakennusurakan yleiset sopimusehdot.

Learning Methods

- 20 h contact teaching (15 %)
- Distance learning and independent study (85 %)

Assessment

- Active participation in lectures
- Call for contracting bids and contracting offers via distance learning.

Further Information Location: School of Agriculture and Forestry, Ilmajoki

Machines for Landscaping and Maintaining Green Areas, 3 op KA01CMARA04 (study unit)

Lecturers

Gardener Kari Peltonen, MSc

Objectives

Students will learn to choose appropriate machines and devices for each stage of landscaping and maintenance of green areas. They will also learn to use machines for landscaping and maintaining green areas according to the instructions for usage and occupational safety. Students will acquire knowledge of how to service the mentioned machines as well.

Content

The course involves the presentation of machines for landscaping and maintaining green areas as well as instructions on how to service them.

Literature / Study Material

- Kauppinen, Tuominen and Blom: Puutarhurin kone- ja laitetekniikka
- Other material and websites as indicated by the lecturer

Learning Methods

- 20 h contact teaching (25 %)
- Distance learning and independent study (75 %)

Assessment

- Active participation in lectures and practical exercises
- Approved assignments via distance learning

Responsible Economic Activities, 3 op KA01CMARA05 (study unit)

Lecturers Gardener Kari Peltonen, MSc

Objectives

Students will acquire knowledge of how to work responsibly and ethically in caring for green areas. They will have command of the planning, requesting for bids, contracting agreements, quality planning and the supervising involved in

such work.

Content

- Principles of maintenance planning
- Maintenance categories of various types of green areas

Literature / Study Material

- Maintenance categories of various types of green areas
- Technical instructions for planning, building and maintaining green areas
- Other material as indicated by the lecturer

Learning Methods

- 20 h contact teaching (20 %)
- Distance learning and independent study (80 %)

Assessment

- Active participation in lectures
- Maintenance plan via distance learning

Caring for Nature and the Landscape in the Coutryside, 5 op KA01CMARA06 (study unit)

Lecturers

Landscape Architect Marketta Nummijärvi

Objectives

Students will familiarize themselves with the care and special features of nature in the countryside, such as meadows, edges of forests, patches of forest and other special features of forests, as well as natural water systems, shores, small water systems, damp areas, roadsides, areas of field and barnyard grounds.

Content

The course involves the discussion of the creation of a meadow and the care of it, the care of traditional biotopes, forests and other tree stands as part of an agricultural landscape, the care of the shore areas of water systems, the prevention of erosion, protective zones, maintaining roadsides and road landscape, natural care for field areas, game pastures, and barnyard grounds.

Literature / Study Material

- Siisti, korjaa, maisemoi. Maatilan pihapiirin kunnostus- ja hoito-ohjeet. 1993.
- Luostarinen M. & Yli-Viikari A. (eds.) 1997. Maaseudun kulttuurimaisemat.
- Panu J. 1991. Seurantalon piha luontopihaksi. Ministry of Agriculture and Forestry. SYKE. 2003. Perinnebiotooppien hoitokortit.
- Other material and literature as assigned by the lecturer

Learning Methods

- 35 h contact teaching (20 %)
- Distance learning and independent study (80 %)

Assessment

- Active participation in contact teaching
- Approved assignments

The Rural Environment as a Recreation Area, 3 op KA01CMARA07 (study unit)

Lecturers

Landscape Architect Marketta Nummijärvi

Objectives

Students will learn to design and create places for recreation, typical to the environment in rural areas, such as nature trails, camping spots and bicycle trails.

Content

The course involves the discussion of the potential a given area has for recreational travel, Everyman's Rights and other norms associated with recreation areas, as well as identifying and examining local potential for recreation. Students shall design recreation areas such as nature trails, campfire spots, routes for bicycling, cross–country skiing, and boating, snowmobiling and look–out towers for watching animals in nature. Students shall also make trails and build duckboards, lean–tos, small bridges, exercise beams and campfire grounds.

Literature / Study Material As assigned by the lecturer.

Learning Methods

- Contact teaching and demonstrations (50 %)
- Distance learning and independent study (50 %)

Assessment

- Active participation in contact teaching
- Approved assignments

Maintaining and Preserving the Landscape, Milieu and Built Environment, 3 op KA01CMARA08 (study unit)

Lecturers

Landscape Architect Marketta Nummijärvi

Objectives

Students will become familiar with the elements of natural landscape and types of landscapes, as well as the principles involved in designing and maintaining built milieus. They will learn about the significance of zoning in supervising land use, and study the principles of maintaining and preserving the cultural environment.

Content

The course involves the discussion of maintaining, zoning and building a rural, cultural environment, as well as the various types of landscapes.

Literature / Study Material

- Tiainen J., Kuussaari M., Laurila I. P., Toivonen T. (eds.). 2004. Elämää pellossa. Suomen maatalousympäristön monimuotoisuus. Edita.
- Other material and websites as indicated by the lecturer

Learning Methods

- Contact teaching (20 %)
- Independent study (80 %)

Assessment

- Active participation in lectures
- Assignment submitted by the deadline

Further Information

Location: School of Agriculture and Forestry, Ilmajoki Schedule: Thurs. 30.10.2008, Thurs. 6.11.2008, Thurs. 13.11.2008, Thurs. 20.11.2008 and Thurs. 27.11.2008 from 2:30 pm to 5:45 pm.

FREE CHOICE STUDIES, 15 op KA01DVVO (study entity)

Students may choose 15 ECTS worth of courses according to their interests. They may choose the courses from the selection of elective courses at the Seinäjoki University of Applied Sciences (intra.seamk.fi), or from the selection of elective course at the School of Agriculture and Forestry in Ilmajoki. Taking courses from the selection of elective courses in other educational establishments, which are at the same level or higher as the university of applied sciences, is also possible.

Horse management 2, 2 op KA01CKOT006 (study unit)

Lecturers Agrologist and Horse Trainer Arja Ala–Kauppila

Objectives

The aim of the course is to provide students with more profound knowledge of horse management.

Content

The course deals with the teaching, handling, training and breeding of horses.

Literature / Study Material To be announced by the lecturer.

Learning Methods Lectures, exercises, assignments

Assessment

- · Active participation in contact teaching
- Approved assignments

Prerequisites Horse Management 1 (KA01CKOT005) or similar studies

Further Information

NB! This course may be taken as an elective course. It is not a part of the joint studies for the Animal Husbandry module.

Regulations concerning farmer and the land use, 3 op KA01CEKO006 (study unit)

Lecturers Agronomist Paavo Hannila

Objectives Students will be familiar with the legislation pertaining to farmers.

Content

- Right of ownership
- Legilation concerning redemption
- Everyman's Right
- Environmental protection and landowners
- Social security for farmers
- Legislation concerning land use, construction, roads, distribution and water use as regards farmers

Literature / Study Material Material provided by the lecturer.

Learning Methods

- Contact teaching (40 %)
- Independent study (60 %)

Assessment

- Approved assignments
- Approved exam

The quality chain of food, 9 op KA01CEJA001 (study unit)

Lecturers

Various teachers and lecturers

Objectives

Students will become familiar with the route domestic food travels on its way from the producer to the consumer, as well as the quality management and risks involved. Students will learn to work as responsible, critically–thinking purchasers for kitchens, and they will also learn about the significance of locally, organically and domestically grown food in sustainable development and the area's economy. Students will learn to benefit from seasonal foods when preparing

menus and understand the importance of self-sufficiency with regard to domestic food production. They will know how to prepare menus utilising a back-up system for institutional kitchens.

Content

- Various trends in agricultural production
- Agricultural quality control systems
- Food route and quality classification
- Local, organic and domestic food, imported food, products offered by global companies, fair trade, the influence of the seasons and the change of seasons on the availability of food, prices, quality and nutritive value
- Purchasing processes as a responsible and critically-thinking purchaser

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, guided assignments, independent study and group work, and field trips.

Assessment

Exams, assignments and exercises, active participation in lectures and field trips.

Geographical information system, 3 op KA01CATK001 (study unit)

Lecturers

Agricultural Engineer Timo Riikonen

Objectives

Students will understand computer-based management and areas of application pertaining to geographical information.

Content

The course involves the utilisation of MapInfo software and GPS equipment.

Literature / Study Material

- Miettinen 1999. GPS vie vaivatta perille. 2nd edition.. Ajatus.
- Poutanen 1998. GPS-paikanmääritys. Tähtitieteellinen yhdistys URSA.
- Virtual UAS global positioning systems

Learning Methods Lectures and distance learning assignment

Assessment

- Active participation in contact teaching
- Approved exam/distance learning assignment

Prerequisites Introduction to Information Technology (KA01AATK001)

Further Information Location: School of Agriculture and Forestry, Ilmajoki

Image processing and www-pages, 2 op KA01CATK002 (study unit)

Lecturers Marja–Liisa Mäntylä, MA

Objectives

Students will become familiar with the the principles and means of digital photo–processing, They will also create web–pages in the XHTML language using Web Editor, and learn to format a website using CSS.

Content

Students design and create a webpage and learn the basics in photo-processing.

Literature / Study Material

- Castro E. Kotisivut kuntoon HTML, XHTML ja CSS, readme.fi.
- Laakso A. Paint Shop Pro X –kuvankäsittely. Docendo.
- Other material provided by the lecturer.

Learning Methods

- Lectures (60 %)
- Guided exercises (20 %)
- Independent assignments (20 %)

Assessment

- Active participation in contact teaching
- Guided exercises
- Approved assignments

Prerequisites

Introduction to Information Technology (KA01AATK001)

Further Information

The course takes place on Thursdays from 2:30 pm to 5:15 pm at the School of Agriculture and Forestry in Ilmajoki. It begins in autumn 2008. A maximum of 14 students are accepted into the course.

Swedish for polytechnic studies, 3 op KA01CKIE001 (study unit)

Objectives

This is a preparatory course in which students will enhance their communication skills in Swedish before taking Swedish courses related to their field of study. Upon completion of the course, students will be competent in speaking Swedish in everyday situations. They will have command of the more significant structures of Swedish, and they will have expanded their knowledge of vocabulary. Students will acquire a positive attitude toward developing their language skills.

Content

- Practising basis language structures in Swedish
- Oral and listening exercises
- Essays

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

- Contact teaching
- Oral and written exercises
- Computer-based exercises

Assessment

- Active participation in lessons
- Written and oral assignments
- One written exam

Further Information

NB! Students may receive credit for this course if they have included it in their Personal Study Programme.

English for polytechnic studies, 3 op KA01CKIE002 (study unit)

Lecturers John Pearce

Objectives

This is a preparatory course in which students will enhance their communication skills in Swedish before taking Swedish courses related to their field of study. Upon completion of the course, students will be competent in speaking Swedish in everyday situations. They will have command of the more significant structures of Swedish, and they will have expanded their knowledge of vocabulary. Students will acquire a positive attitude toward developing their language skills.

Content

- Revision of basic language structures in English
- Revision of basic vocabulary
- Written and oral exercises

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Contact teaching
- Oral and written exercises

Assessment

- Active participation in lessons
- Written and oral assignments
- Written exam

Further Information

NB! Students may receive credit for this course if they have included it in their Personal Study Programme.

Introduction to mathematics, 3 op KA01CMAT001 (study unit)

Lecturers Ville Vauhkonen, MA

Objectives

Students will acquire the skills necessary in solving basic mathematical problems for their profession and studies.

Content

- Basic calculations
- Percentages
- Roots and power
- Interest and taxation

Literature / Study Material Material provided by the lecturer.

Learning Methods Lectures/exercises (60 %) and independent study

Assessment

- Active participation in contact teaching (min. 60 %)
- Approved exercises (min. 40 %)

All parts of the course must be successfully completed passed to receive a grade for the course.

Languages of Instruction Finnish

English conversation, 3 op KA01CKIE003 (study unit)

Lecturers John Pearce

Objectives Students will be competent in oral communication in English in various situations.

Content

- Small talk
- Discussions about current affairs in small groups

- Games, oral exercises and presentations
- Computer work

Literature / Study Material Promentor 5: English–language computer programme and the lecturer's own material.

Learning Methods

Oral exercises in small groups, role playing, group work, presentations, computer exercises and distance learning.

Assessment Active participation during lessons, continual assessment.

Prerequisites English (KA01AKIE002)

Languages of Instruction English

Animal husbandry special practicals, 2 op KA01CKOT007 (study unit)

Lecturers Teija Rönkä

Objectives

Students will expand and deepen their knowledge of and practical skills in animal husbandry in Finland.

Content

The contents of this course are similar to those in the Basic Knowledge and Skills in Animal Husbandry course.

Literature / Study Material Material provided by the lecturer.

Learning Methods

- Teaching in small groups on the school's farm (50 %)
- Visits to various farms (25 %)
- Independent study (25 %)

Assessment Active participation and written assignments

Maatalouden verotuksen ATK- sovellukset, 2 op KA01DTIET11 (study unit)

Lecturers Lecturer N.N.

Objectives Students will learn how to use the latest computer software for processing farm taxation forms.

Literature / Study Material To be announced.

Learning Methods Learning by doing with various case studies and software.

Assessment Completed exercises

Prerequisites Taxation of Farms

Further Information Research and development: 1 cr

PRACTICAL TRAINING, 50 op KA01EH (study entity)

The purpose of practical training is to deepen students' professional knowledge and skills and to assist them in finding work with field-related employers.

Practical training, 30 op KA01EMHARJ (study entity)

The purpose of practical training is to deepen students' professional knowledge and skills. After the practical training, students will be able to work on an ordinary Finnish farm using effective, safe and ecological methods. Completing the practical training book and calculations assists students in planning farm management effectively.

Specialisation practice, 20 op KA01EEHARJ (study entity)

Students may do their practical training in in rural industries in Finland or abroad. The aim of the practical training is to provide students with an opportunity to acquire international work experience and to support the goals of internationalisation.

FINAL THESIS, 15 op KA01FOPNÄYT (study entity)

- Objectives: Students will complete a final thesis on a topic associated with rural industries such that the work supports their professional specialisation in the best possible way. The purpose of the thesis is to give students the opportunity to apply their knowledge of solving problems in the working world using existing information and research results and doing practical research themselves. Students will present their thesis work both in writing and as an oral presentation and in so doing will indicate they are capable of presenting information clearly and consistently. Students are required to present their thesis plan(s) at least 10 weeks before the thesis deadline.
- Maturity Test: According to Section 10 of the law pertaining to universitites of applied sciences (No. 256/1995), students who wish to complete a degree at the university of applied sciences level must complete a Maturity Test. The test is an integral part of the thesis and it is written on a topic pertaining to the thesis. The Maturity Test allows students to validate their knowledge of their chosen professional field and to show they are competent in the Finnish or Swedish languages. Thesis advisors provide students with two topics (titles), one of which they choose to write about. Students must indicate they are able to express themselves clearly using academic–style language and terminology associated with the field of rural industry. The contents of the text should correspond to the requirements of level of education. The Maturity Test should be about 2–4 pages long and written in pencil on ever other line. A lecturer of the Finnish language and thesis advisor grade the test on a pass/fail basis.

Degree Programme in Automation Engineering (In Finnish)

Head of degree programme: Mr Hannu Reinilä, tel.: 040 830 4160, e-mail: hannu.reinila@seamk.fi Student counsellor: Ms Pia-Mari Riihilahti, tel.: 040 830 2355, e-mail: pia-mari.riihilahti@seamk.fi or Ismo Tupamäki, tel.: 040 830 7484, e-mail: ismo.tupamaki@seamk.fi ECTS departmental co-ordinator / International co-ordinator: Mr Tapio Pihlajaniemi, tel.: 040 830 3966, e-mail: tapio.pihlajaniemi@seamk.fi

Enquiries: http://www.seamk.fi/automaatiotekniikka

QUALIFICATION AWARDED

Bachelor of Science in Engineering Technology, Automation Engineer (UAS)

ADMISSION REGUIREMENTS

See the Applicant's Guide.

GENERAL DESCRIPTION OF THE DEGREE PROGRAMME

Automaker Henry Ford and his three Ss (Simplify, Standardize, Specialize) set the pace for today's automation. This was the starting point of the mass production of automobiles, and still today all industrial production strives to apply the 3S rule. Automation engineers have yet one ace up their sleeves, i.e. Soul. By adding intelligence to a control system, it becomes easier to use and answers to customers' needs more appropriately.

Students in the Degree Programme in Automation Engineering graduate as automation engineers who possess competence in a wide range of professional areas. They create intelligent machines/devices and production lines using modern methods. Our inter-technological programme comprises study modules in Automation, Electrical and Machine Design, Control Systems and Programming, and Robotics. Designs acquire substance through modelling, visualisation and simulation in our "virtual cave".

A person with multi-professional expertise can find employment with a number of different employers. Our diverse programme in the fields of automation, electricity and machinery opens up doors to new employment opportunities, a world that is ever-increasingly dependent on technology. For this reason, the employment situation, both in Finland and globally, is excellent. Job titles include designer, technical expert, production manager, project manager, sales manager, purchasing director, etc. It is also possible to work in teaching and as an independent entrepreneur.

Educational and professional goals

Students who graduate from the Degree Programme in Automation Engineering possess a comprehensive understanding of how an automated machine or system works. They understand the possibilities and limitations of automation, electrical and mechanical design. Automation engineers have command of control–system programming (programmable logic), i.e. how to develop intelligent, automated devices.

All design work, such as electrical design, programming, machine design, robot and factory simulation, is carried out using the latest field–related computer programmes. Utilising virtual technology in the designing phase reduces mistakes in the actual creation of a device.

Our students become familiar with robots; they know what type of robot they must choose for each application, such as assembly, welding and dressing. Automation engineers are competent in programming robots to untiringly carry out tasks designed for them. They are also competent in programming computerised machining devices (CNC machines).

Educational approach and learning methods

Learning by doing is an age-old concept used to describe a method of in-depth learning. For this reason, teaching in the Degree Programme in Automation Engineering emphasises hands-on learning. We combine theoretical information with practical skills from the working world in our modern laboratory of technology. Our laboratory offers students numerous experiences of intuitive understanding through a diverse range of assignments. The equipment in our laboratory is the same as that is used in the working world. This provides students with the opportunity to make a routine of solving practical problems and smoothly transferring to the working world after graduation. What's more, designing, automating and finally creating various devices as a member of a team is fun.

The working world not only requires employees to have problem–solving skills, but also the ability to co–operate with others and a commitment to life–long learning. For this reason, learning in our courses involves a lot of pair and group work. There are also visits by experts in the field, assignments, projects, visits to various companies and trade fairs, and practical training in authentic working environments.

Competences acquired in the degree programme

Electrotechnical and other basic competence

- is able to apply mathematical methods and tools to describe the phenomena of the field and to solve problems
- is familiar with the important physical laws used in the applications of the field, especially regarding the field of electromagnetic phenomena
- is familiar with the components of electromagnetism and the basic connections
- knows the basic measurements of electrotechnology
- has the basic ICT skills

Design competence

- knows the methods and tools of hardware and software design in automation
- is able to dimension and select machines and components using techno-economic principles
- is able to produce standardised documentation
- understands the importance of standards and is able to apply them in every design phase of the field
- is familiar with the significance of the quality system
- understands the product life cycle

Competence in electricity and equipment safety

- knows the significant laws and regulations regarding electrical and equipment safety and is able to apply them in practice
- has a positive attitude for following and developing safe work methods

Competence in business and production management

- knows the prerequisites of profitable business and the most important tools of economical design and direction
- has the skills needed to take part in project work and to manage people, processes and projects
- is familiar with the basic principles of entrepreneurship, marketing and service

Competence of basic circuits

- is able to design measurement, control, valve and motor circuits
- knows the theory of conventional feedback control circuit
- is able to perform process experiments, draw basic models for process dynamics and to use PID control circuit tuning methods
- is able to implement measurement, control, valve and motor circuits on the software and hardware level

Competence in processes, machines and systems

- is familiar with the most common production processes and machines
- is familiar with sensors, transmitters and regulating units used in the processes
- is familiar with the structure and maintenance of control systems
- is able to implement control applications using programmable logic and process control systems
- knows the HW and SW design of automation systems from the definition to the implementation

Access to further studies

Students may apply to complete their master's degree in automation technology (See act 351/2003 concerning Finnish universities of applied sciences, in Finnish).

Course structure diagram with credits

The structure of the programme is presented in the form of a chart under AUTE 2008.

Examination and assessment regulations

Regulations pertaining to the operations in universities of applied sciences.

Degree Programme in Automation Engineering (In Finnish), 240 cr (1.9.2008) AUTE 2008

Code	Name	Study Year				CR		
		1.	2.	3.	4.			
KL25AA	BASIC STUDIES							
KL25AA10	Supporting studies							
KL25AA10010	Introduction to technical studies	x				1		
KL25AA10110	Research methods			x		2		
KL25AA20	Languages and communication	1						
KL25AA20000	English 1	x				3		
KL25AA20100	English 2		x			3		
KL25AA20200	English 3				x	3		
KL25AA20300	Swedish			x		3		
KL25AA20400	Communication and negotiation skills 1	x				3		
KL25AA20500	Communication and negotiation skills 2			x		3		
KL25AA31	Mathematics					18		
KL25AA30110	Algebra and trigonometry	x				4		
KL25AA30210	Vectors and analytic geometry	x				3		
KL25AA30200	Differential and integral calculus		x			3		
KL25AA30500	Computer aided mathematics		x			4		
KL25AA30150	Mathematics of automation technology			x		4		
KL25AA32	Physics							
KL25AA30350	Mechanics	x				3		
KL25AA30400	Electricity and magnetism	x				3		
KL25AA30000	Wave motion and modern physics	x				3		
KL25AA30450	Thermophysics		x			3		
KL25AA30300	Laboratory assignments in physics		x			3		
KL25AA40	Information technology		-	-	-	6		
KL25AA40000	Micro computer technology	x				3		
KL25AA50101	Office applications	x				3		
KL25AB	PROFESSIONAL STUDIES					120		
KL25AB10	Basics of professional studies					31		
KL25AB10000	Basics of automation	x				3		
KL25AB10050	Basics of digital technology	x				3		
KL25AB10100	Electronic components		x			3		
KL25AB10151	Human resources management				x	3		
KL25AB10201	Basics of programming 1		x			3		

KL25AB10250	Programmable logic controllers	x				3	
KL25AB10300	Electrical safety	x				2	
KL25AB10350	Industrial economics	x				3	
KL25AB10401	Basics of electrical engineering	x				5	
KL25AB10451	Basics of programming 2		x			3	
KL25AB20	Professional studies modules						
KL25AB30	Manufacturing technology		-			9	
KL25AB30000	Basics of materials and manufacturing technology	x				4	
KL25AB30100	Laboratory assignments in NC technology			х		3	
KL25AB30200	Computer aided manufacturing			x		2	
KL25AB40	Mechanics	Mechanics					
KL25AB40000	Machine elements			x		4	
KL25AB40100	Systems of mechanization			x		3	
KL25AB40200	Statics		x			3	
KL25AB50	Machine design					18	
KL25AB50001	Hydraulics and pneumatics		x			5	
KL25AB50100	Machine and equipment design			х		4	
KL25AB50201	Strength of materials 1			х		4	
KL25AB50300	Mechanical drawing and CAD	х				5	
KL25AB60	Electronics					6	
KL25AB60100	Electronic circuits		x			3	
KL25AB60200	Power electronics				x	3	
KL25AB70	Programming of automation systems						
KL25AB70000	Laboratory assignments in automation 1		x			4	
KL25AB70100	Laboratory assignments in automation 2			х		4	
KL25AB70200	Machine automation 1		x			4	
KL25AB70300	Machine automation 2			х		4	
KL25AB70400	Robotics			х		4	
KL25AB80	Project studies				1	8	
KL25AB80000	Special course in automation			х		4	
KL25AB80100	Project work in automation			х		4	
KL25AB90	Design of control system					18	
KL25AB90400	Electrical CAD		x			3	
KL25AB90000	Sensor technology	х				3	
KL25AB90100	Drive technology			х		5	
KL25AB90200	Laboratory assignments in control systems		x			3	
KL25AB90300	Design of electrical and automation system		x			4	
KL25AC	FREE-CHOICE STUDIES					15	
KL25AD10	THESIS				1	15	
KL25AD10000	Thesis				х	15	
KL25AE20	PRACTICAL TRAINING				1	30	
KL25AE20000	Practical training				х	30	

Study Descriptions

BASIC STUDIES, 60 op KL25AA (study entity)

The purpose of the Basic Studies is to provide students with the intellectual and methodological foundation needed to engage in scientific thinking. Basic Studies also provide students with readiness to progess to their professional studies and achieve professional skill.

Supporting studies, 3 op KL25AA10 (study entity)

Supportive Courses develop students' readiness to study at the university of applied sciences level. Central issues discussed in the courses include awareness of students' chosen professional field, study and learning techniques, and information retrieval.

Introduction to technical studies, 1 op KL25AA10010 (study unit)

Lecturers

Hannu Reinilä, MSc Pia–Mari Riihilahti, MA

Objectives

This is an introductory course to studying in the field of engineering. The course teaches students proper study methods and helps them to understand the significance of the field.

Content Studying, learning, data gathering, significance of engineering

Literature / Study Material To be announced during the lectures.

Learning Methods Lectures, team work, and active participation

Assessment Active participation in the lectures, exercises, and a written exam

Languages of Instruction Finnish

Research methods, 2 op KL25AA10110 (study unit)

Lecturers Jorma Mettälä, LSc (Tech.)

Objectives

Students will acquire skills necessary in data acquisition for their thesis. They will be familiar with various research methods and be able to apply them in their thesis process.

Content

The course involves the use of the internet and library and university data bases. Students will be familiar with scientific research methods and how to apply them to their own thesis.

Literature / Study Material To be announced during the lectures.

Learning Methods Lectures and exercises

Assessment Approved exercises and examination

Languages of Instruction Finnish
Languages and communication, 18 op KL25AA20 (study entity)

This module provides students with the skills necessary to communicate with professionals in their chosen field and other fields. Students will be competent in various communicative situations in both Finnish and a foreign language.

English 1, 3 op KL25AA20000 (study unit)

Lecturers Anne Vuokila, M.A.

Objectives

The aim of the course is to enhance students' language skills. Upon completion of the course, students will

- be able to gather information in English from various sources and learn new terminology and concepts,
- be able to discuss their studies in English,
- be able to discuss the Finnish industry in English,
- be able to comprehend the differences in communicational situations in English and in Finnish,
- be able use English in everyday situations and in work related situations, and
- have the ability to use basic IT terminology.

Content

- Finnish education system, Finnish industry
- Product descriptions
- Basic hydraulic and material related terminology (integration)
- Basic IT terminology; basic equipment-related vocabulary
- Basic mathematical terms and shapes in English
- Searching for information in English

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, listening comprehension, oral exercises, and independent study

Assessment Active participation in the lectures, oral presentation, and approved final examination

Languages of Instruction Finnish and English

English 2, 3 op KL25AA20100 (study unit)

Lecturers Anne Vuokila, M.A.

Objectives

Students will understand and be competent in using basic technical vocabulary in English when speaking or writing. Upon completion of the course, students will

- understand the various stages of business correspondence and will know how to write an offer in English,
- be familiar with typical business correspondence, e.g. telephone and e-mail,
- know how to make a presentation of a company in English,
- be familiar with the vocabulary related to trade fairs,
- be able to describe industrial processes in English, and
- know how to write a CV.

Content

- Business correspondence
- Business communication by e-mail or phone
- Company presentations
- Trade fairs
- Process descriptions
- Mathematical terms

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

Lectures, listening comprehension, oral exercises, and independent study

Assessment

Active participation in the lectures, an oral presentation and an approved final examination

Languages of Instruction Finnish and English

English 3, 3 op KL25AA20200 (study unit)

Lecturers Anne Vuokila, M.A.

Objectives

Upon completion of the course, students will

- be able to apply for a job in English,
- understand the basics of and conditions for technical reading and writing,
- master meeting procedures,
- be familiar with advanced technical terminology,
- be able to prepare a thesis abstract in English.

Content

- Applying for a job
- Technical reading and writing
- Meetings and negotiations

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, listening comprehension, oral exercises, and independent study

Assessment Active participation on the lectures, approved interim and final examinations

Languages of Instruction Finnish and English

Swedish, 3 op KL25AA20300 (study unit)

Lecturers Hanna Mäki-Hallila, MA

Objectives

Upon completion of the course, students will be competent in actively communicating in Swedish at work. They will also know how to acquire and use information related to their professional field.

Content

- Education, applying for a job, working
- Work environment and society
- Customer contacts
- General purpose texts
- · Basic terminology related to the field

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, listening comprehension, oral exercises, and independent study Assessment Active participation in the lectures, interim and final examinations

Languages of Instruction Finnish and Swedish

Communication and negotiation skills 1, 3 op KL25AA20400 (study unit)

Lecturers Pia–Mari Riihilahti, MA

Objectives

Upon completion of the course, students will

- understand the principles of the communication process; they will have knowledge of the various aspects involved in the process and be able to apply this knowledge to situations in the working world,
- be able to write documents in proper Finnish,
- be able to create a standardised document and know the basics of business correspondence,
- know how to write excellent job applications and CVs and how to present themselves in job interviews,
- know how to speak in public and to give successful presentations,
- understand how culture influences the communication process, and
- be able to write good summaries.

Content

- Communication processes in the working world
- Teamwork
- Documents
- Business correspondence
- Job applications, job interviews, and CVs
- Non-verbal communication, presentations
- Speaking in public
- Cultures and communication
- Grammar

Literature / Study Material Kauppinen, A., Nummi, J. & Savola, T: Tekniikan viestintä. Edita. (Technical communication)

Learning Methods Lectures, exercises in written and oral communication

Assessment Oral and written exercises and an examination

Languages of Instruction Finnish

Communication and negotiation skills 2, 3 op KL25AA20500 (study unit)

Lecturers Pia–Mari Riihilahti, MA

Objectives Upon completion of the course, students will

- be able to produce formal written material,
- be able to write clear instructions and specifications,
- know how to write scientific reports and use citations,
- have knowledge of negotiation procedures and meetings, and
- possess presentation skills.

Content

- Writing instructions and specifications
- Reports
- Analysing texts

- Scientific writing
- Argumentation
- Presentations
- Negotiations
- Meetings
- Grammar

Literature / Study Material Kauppinen, A., Nummi, J. & Savola, T: Tekniikan viestintä. Edita. (Technical communication)

Learning Methods Lectures, oral and written exercises

Assessment Oral and written exercises and an examination

Languages of Instruction Finnish

Mathematics, 18 op KL25AA31 (study entity)

This module provides students with the mathematical skills necessary to solve problems encountered later in their professional studies and in the working world. Students will be aware that mathematics are a basic tool used in modelling phenomena encountered in nature.

Algebra and trigonometry, 4 op KL25AA30110 (study unit)

Lecturers Pasi Mikkonen, PhD

Objectives Students shall acquire basic knowledge needed in technological mathematics.

Content Simplification of algebraic expressions, equations and trigonometry

Literature / Study Material

- Antti Majaniemi: ALGEBRA I
- Antti Majaniemi: GEOMETRIA

Learning Methods Lectures, exercises and independent study

Assessment Final exam and the exercises during the course

Languages of Instruction Finnish

Vectors and analytic geometry, 3 op KL25AA30210 (study unit)

Lecturers Pasi Mikkonen, PhD

Objectives

Students will acquire basic knowledge of vectors and analytic geometry. They will use this knowledge in their professional studies, and it provides a basis for commanding complex technical-mathematical knowledge.

Content Vectors and analytic geometry

Literature / Study Material

• Antti Majaniemi: ALGEBRA I

• Antti Majaniemi: GEOMETRIA.

Learning Methods Lectures, calculations, and independent study

Assessment Final exam and calculations during the course

Prerequisites Algebra and trigonometry

Languages of Instruction Finnish

Differential and integral calculus, 3 op KL25AA30200 (study unit)

Lecturers Pasi Mikkonen, PhD

Objectives

Students will acquire basic knowledge in one-variable differential and integral calculations, which is needed in vocational subjects. The course prepares students for the command of complex technical-mathematical knowledge.

Content

One variable differential and integral calculations

Literature / Study Material

- Antti Majaniemi: MATEMATIIKKA I
- Antti Majaniemi: MATEMATIIKKA II

Learning Methods Lectures, calculations and independent study

Assessment Final exam and the exercises during the course

Prerequisites Algebra and trigonometry

Languages of Instruction Finnish

Computer aided mathematics, 4 op KL25AA30500 (study unit)

Lecturers Pasi Mikkonen, PhD

Objectives

Students will acquire basic knowledge of mathematical software and statistics. This knowledge is needed in vocational subjects and it helps students to command complex technical–mathematical knowledge.

Content Mathematical software and statistics

Literature / Study Material To be announced by the lecturer.

Learning Methods Lectures, computer exercises, other exrcises, and independent study

Assessment Final exam and the exercises during the course

Prerequisites Algebra and trigonometry

Study Descriptions

Languages of Instruction Finnish

Mathematics of automation technology, 4 op KL25AA30150 (study unit)

Lecturers Pasi Mikkonen, PhD

Objectives

Students will understand the mathematical concepts and methods as described in the Contents, and they will know how to apply the concepts and methods to solving problems in the field of technology.

Content

Mathematical tools needed in professional studies, for example:

- Matrix calculations
- Sequences and series
- Differential equations and Z transformation
- Fourier analyses
- Optimization
- Discrete mathematics
- Probability calculations
- Statistics

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, calculations and independent study

Assessment Written examination, calculations and assignment

Prerequisites First- and second-year mathematics courses

Languages of Instruction Finnish

Physics, 15 op KL25AA32 (study entity)

This module provides students with the readiness to understand the physical bases for phenomena encountered in nature. Understanding the laws of physics provides a foundation for designing and implementing new applications.

Mechanics, 3 op KL25AA30350 (study unit)

Lecturers Jouni Björkman, PhD

Objectives

The aim of the course is to provide students with basic knowledge of physics in engineering and to prepare students for obtaining complex technical expertise encountered in the working world.

Content

- Mechanics of rigid objects
- Kinematics
- Dynamics and gravitation

Literature / Study Material Hautala et al. Insinöörin fysiikka (AMK) osa 1 / Physics for engineers, part 1

Learning Methods Lectures and calculations: at least 80 % attendence required Assessment Mainly interim and final examinations

Languages of Instruction Finnish

Electricity and magnetism, 3 op KL25AA30400 (study unit)

Lecturers Jouni Björkman, PhD

Objectives

The aim of the course is to provide students with basic knowledge of physics in engineering and to prepare them for learning complex technical expertise needed in the working world.

Content

- Electrostatics
- Electrodynamics

Literature / Study Material Hautala et al. Insinöörin fysiikka (AMK) osat 1 ja II / Physics for engineers, parts I and II

Learning Methods Lectures and calculations

Assessment Interim or final examinations

Languages of Instruction Finnish

Wave motion and modern physics, 3 op KL25AA30000 (study unit)

Lecturers Jouni Björkman, PhD

Objectives Students shall acquire basic information concerning physics in engineering, as well as readiness to acquire complex technical expertise in the working world.

Content Acoustics, optics, radiation, and nuclear physics

Literature / Study Material Peltonen et al. Insinöörin (AMK) fysiikka osa II / Physics for engineers

Learning Methods Lectures and calculations

Assessment Written examination

Languages of Instruction Finnish

Thermophysics, 3 op KL25AA30450 (study unit)

Lecturers Jouni Björkman, PhD

Objectives

The aim of the course is to provide students with basic knowledge of physics for engineering and to prepare them to learn complex technical expertise needed in the working world.

Content

- Hydrostatics
- Hydrodynamics
- Mechanics of solids and fluids
- Thermophysics
- Thermodynamics

Literature / Study Material Peltonen et al: Insinöörin (AMK) Fysiikka osa II / Physics for engineers, part II

Learning Methods Lectures and calculations

Assessment Interim and final examinations

Languages of Instruction Finnish

Laboratory assignments in physics, 3 op KL25AA30300 (study unit)

Lecturers Jouni Björkman, PhD

Objectives

- Basic knowledge of measurements in experiments
- Processing and reporting results
- Application of experimental physics in various fields of engineering

Content

Laboratory experiments

Literature / Study Material

Instructions for physics exercises (Seinäjoki University of Applied Sciences, School of Engineering)

Learning Methods

Laboratory exercises and at least 80 % attendance at the lectures

Assessment

Approved completion of assignments, approved reports, and an examination related to completed work

Languages of Instruction Finnish

Information technology, 6 op KL25AA40 (study entity)

This module provides students with readiness needed in utilising the university's information technology tools. Further, students will be familiar with the structure of a PC and its functional aspects in such a way that they will be able keep their own computer up to date.

Micro computer technology, 3 op KL25AA40000 (study unit)

Lecturers Alpo Anttonen, MSc

Objectives

This is an introductory course which discusses micro-computers and their most common peripheral devices, structure and functions. Students learn how to use and service a personal computer.

Content

- PC structure, processors and connections
- Magnetic and optic memory

• Monitors, voice cards, scanners and printers

Literature / Study Material

Lähteinen & Pietikäinen: PC-tekniikan käsikirja, Helsinki Media (PC technology manual)

Learning Methods Lectures, exercises and laboratory assignments

Assessment Active participation, exercises, laboratory assignments and an examination

Languages of Instruction Finnish

Office applications, 3 op KL25AA50101 (study unit)

Lecturers Alpo Anttonen, MSc

Objectives

This course teaches students how to use word processing programmes, spreadsheets, databases, graphics, mathematics, etc. software needed during the course of their studies at the university. Students will also become familiar with the information technology used in the university.

Content

- Internet and email
- Basics word processing, spreadsheets, databases, and graphics
- Mathematics software
- Creating a home page

Literature / Study Material

- Application programme manuals
- Handouts

Learning Methods Lectures, computer work, exercises, and independent study

Assessment Assignments and an examination

Languages of Instruction Finnish

PROFESSIONAL STUDIES, 120 op KL25AB (study entity)

Professional Studies are divided into Basic Professional Studies and Professional Studies Modules. Professional Studies comprise courses in automation technology which create a foundation for the more in-depth learning that takes place in the Professional Studies Modules. Professional Studies Modules depend on what degree programme and line of specialisation a particular student is studying. The courses in the modules provide students with advanced skills in automation engineering.

Basics of professional studies, 31 op KL25AB10 (study entity)

The purpose of Basic Professional Studies is to create a foundation for more in-depth understanding of the Professional Studies. These courses provide students with specialised skill that they can use during their summer internship, for example. As a rule, students complete the Basic Professional Studies during their first two years of study. Basic Professional Studies are compulsory.

Basics of automation, 3 op KL25AB10000 (study unit)

Lecturers Martti Lehtonen, BSc

Objectives

Students will be able to differentiate between various automation systems, they will understand how automation systems work. Students will be familiarised with relay and PLC drivers, the more common types of sensors, and the structure, function and connections associated with various devices. They will also be familiar with the idea behind the logic needed in automation technology.

Content

- Development of automation and automation technology
- What is automation?
- Control and regulation, control systems for automation, sensors, devices, programmable logics, components for a control system
- · Common connections for sensors and devices into programmable logics
- Practice making connections as laboratory work
- Familiarisation with various automation control systems

Literature / Study Material

- Lecturer's material
- Examples from lectures
- Exercises
- Product and programming manuals from various importers

Learning Methods

Lectures, examples, exercises, and group work in the laboratory

Assessment Exercises and a written and practical examination

Languages of Instruction Finnish

Basics of digital technology, 3 op KL25AB10050 (study unit)

Lecturers Tuomo Hirvonen, MSc Ismo Tupamäki, MSc

Objectives

Students will acquire understanding of digital data and their use.

Content

Gate circuits, binary arithmetic, number systems, codes, A/D and D/A conversions, digital technology and computers, and data transmission and control systems are topics discussed in the course.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises

Assessment Exercises and an examination

Languages of Instruction Finnish

Electronic components, 3 op KL25AB10100 (study unit)

Lecturers Tuomo Hirvonen, MSc

Objectives This is an introductory course concerning basic electronic components.

Content

- Electronic mechanics: PCB, connectors, switches
- Passive components: resistors, capacitors, inductances
- Discrete conductors: diodes and transistors, operational amplifiers and optoelectronic components
- Simulation.

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, calculations, and simulation exercises

Assessment An examination and active participation when doing the exercises

Languages of Instruction Finnish

Human resources management, 3 op KL25AB10151 (study unit)

Lecturers Lasse Tarhala, MSc

Objectives

Upon the completion of the course, students will possess basic, operational and strategic knowledge of human resources management, from the point of view of both individuals and the processes involved.

Content

Topics discussed during the course include human resources management today, with a focus on the learning organization. It also involves discussion about the strategic viewpoints in human resources management and company culture, supervision in changing organizations, situation management and interaction, individuals as part of the work community (motivation, commitment and superior/subordinate dialogs), the development of knowledge, collective agreements and labor codes.

Literature / Study Material

Riitta Viitala, Henkilöstöjohtaminen, 2000. Lecturer's material.

Learning Methods Active participation in the lectures and group work, seminars and exercises

Assessment Written examination and approved exercises: 80/20

Prerequisites Industrial Economics

Languages of Instruction Finnish

Basics of programming 1, 3 op KL25AB10201 (study unit)

Lecturers Hilkka Niemelä, MA

Objectives

Students will understand the basics of programming and learn to design and test the logic of a program. They will also learn about general programming thinking which is independent from the programming language or equipment.

Content

The basics of high-level programming language: variables, input/output, logical expressions, decision-making, looping, methods and arrays

Literature / Study Material Material announced by the lecturer

Learning Methods Lectures and programming exercises

Assessment Approved exercises and an exam

Languages of Instruction Finnish

Programmable logic controllers, 3 op KL25AB10250 (study unit)

Lecturers

Hannu Reinilä, MSc Niko Ristimäki, BSc Ismo Tupamäki, MSc

Objectives

Students will understand the prerequisites for the function of automatic machines and production systems. They will understand the role of Programmable Logic Control (PLC) devices. The students will learn about the stucture and the function of PLC devices, which are usually used in machine and production automation systems. They will learn the logical way of programming and to create sequence–based programs and human–machine interfaces with a control panel.

Content

- History of production automation and information systems
- Taylorism
- Flexible automation systems
- Stucture of Omron PLC devices and the CX-One programming environment
- Memory areas, timers, counters, bytes, words, holding relays, seguence-based programming
- Designing and programming an interface

Upon completion of the course, students will receive hands-on experience in programming.

Literature / Study Material

Lecturer's material, exercises, the product and programming manuals of various suppliers

Learning Methods Lectures, exercises, group work

Assessment Exercises and an examination

Languages of Instruction Finnish and English

Electrical safety, 2 op KL25AB10300 (study unit)

Lecturers Ismo Tupamäki, MSc

Objectives

Students will become familiar with national guidelines concerning the rights to make electrical installations, and the instructions on how to do electrical jobs safely.

Content

The topics discussed in the course include the dangers of electricity, laws concerning electrical safety, protecting against electric shock, safety at work, and first aid.

Literature / Study Material

- Electrical safety regulations
- D1 handbook concerning electrical installations in buildings
- Standards
- Hand–outs
- Internet (www.tukes.fi)

Learning Methods Lectures, online learning, exercises

Assessment Online exams

Prerequisites

• Theory of Electricity and Magnetism

Languages of Instruction Finnish

Industrial economics, 3 op KL25AB10350 (study unit)

Lecturers

Jorma Mettälä, LSc (Tech.) Lasse Tarhala, MSc

Objectives

Students will gain insight into the national economy, the structure of the industry and domestic competitive advantage. The main concepts of economics, marketing and production operations, quality management and environmental policies will also be discussed.

Content

The course comprises the following topics:

- Industrial strategy and policies
- Labor market parties
- Types of enterprises
- Establishing and managing an enterprise
- Financial requirements, growth, profitability, liquidity, solvency
- Basic concepts of marketing, human resources and quality management

Literature / Study Material

- Uusi-Rauva, Haverila, Kouri: Teollisuustalous (Industrial economics)
- Lecture handouts and other material

Learning Methods Lectures, group work, and exercises

Assessment Approved exercises and an examination

Languages of Instruction Finnish

Basics of electrical engineering, 5 op KL25AB10401 (study unit)

Lecturers Ismo Tupamäki, MSc

Objectives

Students will acquire the basic knowledge of the concepts in electrical engineering in theory and make related calculations. They will also learn to measure components for specific requirements.

Content

- Electodynamics/ DC and AC circuits
- Electrical circuit measurement
- Multi-phase systems
- Electrical motors

Literature / Study Material

Aura & Tonteri: Teoreettinen sähkötekniikka ja sähkökoneiden perusteet, WSOY (Electrical engineering and motors)

Learning Methods Lectures, calculations and measurements

Assessment Exercises and examinations

Prerequisites Theory of Electricity and Magnetism

Languages of Instruction Finnish

Basics of programming 2, 3 op KL25AB10451 (study unit)

Lecturers Hilkka Niemelä, MA

Objectives

The course provides students with in-depth knowledge of structured program designing. They will also learn to use graphical user-interface controls, as well as to plan, code, document and test small-scale Windows-type applications.

Content

- User-interface controls
- Layouts
- Events

Literature / Study Material Material announced by the lecturer

Learning Methods Lectures and programming exercises

Assessment Assessment is based on exercises, an independent assignment, and on an exam.

Prerequisites

• Basics in Programming 1

Languages of Instruction Finnish

Professional studies modules, 89 op KL25AB20 (study entity)

Professional Studies are divided into modules. The modules comprise several courses, all of which are linked to the topic of the module in question. The purpose of the Professional Studies Modules is to provide students with professional competence which involves a profound understanding of knowledge and skill and putting that knowledge and skill to use. As a rule, students begin their Professional Studies in their second year of study.

Manufacturing technology, 9 op KL25AB30 (study entity)

The promary aim of the Manufacturing Techniques Module is to provide students with a clear picture of construction materials used today and how they can be used in various processing environments. Students also learn how to process materials, intended mainly for chipping, into end–products using numerically controlled processing machines.

Basics of materials and manufacturing technology, 4 op KL25AB30000 (study unit)

Lecturers Markku Kärkkäinen, MSc

Objectives

Students will understand the fundamental concepts of the material selection process and the properties of ordinary

construction materials. They will also know how to make decisions concerning materials and manufacturing methods for those materials.

Content

- Manufacturing methods used in the engineering industry
- Casting
- Welding
- Coating methods
- Powder metallurgy
- NC concept in brief
- Construction materials, their characteristics, handling, standards and selection
- Operating characteristics and material testing
- Internal structure of metals
- Equilibrium phase diagrams
- Heat treatment of steels
- Characteristics of steels and cast irons
- Other alloys
- Polymers and composite materials

Literature / Study Material Lecturer's material

Learning Methods Interactive lectures and exercises

Assessment An examination and approved exercises

Languages of Instruction Finnish and English

Laboratory assignments in NC technology, 3 op KL25AB30100 (study unit)

Lecturers

Markku Kärkkäinen, MSc Jorma Mettälä, LSc (Tech.)

Objectives

Students will be familiar with the functions and CAD/CAM systems of NC machines. They will be competent in independently using and programming NC machines.

Content

- Functions of NC machines
- CAD/CAM-systems
- Machining operations and tool paths
- Post-processing
- Concepts of G-code
- Compensations and tool management

Literature / Study Material

Pikkarainen E. 1999. NC-tekniikan perusteet (Basics in NC technology). Helsinki Hakapaino Oy. pp. 170. ISBN 952-13-0452-9

Learning Methods

Lectures, supervised computer work and exercises, laboratory work, and an approved examination

Assessment

Supervised computer work and exercises, laboratory work, and an approved examination

Prerequisites

- Mechanical Drawing and CAD
- Computer-aided Manufacturing

Languages of Instruction Finnish

Computer aided manufacturing, 2 op KL25AB30200 (study unit)

Lecturers

Jorma Mettälä, LSc (Tech.)

Objectives

Students will be familiar with CAM-systems (computer-aided manufacturing) and the functions of NC machines. They will be able to independently program numerically controlled (NC) machines.

Content

- CAD/CAM–systems
- · Machining operations and toolpaths
- Post-processing
- Concepts of G-code
- Compensations and using NC-machines

Literature / Study Material

Pikkarainen, E. 1999. NC-tekniikan perusteet (Basics in NC technology). Helsinki Hakapaino Oy. pp. 170. ISBN 952-13-0452-9

Learning Methods Lectures, supervised computer work, and exercises

Assessment Active participation, exercises, and an examination

Prerequisites

• Mechanical Drawing and CAD

Languages of Instruction Finnish

Mechanics, 10 op KL25AB40 (study entity)

The Mechanics Module familiarises students with the construction solutions used in general mecanical engineering, and they also learn how to measure and select these solutions. Furthermore, students will learn the basics of how to determine the equilibrium and strain of various components.

Machine elements, 4 op KL25AB40000 (study unit)

Lecturers Markku Kärkkäinen, MSc

Objectives

Students will gain knowledge about the structure and design of machine elements, the design norms associated with the field, and they will know how to select parts from standards and catalogs.

Content

- Machine part calculations and design basis
- Joints
- Revolving machine parts, shaft connections, bearings, couplings
- Basics in power transmission equipment design

Literature / Study Material Provided by the lecturer

Learning Methods Interactive lectures and exercises

Assessment An examination, exercises and assignments Prerequisites Strength Theory

Languages of Instruction Finnish and English

Systems of mechanization, 3 op KL25AB40100 (study unit)

Lecturers

Markku Kärkkäinen, MSc

Objectives

The aim of this course is to introduce students to systematical procedures for constructing mechanical systems using standard components.

Content

- Linear guide systems
- Components of power transmission
- Calculation and optimization methods of power transmission components
- V-belt drives, toothed belt drives
- Introduction to tailor-made calculation software for power transmission

Literature / Study Material Material provided by the lecturer.

Learning Methods Interactive lectures and exercises

Assessment An examination and approved exercises

Prerequisites

- Algebra
- Geometry
- Analytic geometry
- Matrix calculations
- Differential calculus
- Integral calculus

Languages of Instruction Finnish and English

Statics, 3 op KL25AB40200 (study unit)

Lecturers Markku Kärkkäinen, MSc

Objectives

The aim of the course is to develop students' ability to analyze a given problem in a simple and logical manner and to apply the few fundamental and well–known principles of statics on statically determined problems.

Content

- Basic laws of mechanics
- Combination of forces, moment of force, equilibrium of particle and rigid body
- Statically determinate beams, shear force and bending diagrams
- Center of gravity calculations

Literature / Study Material To be announced during the lectures.

Learning Methods Lectures and exercises Assessment

Interim tests or a final examination and approved exercises

Prerequisites

- Algebra
- Geometry
- Analytic Geometry
- Matrix calculations
- Differential Calculus
- Integral Calculus

Languages of Instruction Finnish and English

Machine design, 18 op KL25AB50 (study entity)

The central topics of the Machine Design Module include hydraulic and pneumatic automation systems, calculationg the strength of machine parts and actuators, and an introduction to the primary principles of systematic design processing. Students also learn how to make technical drawings and engage in computerized designing.

Hydraulics and pneumatics, 5 op KL25AB50001 (study unit)

Lecturers Markku Kärkkäinen, MSc

Objectives

Students will learn the operational principles of the main components in hydraulic and pneumatic systems, their design concepts and applicability. They will also acquire the ability to choose between these two systems.

Content

Topics discussed during the course include the fundamentals of hydraulic and pneumatic systems, the structure and operation of hydraulic and pneumatic components, cylinders, pumps and engines. Students also learn about valve technology and computer-aided design in both hydraulics and pneumatics.

Literature / Study Material Provided by the lecturer

Learning Methods Interactive lectures, exercises and laboratory work

Assessment

Approved exercises and laboratory work, an examination

Languages of Instruction Finnish and English

Machine and equipment design, 4 op KL25AB50100 (study unit)

Lecturers Jorma Mettälä, LSc (Tech.)

Objectives Students will acquire knowledge of the stages of machine and equipment design processes.

Content

- Common construction principles
- Materials and their selection
- Tolerances
- · Production method in relation to product design
- Machine safety directives.
- Ergonomics

Literature / Study Material To be announced during the lectures.

Learning Methods Lectures and guided exercises

Assessment An examination and approved assignments

Prerequisites

- Statics
- Strength Theory
- Basics in Material and Production Technology
- Technical Drawing and CAD

Languages of Instruction Finnish

Strength of materials 1, 4 op KL25AB50201 (study unit)

Lecturers Markku Kärkkäinen, MSc

Objectives

Students will acquire basic knowledge of the elasticity and strength of materials and their application to machine parts and structures.

Content

- Fundamental concepts of the strength of materials
- Stress, changes of form, measurement in conditions of pulling, pressure, shearing, bending and torsional load
- Plane strain
- Combined strain
- Stability
- Curved beam
- Hypothesis of fracture

Literature / Study Material Karhunen ym: Lujuusoppi (Strength theory)

Learning Methods Lectures and exercises

Assessment Examination, approved exercises

Prerequisites Statics

Languages of Instruction Finnish

Mechanical drawing and CAD, 5 op KL25AB50300 (study unit)

Lecturers Jorma Mettälä, LSc (Tech.)

Objectives

Students will learn to use computer-aided methods in designing and measuring machines and machine parts in accordance with regulations and standards.

Content

• Significance of engineering drawing, projections, measurement, assembly drawings, surface markings

• SolidEdge 3D program's 2D and 3D modelling, sheet metal design, assembly, kinetics, 3D calculations, virtual reality

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, supervised computer work and exercises

Assessment Exercises and an examination

Languages of Instruction Finnish and English

Electronics, 6 op KL25AB60 (study entity)

In the Electronics Module, students will learn about the typical electronic components and circuits used in the automation field. Work in the laboratory teaches students to identify components, measure currents and voltage, and to identify malfunctions.

Electronic circuits, 3 op KL25AB60100 (study unit)

Lecturers Tuomo Hirvonen, MSc

Objectives

Students will acquire cmpetence in using basic electronic components. They will use data books and learn about passive components, i.e. resistors, capasitors, adaptors, and connectors.

Content

- Semiconductor components, linear and switched mode power supplies
- Break–downs and protecting electronic components

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises

Assessment Examination and active participation when doing exercises

Prerequisites Electronic Components

Languages of Instruction Finnish

Power electronics, 3 op KL25AB60200 (study unit)

Lecturers Seppo Stenberg, MSc

Objectives

- Use of power components
- Equipment design

Content

- Director components, the structure and characteristics of circuits, the measurement of cooling
- Frequency converter structure, characteristics and operations
- Servo- and stepping motor controls

Literature / Study Material Lecturer's handouts

Learning Methods Lectures and exercises

Assessment An examination and exercises

Prerequisites

• Electronic Components

• Electronic Circuits

Languages of Instruction Finnish

Programming of automation systems, 20 op KL25AB70 (study entity)

The Automation System Programming Module provides students with practical knowledge about configuring and programming machines and machine systems. Automation devices may be single devices or entire communicating systems with the help of industrial channels. Students practice their logical thinking and problem–solving skills.

Laboratory assignments in automation 1, 4 op KL25AB70000 (study unit)

Lecturers

Hannu Reinilä, MSc Niko Ristimäki, BSc Ismo Tupamäki, MSc Martti Lehtonen, BSc

Objectives

Working together in pairs, students will apply the skills they have gained during the Machine Automation course. They will design programmes and human-machine interfaces for multifunctional automated production systems.

Content

- Siemens, Omron and Beckhoff programmable logic controllers
- Touch screens
- Profibus and Device–Net buses
- Identification systems, machine vision.
- · Electric motors and pneumatic valves as actuators

Literature / Study Material

- Product and programming manuals
- Network material

Learning Methods Supervised laboratory assignments

Assessment Approved laboratory assignments

Prerequisites

• Programmable Logic Controllers

Machine Automation 1.

Languages of Instruction Finnish and English

Laboratory assignments in automation 2, 4 op KL25AB70100 (study unit)

Lecturers Niko Ristimäki, BSc

Objectives

Working in pairs, students apply the skills they have gained in the Machine Automation 2 course. The design, assembly, construction and programming of an automated material handling system are discussed in the course.

Content

- One–axis motion control
- Servo–drives
- Frequency inverters
- Rotating servo-motors
- Programmable logic controllers
- Field buses in motion control

Literature / Study Material Handouts, product and programming manuals

Learning Methods Supervised laboratory assignments

Assessment Approved laboratory assignments

Prerequisites

- Basics of Automation
- Programmable Logic Controllers
- Machine Automation 1
- Machine automation 2

Languages of Instruction Finnish and English

Machine automation 1, 4 op KL25AB70200 (study unit)

Lecturers

Hannu Reinilä, MSc Niko Ristimäki, BSc Ismo Tupamäki, MSc Martti Lehtonen, BSc

Objectives

Students will be familiar with the structures and functions of the control systems used in machine automation systems. They will utilize several standardised programming languages for PLC devices.

Content

- Siemens and Beckhoff PLC devices
- TwinCat and STEP7 tool programmes
- Programming using Function Blocks and Functions, timers, counters, analog signals, recipes
- Standardized programming languages

Literature / Study Material

Lecturers' handouts and the product and programming manuals of various suppliers

Learning Methods Lectures, exercises and group work

Assessment Approved exercises and an exam

Prerequisites

- Basics in Automation
- Programmable Logics
- Sensor Technology

Languages of Instruction Finnish and English

Machine automation 2, 4 op KL25AB70300 (study unit)

Lecturers

Niko Ristimäki, BSc

Objectives

Students will learn to implement modern motion control systems by using frequency inverters, AC motors, servo-drives and rotating servo-motors. They will also learn how to configure various industrial network systems required to perform modern motion control tasks.

Content

- One–axis motion control
- Servo-drives
- Frequency inverters
- Rotating servo-motors
- Programmable logic controllers
- Field buses for motion control

Literature / Study Material

Handouts, product and programming manuals

Learning Methods Lectures, examples, exercises and group work

Assessment Exercises and an examination

Prerequisites

- Basics in Automation
- Programmable Logic Controllers
- Machine Automation 1

Languages of Instruction Finnish and English

Robotics, 4 op KL25AB70400 (study unit)

Lecturers Martti Lehtonen, BSc

Objectives

Students will gain insight into the potential and limitations of robotics in industrial production, and learn to program an industrial robot. The course provides fundamental knowledge of robotics and an ability to design and select equipment for the automatic handling of products.

Content

- Structure, design, control and programming of robots
- Development views

Literature / Study Material Risto Kuivanen: Robotiikka, Suomen Robottiyhdistys Ry. (Robotics)

Learning Methods Lectures, programming exercises, and laboratory assignments

Assessment Approved exercises and exams

Prerequisites

- Basics in Automation
- Sensor Technology

Languages of Instruction Finnish and English

Project studies, 8 op KL25AB80 (study entity)

Project Studies assists students in developing their skills in obtaining information independently, as well as in planning and scheduling, which are integral parts of project work. The latest topics in the field of automation are linked to Project Studies whenever appropriate.

Special course in automation, 4 op KL25AB80000 (study unit)

Lecturers

Hannu Reinilä, MSc Niko Ristimäki, BSc Martti Lehtonen, BSc

Objectives

Students will become familiar with the latest technology in machine or factory automation. They will learn to utilize the technology in designing or in implementing machine automation systems.

Content

The topics discussed during the course vary from year to year; they are aanounced at the beginning of the course.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, exercises and group work

Assessment A practical assignment and an exam

Prerequisites

- Machine Automation 1
- Machine Automation 2

Languages of Instruction Finnish and English

Project work in automation, 4 op KL25AB80100 (study unit)

Lecturers Hannu Reinilä, MSc Niko Ristimäki, BSc Martti Lehtonen, BSc

Objectives

Students will become familiar with various topics of interest concerning machine automation. They will complete a project about a chosen topic.

Content

The content of the course varies according to the interests of the students.

Literature / Study Material

The literature varies according to the students' chosen project topic.

Learning Methods Project work

Assessment

Students must write a report about their completed project and the project and the report will be assessed like a final thesis.

Prerequisites

- Machine Automation 1
- Machine Automation 2

Languages of Instruction Finnish and English

Design of control system, 18 op KL25AB90 (study entity)

The aim of the Control Systems Module is to introduce to students the phases involved in electrical and automation design. The products of design include practical connections and start–up.

Electrical CAD, 3 op KL25AB90400 (study unit)

Lecturers Heikki Rajala, BSc

Objectives

Upon completion of the course, students will have command of computer-aided drawing of wiring diagrams.

Content

- Using the CADS Planner designing programme
- Drawing a principle diagram and a wiring diagram using appropriate software
- Centre diagram applications
- Chart applications

Literature / Study Material Lecture material

Learning Methods Lectures and exercise with CADS Planner

Assessment Exercises and exam

Prerequisites

- Electric Technology
- Basics in Automation

Languages of Instruction Finnish

Sensor technology, 3 op KL25AB90000 (study unit)

Lecturers Martti Lehtonen, BSc

Objectives

Students learn about the structure of the basic sensors in mechatronics and a selection of appropriate sensors. They are introduced to connecting sensors for control systems, and they gain insight into the sensors used in process industry.

Content

- Basics in sensor technology
- Protection classes
- On-off sensors
- Intelligent sensors
- Detection techniques
- Measuring sensors
- Connecting sensors for control systems

Literature / Study Material To be announced during the lectures.

Learning Methods Lectures and exercises Assessment Examination and seminar

Prerequisites Basics in Automation

Languages of Instruction Finnish

Drive technology, 5 op KL25AB90100 (study unit)

Lecturers Martti Lehtonen, BSc

Objectives

Students will learn about the basic principles of electric motors, the functions of direct current motors (DC motors) and alternating current motors (AC motors). Adjustable drives and control system engineering are also discussed. The aim of the course is to give students a general idea of electric motors as an integral part of mechatronics. Upon completion of the course, students will know how to choose the correct electric drives and connect them to an electrical network.

Content

- Basic principles of electric motors
- Direct current motors (DC motors)
- Squirrel-gage motors
- Frequency converters
- Servo-motors
- Servo-controls
- Stepping motors and their controls
- Control engineering
- Control devices
- Setting control circuits

Literature / Study Material Material announced by the lecturer

Learning Methods Lectures, examples and exercises

Assessment Exercises and an exam

Languages of Instruction Finnish and English

Laboratory assignments in control systems, 3 op KL25AB90200 (study unit)

Lecturers

Martti Lehtonen, BSc Heikki Rajala, BSc

Objectives

Students will learn about the basic connections involved in electric and automaiton solutions. Students will also become familiar with the implementation of an automation system.

Content

During the course, students will construct an automation system. Automation systems involve mechanics, programmable logic controllers, and various sensors, such actuators as valves and electric motors.

Literature / Study Material Material provided by the lecturer and the product and programming manuals of various suppliers

Learning Methods Lectures and exercises

Assessment Approved exercises

Study Descriptions

Languages of Instruction Finnish

Design of electrical and automation system, 4 op KL25AB90300 (study unit)

Lecturers Martti Lehtonen, BSc

Objectives

Students will acquire the ability to interpret and design diagrams in the fields of electrical engineering and electronics by using CAD. They will also learn to assess wire and fuse requirements.

Content

Topics discussed in the course include symbols, diagram drawings, wiring diagrams, lists of assembly parts, automation design, file layout, CAD programs relevant to the field, motor output, components and design, and wire and fuse requirements.

Literature / Study Material Lecturer's handouts

Learning Methods Lectures and exercises using CAD

Assessment Examination and assignments

Languages of Instruction Finnish

FREE-CHOICE STUDIES, 15 op KL25AC (study entity)

The purpose of the Elective Courses is to provide students with more advanced knowledge of their Professional Studies. Students may choose Electives from the course offering at any university of applied sciences or other university. However, we recommend that students choose Electives offered by their degree programme. This way, the chosen Electives are the most appropriate with regard to students' other courses. It is also easier for students to advance in their studies while studying other courses.

THESIS, 15 op KL25AD10 (study entity)

As a rule, students write their final thesis during their fourth year of studies. Students should choose their thesis topic as early as possible, during their internship completed during the autumn of their fourth year of studies at the latest. Students do their thesis as an independent project in design, development, or as a survey. The thesis may also be a part of a more extensive research or development project. The purpose of the thesis is to give students an opportunity to show their competence in independently utilising theoretical information to solve a practical problem. With few exceptions, students usually do their thesis for an enterprise. This gives students an excellent opportunity to pave their way into the working world and the services of the enterprise for which they have written their thesis.

PRACTICAL TRAINING, 30 op KL25AE20 (study entity)

Practical training is an integral part of studying at the university of applied sciences, and it is a degree requirement. Practical training is not only working, but it is learning while working and applying that which has been learned while studying at the university. Practical training teaches students how to survive in life after the university. The aims of practical training are as follows:

- Students learn to work in the working world as a member of a work community.
- Students learn to apply the knowledge and skills they have learned at the university to practical work.
- Students gain experience in the technical implementations and favourable practices characteristic of their chosen field.
- Students learn about various work methods and phases.
- Students gain experience in carrying out operations economically and responsibly.
- Students develop their social skills and langauge skills.
- Students' ability to withstand pressure and uncertainty increases.
- Students practice their skills in management.

Students are responsible for obtaining an internship and make a contract with the employer. In this way, the practical training also teaches students the process of applying for a job. During their training, students should discuss possible topics or projects for their final thesis.

Degree Programme in Business Information Technology (In Finnish)

Head of degree program: Mr Markku Lahti, tel.: +358 40 830 2357, e-mail: markku.lahti@seamk.fi ECTS departmental co-ordinator / International coordinator: Mr Tapio Pihlajaniemi, e-mail: tapio.pihlajaniemi@seamk.fi Student counsellor: Mc Taria Kaski-Mattinen e-mail: taria kaski-mattinen@seamk fi

Student counsellor: Ms Tarja Keski–Mattinen, e-mail: tarja.keski-mattinen@seamk.fi Further information: www.seamk.fi/businessinformationtechnology

QUALIFICATION AWARDED

Bachelor of Business Administration (Business Information technology)

ENTRANCE REGUIREMENTS

See the Applicant's Guide.

GENERAL DESCRIPTION OF THE DEGREE PROGRAMME

Educational and professional goals

The Degree Programme in Business Information Technology paves the path into professional data processing as it provides students with extensive knowledge and skills needed in modern, interactive work environments. It aims at producing professionals for business and industry, providing them with skills that enable them to work in various versatile jobs.

The programme teaches students practical skills based upon a theoretical foundation. The training enhances students' communicative abilities and co-operation skills and encourages them to work independently as well. Upon completion of the studies, students will be able to work in various duties where specialists are needed. This could mean, for example, working as a designer for programmes, databases, multimedia or the Internet, an online service provider, a project manager, an instructor, or an entrepreneur.

Track alternatives

Digital Media Production concentrates on the development of digital media products using the methods of media communication. Students learn to create digital and audio–visual products for various purposes.

Application Production focuses on the development of data systems. Students learn to design and program applications for various platforms and architectures.

E-business concentrates on the uniting of information technology with the enterprise recourse planning of companies. Students learn to design and program integrated and flexible services for networks.

Educational approach and learning methods

Due to the rapid development in the field, professionals in information technology must be prepared to engage in continuous, autonomous learning. Therefore, the Degree Programme in Business Information Technology emphasises the students' active role in learning and also gives them more responsibility; the role of the teacher is that of a mentor or guide. To achieve this, teachers utilise a diverse range of teaching methods and the students are encouraged to develop their social skills through projects and group work.

In the professions of information technology people have to be ready for continuous, autonomous learning because of the rapid development of the field. Therefore the study program of Business Information technology emphasizes the students' active role in learning and also gives them more responsibility since the teacher is seen more as a backer–up, guide or an advisor. The goals are achieved through versatile teaching methods and the students are encouraged to develop their interaction skills through projects and group work.

Competences acquired in the degree programme

Information Systems Competence

- understands information systems as a whole
- understand the production, acquisition and deployment processes of an information system
- understands the principles of data management
- is able to specify, design and implement secure software systems, databases, and user interface
- is able to program
- is able to document and decode documentation of an information system e.g. when dealing with tasks related to software maintenance
- is able to plan and implement training

ICT Infrastructure Competence

- understands the purpose and principles of the main network components (hardware and software components) and services
- is able to utilize various network components in his/her solutions
- is able to construct and maintain basic network solutions
- is able to take data security into account in solutions regarding ICT infrastructure

Project Work Competence

- understands the differences between various kind of ICT projects and the role of projects as a part of an organizational structure
- understands the purpose of a systematic way of action in project work and is able to work in a responsible manner in ICT projects
- is able to use and apply various ICT project planning and management methods
- is able to identify and provide for possible risks related to ICT projects

Business Competence

- understands essential business processes and functions
- understands the role of ICT within an organization and its supportive role in business processes and their development
- is able to develop business processes using ICT
- understands the purpose of contracts, offers, licences, and immaterial rights in his/her work
- is able to serve customers

Specialized ICT Field Competence

- is able to apply his/her knowledge and skills in a specialized ICT field
- is able to analyse, evaluate, and develop operations in this field

Access to further studies

Students who have completed this programme are eligible to apply for a master's degree programme (See act 351/2003 concerning Finnish universities of applied sciences, in Finnish).

Course structure diagram with credits

The structure of the programme is presented in the form of a chart under TIKO 2008.

Examination and assessment regulations

Regulations pertaining to the operations in universities of applied sciences.

Degree Programme in Business Information Technology (In Finnish), 210 cr (1.9.2008) TIKO 2008

Code	Name	Study Yea			ar	CR
		1.	2.	3.	4.	
PERUS	BASIC STUDIES					60
TIEPER	BASIC STUDIES IN IT		1	1	<u> </u>	30
KL17APTP011	Office applications	x			 	4
KL17APTP016	Computer hardware	X			<u> </u>	3
KL17APTP017	Operating systems	x			<u> </u>	3
KL17APTP303	Introduction to programming 1	x			<u> </u>	3
KL17APTP313	Introduction to programming 2	x			<u> </u>	3
KL17APTP014	New media and network production 1	x			<u> </u>	4
KL17APTP015	New media and network production 2	x				2
KL17APTP005	Database design and management	x				5
KL17APTP006	Information society	х				3
KL17APOP010	Student counselling	х				
YDINOSAA	CORE COMPETENCES SUPPORTIVE COMPETENCE					18
KL17APLI001	Introduction to business	x				5
KL17APLI002	Basics of accounting	x				2
KL17APLI003	Basics of marketing	x				2
KL17APLI004	Business information systems	х				4
KL17APME004	ICT- industry and learning	x				2
KL17APME005	Mathematics	x				3
VIESTINTÄ	Language and communication skills					12
KL17APKI006	Communication and documentation skills	x				6
KL17APKI005	English	x				3
KL17APKI007	Swedish	x				3
YHTAMM	COMMON PROFESSIONAL STUDIES					51
KL17BLAVE	Data networks and security					5
KL17BTLV001	Computer networks		х			3
KL17BTLV002	Data security		x			2
KL17BSUOS	Planning competence					10
KL17BTSO001	Development of information systems		х			4
KL17BTSO002	Modelling		х			3
KL17BTSO003	User interfaces		x			3
KL17BTIHA	Data Management skills					8
KL17BTTH301	Database programming		х			4
KL17BTTH302	Structured documents and XML		x			4
KL17BWEB	Web know-how					8
KL17BTTH003	Network communication	Γ	х			3
KL17BTTH004	Internet programming		x			5
KL17BYDIN	Core Competences supportive competence					20
KL17BTME102	Basics of statistics	Τ	х			3
KL17BTME012	Project work	1	x			3
KL17BTME001	IT-jurisprudence	1	x			4
KL17BTKI001	IT-English	1	x			4

KL17BTTU320	Introduction to thesis		x			2	
KL17BTME002	Research methods			x		2	
KL17BTME300	Project management and documentation				x	2	
SUUNNAMM	OPTIONAL PROFESSIONAL STUDIES					36	
SOTU	Software production competence					36	
KL17BSOH01	Application programming					23	
KL17BTTT382	Data structures and algorithms		х			4	
KL17BTTT380	Object programming 1		х			4	
KL17BTTT390	Object programming 2		х			3	
KL17BTTT285	Open Source software			x		3	
KL17BS30000	Java			x		3	
KL17BTEL300	Server programming 1			х		3	
KL17BTEL310	Server programming 2			x		3	
KL17BSSK01	Application development						
KL17BTTT340	Systems development project				x	7	
KL17BSME	Core Competences supportive competence					6	
KL17BTMT101	Applied mathematics			х		3	
KL17BHSE300	Thesis seminar		x			3	
VELI	Core Competence of e-business					36	
KL17BEVK01	Development of E-business					20	
KL17BEVK001	Data transfer between software's			х		3	
KL17BETT284	Server programming			х		6	
KL17BEVK300	Network business (SCM)		х			4	
KL17BTEL307	Construction of WEB-application project				x	7	
KL17BELT01	Business operations and ERP skills						
KL17BELT300	Customer Relationship Management		x			3	
KL17BETT002	ERP-software		x			5	
KL17BELT400	Network business strategies			х		2	
KL17BEME	Core Competences supportive competence						
KL17BTMT102	Applied mathematics			х		3	
KL17BEME303	Thesis seminar		х			3	
DIGI	Core competence of digital media 30						
KL17BMMT	Media communication and production	1 1]	23	
KL17BMTT303	Basics of media production		х			2	
KL17BMTT002	Web publishing software		х			3	
KL17BTME313	Media know-how and scriptwriting			х		5	
KL17BTME323	Server programming			х		3	
KL17BTME333	Media entrepreneurship			х		3	
KL17BTME023	Multimedia project				x	7	
KL17BMDT	Production of digital media						
KL17BTME017	Desktop publishing graphics		Х			3	
KL17BTME008	Digital production		Х			3	
KL17BTTT115	Hypermedia development system			х		4	

KL17BMME	Core Competences supportive competence					2
KL17BMME302	Thesis seminar		x			3
VAIHAMMA	ALTERNATIVE PROFESSIONAL STUDIES					
KL17CCLP	Server architectures					10
KL17CCLP001	Linux Operating System					2
KL17CCLP002	Linux – Server					4
KL17CCLP003	Windows – Server					4
KL17CCCI	Telecommunications (Cisco)					10
KL17CCOR	Application development					10
KL17VEAV	AV-Production					10
KL17VEAV001	AV-manual scripting and media know-how					3
KL17VEAV002	AV-production and editing					3
KL17VEAV003	DVD project					4
KL17DT90	FREE CHOICE STUDIES				8	
OPINNÄYT	THESIS					15
KL17FY0T100	Maturity test				х	
KL17FYOT200	Thesis				х	15
TYÖHARJ	PRACTICAL TRAINING					30

Study Descriptions

BASIC STUDIES IN IT, 30 op TIEPER (study entity)

Objectives: Students will identify the more common components of a computer and understand how they work as a whole. They will also understand the main principles of the operating systems and how to use them efficiently. They will be familiar with the basic structures of programming, such as the foundations of object-oriented thinking. Students will be adept in modelling and managing relational databases, and the principles of image processing and the elements of HTML language will be familiar to them. Students will understand the concepts associated with new media, procedures and methods.

Office applications, 4 op KL17APTP011 (study unit)

Lecturers Jari Kattelus, BA

Objectives

Students will acquire basic knowledge of word processing, spreadsheets and presentation graphics.

Content

Word processing, use of spreadsheets, making presentations, packing programmes (Winzip/Winrar)

Literature / Study Material

- Karhula, Matti. Word 2007 Selkeyttä asiakirjoihin. Docendo.
- Lammi, Outi. Excel 2007 Laatua taulukoihin. Docendo.
- Lammi, Outi. Powerpoint 2007 Tehoa viestintään. Docendo.

Learning Methods Exercises

Assessment Exam carried out on computer Languages of Instruction Finnish

Computer hardware, 3 op KL17APTP016 (study unit)

Lecturers Jari Kattelus, BA

Objectives

Students will be familiar with the computer, its processors and the structure of its auxiliary devices and how they work. Students will be competent in installing the more common micro–computer components, peripheral devices, and drivers.

Content

- Computer components: installation and updating
- Installing and using accessory cards and testing programmes

Literature / Study Material

- Lähteinen, Pietikäinen & Kosonen. 2002. Uusi PC-tekniikan käsikirja. Sanoma Magazines.
- Flyktman R. 2003. PC-käsikirja. IT Press

Learning Methods

Lectures, exercises, workshop and a written exam

Assessment

The grade for the course is based mainly on the exam, but the exercises completed in class also affect the grade (exercise bonuses).

Languages of Instruction Finnish

Operating systems, 3 op KL17APTP017 (study unit)

Lecturers Jari Kattelus, BA

Objectives

Students will become familiar with the principles of technological aspects of operating systems, memory control, and file systems, as well as other concepts associated with operating systems.

Content

- Basic concepts associated with operating systems
- Process management
- Synchronizing and communication
- Memory control
- Memory hierachy
- Managing auxiliary devices
- Basics in Linux
- Basic command of Windows XP/Vista and Ubuntu Linux operating systems

Literature / Study Material

- Haikala & Järvinen. 2003. Käyttöjärjestelmät. Talentum.
- Joutsi J. 2007. Windows Vista. Docendo.

Learning Methods Lectures, exercises and a written exam

Assessment

The grade for the course is based mainly on the exam, but the exercises completed in class also affect the grade (exercise bonuses).

Languages of Instruction Finnish

Introduction to programming 1, 3 op KL17APTP303 (study unit)

Lecturers Hilkka Niemelä, MA

Objectives

Students will have command of the basic structures of programming and structural programme design. They will learn to design, code, document and test small-scale programmes equooed with concole interfaces.

Content

Basic structures of language: types, statements, input, output, logical statements, selection, looping, branching, and

Literature / Study Material To be announced.

Learning Methods Lectures and programming exercises

Assessment Completed exercises and exam

Languages of Instruction Finnish

Introduction to programming 2, 3 op KL17APTP313 (study unit)

Lecturers Hilkka Niemelä, MA

Objectives

Students will have command of the basic structures of programming and the technology for using the basic components of a graphic interface. Upon completion of the course, students will know how to programme a small–scale application with a graphic interface.

Content

- User-interface components
- Layouts
- Connecting transactions to components

Literature / Study Material To be announced.

Learning Methods Lectures and programming exercises

Assessment Assessment is based on exercises and an exam.

Prerequisites Introduction to Programming I

Languages of Instruction Finnish

New media and network production 1, 4 op KL17APTP014 (study unit)

Lecturers Tarja Keski–Mattinen, BBA

Objectives

Students will be familiar with the concepts, procedures, methods and software associated with new media and network production. They will learn to plan, produce and publish websites using the more common structural elements of HTML language. They will have command of document management and style specificaitons. They will publish/transfer information to the Internet on the example website.

Content

- Basics of HTML, table and frame structures, elements
- Images, image maps
- CSS style sheets
- Transferring files to the webserver

Literature / Study Material

- Lamberg, Keränen & Penttinen 2000. Multimedia Multimedian peruskirja (in part)
- Lecturer's material
- Programme manuals

Learning Methods Lectures and exercises

Assessment Assignment and independent exercises

Languages of Instruction Finnish

New media and network production 2, 2 op KL17APTP015 (study unit)

Lecturers Jari Kattelus, BA

Objectives

Students will learn basic skills in image processing and learn to use Adobe Photoshop. They will know the colour schemes and the more common image file formats and what they are used for.

Content

- Acquiring digital material and processing it
- Colour schemes and image file formats
- Photoshop

Literature / Study Material

- McClelland, D. 2002. Photoshop 7 kuvankäsittely. Docendo.
- Weinmann, Lourekas & Kelby. Inside Photoshop 7. IT Press.

Learning Methods Lectures, demos and exercises

Assessment Exam on the computer. The weekly exercises completed in class also affect the grade.

Languages of Instruction Finnish

Database design and management, 5 op KL17APTP005 (study unit)

Objectives

The aim of the course is to familiarize students with the basics of data management. They will have command of the relational model, relational database and the stages of information analysis.

Content

The course involves discussion of the process of database development, relational models and conceptual modelling. Applied graphics technology will be used as the modelling method. The basics of SQL language will also be discussed. Students will be introduced to database management and programming with the aid of chosen database software. Students will design and introduce a database solution as an assignment.

Literature / Study Material

• Material provided by the lecturer
- Hovi, Huotari, Lahdenmäki. Tietokantojen suunnittelu ja indeksointi, Docendo.
- Lahtonen. SQL Toolkit, Docendo.

Learning Methods Lectures and exercises

Assessment Exam, assignment

Languages of Instruction Finnish

Information society, 3 op KL17APTP006 (study unit)

Lecturers Erkki Koponen, MA

Objectives

Students will understand the concept of information society from an international and national viewpoint. They will examine the information society from the viewpoint of information technology, economics, sociology and social policy on the one hand, and culture, the working world and the individual on the other hand using the ntwork connections made possible by the information society. Further, students will be familiar with the field of ICT and its duties as part of the information society.

Content

- · Concept fo information society and its background
- Concept of information
- Information society from the national and international perspective
- Technological determinism
- Knowledge-work and ICT networks
- Internet
- Strategies of the information

Literature / Study Material

Extracts from literature and the Internet:

- Niiniluoto, I. 1991. Informaatio, tieto ja yhteiskunta. Valtion Painatuskeskus: Helsinki.
- Vuorensyrjä M. and Savolainen R (eds.). 2000. Tieto ja tietoyhteiskunta. Gaudeamus.
- Tiedon valtatiet 2000–2005. 1999. Edita.
- Online material

Learning Methods

Online learning (discussions, group work, written report), lectures and presentations

Assessment Weekly assignments and online discussions

Languages of Instruction Finnish

Introduction to business, 5 op KL17APLI001 (study unit)

Lecturers Kari Aho

Objectives

Students will learn the basics of organizational behavior and entrepreneurship. In addition, they will become familiar with business processes and understand the data processing system for enterprises.

- Leadership and organization
- Entrepreneurship
- Data processing systems in businesses

Literature / Study Material

- Vanhala, Laukkanen & Koskinen. 2002. Liiketoiminta ja johtaminen
- Material distributed in the lectures

Learning Methods Lectures, exercises and written exam

Assessment Assessment is based on the exercises and written exam.

Languages of Instruction Finnish

Basics of accounting, 2 op KL17APLI002 (study unit)

Objectives

Students will become familiar with the concepts, tasks and methods of external accounting. The course provides students with an overall picture of accounting and managing it in a company.

Content

- Concepts of accounting
- Financial periods
- Financial statements

Literature / Study Material

- Tomperi: Käytännön kirjanpito
- Tomperi & Keskinen: Käytännön kirjanpito Harjoituskirja

Learning Methods Lectures, exercises and exam

Assessment Exam and exercises

Languages of Instruction Finnish

Basics of marketing, 2 op KL17APLI003 (study unit)

Objectives

Students will become familiar with the basic concepts of marketing and possess an overall picture of the competitive tools used in marketing.

Content

- Significance and tasks of marketing
- Modern thinking in marketing
- Operational environments in marketing
- Segmentation
- Competitive tools used in marketing

Literature / Study Material Anttila & Iltanen. 2001. Markkinointi.

Learning Methods Lectures, literature, exam, exercises and group work

Assessment Exam and exercises

Languages of Instruction Finnish

Business information systems, 4 op KL17APLI004 (study unit)

Lecturers Kari Aho, BBA

Objectives

Students will gain an overall understanding of data processing systems that support entrepreneurship. They will also be competent in using various data processing systems.

Content

The course focuses on the use of an integrated system and the administration of an order–supply chain. The following enterprise resource planning (ERP) modules are use in the course:

- Client/supplier relationship management
- Sales orders
- Invoicing
- Purchasing orders
- Inventory control
- Connections to accounting

Literature / Study Material To be announced.

Learning Methods Lectures, exercises and exam

Assessment Assessment is based on completed exercises and a written exam.

Languages of Instruction Finnish

ICT– industry and learning, 2 op KL17APME004 (study unit)

Lecturers Anne–Maria Aho, LSc (Bus. Econ.)

Objectives

The aim of the course is to provide students with an understanding of the ICT industry in general terms (based on ACM classification), and to teach them skills in outlining the competencies needed in various ICT professions.

Content

- ICT as a profession
- Learning styles
- Learning techniques
- Problem-solving methods
- Creativity

Literature / Study Material Study Guide for Business Information Technology and other material provided by the lecturer.

Learning Methods Lectures and practical work

Languages of Instruction Finnish

Mathematics, 3 op KL17APME005 (study unit)

Objectives The objective is to teach the student basic business mathematical skills.

- Percentage calculations
- Interest calculations and applications associated with indexes, currencies, taxation, pricing, credit and investments

Literature / Study Material

- Material provided by the teacher
- Karjalainen L. 2001. Optimi. Matematiikkaa talouselämän ammattilaisille

Learning Methods Lectures and two interim exams, assignments (also on computer) and independent practice

Assessment Exam and assignments

Languages of Instruction Finnish

Communication and documentation skills, 6 op KL17APKI006 (study unit)

Lecturers Pia–Mari Riihilahti, MA

Objectives

Upon completion of the course, students will

- understand the principles of the communication process, have knowledge of the various factors of the process and be able to apply this knowledge in the working world,
- understand the theories of teamwork and the factors influencing it teamwork,
- be able to write documents needed at work using clear, logical language,
- know how to write job applications and CVs and present themselves in job interviews,
- know how to speak in public and give good presentations,
- be able to summarize scientific reports, and
- be aware of the phases of process writing.

Content

- Communication process and significance in the working world
- Teamwork
- · Everyday communication in the working world
- Standard documents
- Business correspondence
- Job applications, job interviews, and CVs
- non-verbal communication, presentations
- Non-verbal communication and its significance in various situations
- Scientific writing and criticism of sources
- Instructions and specifications
- speaking in public and presentations in the working world
- Meetings
- Group work: "Communication here and elsewhere"
- Language management: lists, compound words, abbreviations

Literature / Study Material To be announced.

Learning Methods Group work, presentations, oral exercises and written assignments

Assessment

Active participation in class, completion of written assignments and exercises, exam. Students must pass all parts of the course to receive a grade for the course.

Languages of Instruction Finnish

English, 3 op KL17APKI005 (study unit)

Objectives

The objective of the course is to enhance students' language skills and to acquire information from dictionaries, academic articles and the Internet. Upon completion of the course, students will be to discuss their education, tell about their country and its industries in English. They will have command of basic business English and business correspondence. They will also distinguish between the differences in communication situations in English and in Finnish and be able to communicate in everyday situations and in work–related situations in English.

Content

- Telling about oneself and one's education
- Finnish industry and knowledge about Finland
- Business correspondence, e.g. e-mails, telephone, letters
- Company presentations and trade fairs

Literature / Study Material

To be announced.

Learning Methods

Oral exercises such as dialogues, discussions and presentations, written assignments

Assessment

Active indication of oral skills (oral presentations and dialogues), completion of written assignments and exercises, exam. Students must pass all parts of the course to receive a grade.

Swedish, 3 op KL17APKI007 (study unit)

Lecturers

Emilia Ali-Löytty

Objectives

Upon completion of the course, students will be able to interactively communicate in Swedish in their place of work. They will also know how to acquire and use field-related information.

Content

- Education, applying for a job, working
- Working environment and society
- Customer contacts
- General texts
- Basic business concepts
- Basic field-related terminology

Literature / Study Material To be announced.

Learning Methods

Lectures, listening comprehension, oral exercises and written assignments in pairs, groups and individually

Assessment

Active participation in the lectures, interim and final examinations

Data networks and security, 5 op KL17BLAVE (study entity)

Objectives: Students will be familiar with the risks associated with data security and be competent in finding solutions to data security problems. They will also be familiar with the structure, principles, components and protocols of data networks. Students will know the types of parts that make up a local network and be able to do the more typical micro–network connections.

Computer networks, 3 op KL17BTLV001 (study unit)

Lecturers Jari Kattelus, BA

Objectives

Students will be familiar with structure, functions, components, and protocols of data networks. The will be familiar with the parts contained in local networks, they will be competent in making typical microcomputer network connections.

Content

- Cabling and components for local networks
- Connecting a terminal to a network
- Alternatives for carrying out the external connections for a local network and network management
- Wireless data transfer and various wireless solutions

Literature / Study Material

- Material provided by the lecturer
- Hämeen-Anttila: Tietoliikenteen perusteet, Docendo
- Puska: Lähiverkkojen tekniikka Pro Training, Suomen ATK-Kustannus
- Granlund: Langaton tiedonsiirto, Docendo

Learning Methods Lectures, assignments and workshops

Assessment Exam

Languages of Instruction Finnish

Data security, 2 op KL17BTLV002 (study unit)

Lecturers Jari Kattelus, BA

Objectives

Students will become familiar with the areas of data security. They will be able to identify the risks associated with data security and to find ways to solve common data security problems.

Content

- Encryption techniques
- Solutions for data security in local networks
- Factors associated with Internet data security
- · Focus on technical data security, i.e. protecting one's own terminal from possible threats

Literature / Study Material

- Ruohonen, M. 2002. Tietoturva. Docendo.
- Boström M. 2003. Kotimikron tietoturva. Talentum.
- Järvinen P. 2003. Salausmenetelmät. Docendo.
- Järvinen P. 2002. Tietoturva ja yksityisyys. Docendo.

Learning Methods Lectures, assignments and exercises

Assessment

The grade for the course is based on a group assignment in which students concentrate on a specific area in data security.

Languages of Instruction Finnish

Planning competence, 10 op KL17BSUOS (study entity)

Objectives: Students will understand the functions and structures of data processing systems and understand how people process information. They will have command of methods for determining and modelling the state of a data processing

system. They will be competent in finding various solutions for problems with data processing systems and in describing the target state.

Development of information systems, 4 op KL17BTSO001 (study unit)

Lecturers Hilkka Niemelä, MA

Objectives

Students will understand what a data processing system is, the different types of available data processing systems, how they are linked to each other, and how they can be modelled. In addition, students will understand the reasons for developing data processing systems. They will also be familiar with the methods for developing data processing systems this and the phases involved in acquiring them. Having completed the course, students will be able to make adata processing systems analysis for a company.

Content

- Principles of development: dataprocessing systems, designing and description methods, purchasing
- Comprehensive study: project, survey of the current situation, problems, goals, strategies, defining requirements, calculating investments, offers, and development plan

Literature / Study Material Material provided by the lecturer

Learning Methods Lectures, assignments and project work

Assessment Assessment is based on assignments and project work.

Languages of Instruction Finnish

Modelling, 3 op KL17BTSO002 (study unit)

Lecturers Markku Lahti, MA

Objectives

Students will be familiar with the principles of modelling and imaging technologies used in software development. They will be capable of modelling the real world and data processing systems. Using models and diagrams, students will examine the system of the target area from different perspectives, which complement each other. Students will learn about UML modelling language (UML = Unified Modelling Language) and the more common diagrams by way of examples and exercises.

Content

- Models and modelling
- Phases in the development of software
- Use case diagrams
- Class diagrams
- Intercommunication diagrams
- Activity diagram, i.e. process diagram
- Interaction between the above-mentioned diagrams

Literature / Study Material

- Lecturer's material
- Guidebooks for the software
- Eriksson & Penker. UML. IT Press

Learning Methods Lectures and exercises

Assessment Written exam, separate, independent exercises Languages of Instruction Finnish

User interfaces, 3 op KL17BTSO003 (study unit)

Lecturers

Tarja Keski-Mattinen, BBA

Objectives

Upon completion of the course, students will understand what a good interface and usability mean for a product. They will also understand the significance of information processing in the designing and implementation of interfaces. Students will be familiar with the various elements of interfaces and know how to use them with various products and computer devices.

Content

- Characterisitcs of human information processing
- Significance and evaluation of usability
- Various interface elements and their combinations
- User interface design principles
- Testing and evaluating user interfaces

Literature / Study Material

- Lecturer's material
- Korpela & Linjama. 2003. Web-suunnittelu. Docendo Finland Oy
- Sinkkonen, Kuoppala, Parkkinen & Vastamäki. 2002. Käytettävyyden psykologia. Edita Publishing Oy.
- Preece J. 1994. Human-Computer Interaction. Pearson Education Limited.

Learning Methods Lectures and exercises

Assessment Assignment and an exam

Languages of Instruction Finnish

Data Management skills, 8 op KL17BTIHA (study entity)

Objectives:. Students will have command of the principles of structured data, and they will be competent in defining structured documents. They will create small–scale applications using the various connection techniques of XML language. Students will have diverse knowledge of defining SQL and, utilising processing language, process databases and know how to construct an interavtive database web service.

Database programming, 4 op KL17BTTH301 (study unit)

Lecturers Markku Lahti, MA

Objectives

Students will be familiar with the utilisation of interactive, database web services, i.e. they will understand how to utilise databases on the Internet. Students will become familiar with the advanced features of SQL language as regards database programming, and they will understand the issues involved in programming database servers. Moreover, they will understand the special features of managing and programming database servers.

- Basics of SQL (in short)
- Joining statements
- Sub–queries
- Triggers and procedures
- Efficiency and management of commands
- Database connections
- Databases on the Internet

Literature / Study Material

- Material provided by the teacher
- Guidebooks for the software

Learning Methods Lectures and exercises

Assessment Exam and separate, independent exercises

Prerequisites Designing and Managing Databases

Languages of Instruction Finnish

Structured documents and XML, 4 op KL17BTTH302 (study unit)

Lecturers Markku Lahti, MA

Objectives

Students will be competent in using structures documents and utilising structured documents in data networks. Students will be adept in designing structured documents, determining the structure using a defining language, and utilising XML language. The main focus in the course is in creating a small–scale application with which students become familiar with the more significant connection technologies.

Content

- Why structures documents
- Comparison of traditional and structured documents
- Utilising a structure tree
- Introduction to XML language
- Structure definitions associated with documents (DTD, XML-Schema)
- Style-sheet language (CSS, XSL)
- Extensible Stylesheet Language Transformations (XSLT)

Literature / Study Material

- Material provided by the teacher
- Guidebook and instructions for the software

Learning Methods Lectures and exercises

Assessment Assignment

Prerequisites New Media and Network Production

Languages of Instruction Finnish

Web know-how, 8 op KL17BWEB (study entity)

Objectives: Students will have command of various forms of digital communication and understand the programming techniques used on the Internet. They will be preapred to design and implement interactive, web-based products and services.

Network communication, 3 op KL17BTTH003 (study unit)

Lecturers Tarja Keski–Mattinen, BBA

Objectives

Students will have command of various forms of digital communication and the methods being used. They will be familiar with the new trends and types of services available in digital communication and the opportunities they afford in a networking society. Students will be competent in designing and developing a digital communication project into a product.

Content

- Digital business and communal communication
- Properties and opportunities in digital communication
- Networked projects
- Operational, contextual and user-based projects
- Reader-centred network writing

Literature / Study Material

- Mäkeläinen J.: ABC Digi, Sisällöntuottajan käsikirja
- Alasilta A.: Verkkokirjoittajan käsikirja
- Jussila M. & Leino A.: Net. verkkoviestinnän käsikirja

Learning Methods Lectures and exercises

Assessment An assignment and an exam

Languages of Instruction Finnish

Internet programming, 5 op KL17BTTH004 (study unit)

Lecturers Erkki Koponen, MA

Objectives

Students will possess basic command of Internet programming using the programming language used today. They will be knowledgeable of how to produce interactive programmes on the Internet utilising modern programming tools.

Content

- Revision of HTML language
- JavaScript
- Other techniques

Literature / Study Material Teacher's material

Learning Methods Lectures and exercises

Assessment Exam and assignment

Languages of Instruction Finnish

Basics of statistics, 3 op KL17BTME102 (study unit)

Objectives

Students will become familiar with the phases of statistical research, methods of sampling and how to create a questionnaire. They will be competent in calculating parametres and analysing data using those parametres.

- Basic concepts: scales, parametres, dependency, correlation, time series and indices
- Statistical research: samples, questionnaire, description and analysis

Literature / Study Material

- Karjalainen L. 2004. Tilastomatematiikka
- Heikkilä T. 2001. Tilastollinen tutkimus

Learning Methods Lectures and computer exercises

Assessment Exercises and computer exam

Languages of Instruction Finnish

Project work, 3 op KL17BTME012 (study unit)

Lecturers Anne-Maria Aho, LSc (Bus. Econ.)

Objectives

Students will be familiar with ways to organise projects and the necessary leadership tools. Students will be competent in planning, managing and evaluating project work.

Content

- Projects and project operations
- Project planning
- Project management and evaluation
- Activities of project teams: roles and tasks
- Project management software

Literature / Study Material Material provided by the teacher

Learning Methods Lectures and assignments

Assessment Project plan and written exam

Languages of Instruction Finnish

IT-jurisprudence, 4 op KL17BTME001 (study unit)

Objectives

Students will be familiar with the legal problems related to information technology and with the legal code.

Content

- Privacy code
- Rights and responsibilities of the Internet user
- E-business
- · Contract laws and the risks and crimes associated with them

Literature / Study Material Material provided by the teacher

Learning Methods Lectures, examination, literature, legislation and exercises

Assessment Written examination

Languages of Instruction Finnish

Study Descriptions

IT-English, 4 op KL17BTKI001 (study unit)

Objectives

Students will understand and use termoniology common to their professional field both in writing and in speaking. Upon completion of the course, students will

- possess the ability to use IT terminology (written and oral) in English
- be able to gather information in English from different sources and familiarize themselves with new terminology and concepts (articles, Internet, field-related literature, etc.)

Content

- IT terminology in English
- Analyzing field-related texts
- Information systems: searches and processing (e.g. looking for an article on the Internet)

Literature / Study Material Material provided by the teacher

Learning Methods

Oral exercises such as dialogues, discussions and presentations, written assignments

Assessment

Active exhibition of oral language skills (i.e. oral presentations and dialogues), completion of written assignments and exercises, exam. Students must complete all parts of the course to receive a grade for the course.

Languages of Instruction English

Introduction to thesis, 2 op KL17BTTU320 (study unit)

Lecturers Erkki Koponen, BA

Objectives

Students will acquire readiness to carry out research. The course prepares students for their thesis writing process especially. They will be familiar with the process of research and the more common research methods.

Content

- Research and its role in professional work
- Research process
- Common research methods
- Reporting research

Literature / Study Material Material announced by the teacher

Learning Methods Lectures and assignments

Assessment Reports and exam

Languages of Instruction Finnish

Research methods, 2 op KL17BTME002 (study unit)

Lecturers Erkki Koponen, MA

Objectives

Students will be familiar with the more common research and development methods in the field of data processing, especially designing and implementation methods. They will understand and apply the research and development

methods in their thesis work.

Content

- Conceptual, descriptive, and normative research methods
- Research that creates new methods and design-based research
- Methods of gathering and analysing data appropriate for data processing
- Determining the research problem for one's thesis, research models, survey of sources, research plan and instructions for writing the thesis

Literature / Study Material

- Järvinen P. & Järvinen A. (latest edition). Tutkimustyön metodeista. Tampereen yliopistopaino Oy, Juvenes–Print, Tampere.
- Material provided by the lecturer
- Student reports

Learning Methods

Lectures, exercises, and student reports

Languages of Instruction Finnish

Project management and documentation, 2 op KL17BTME300 (study unit)

Objectives

Students will have command of the concept of software production process and process management for improving a data processing system. They will be competent in dividing the life cycle of a data processing system into phases and in utilising imaging methods as part of the various phases of the life cycle. They will also know how to produce documentation for the various phases.

Content

- Software production process
- Phases of the life cycle (defining compliance, defining, etc.)
- Documentation (defining compliance, definging functions, etc.)
- Life cycle models
- Various modelling methods

Literature / Study Material Material provided by the teacher

Learning Methods Lectures and exercises

Assessment Documentation of a chosen data processing system

Prerequisites

- Project Work
- Modelling

Languages of Instruction Finnish

Application programming, 23 op KL17BSOH01 (study entity)

Objectives: Upon completion of the module, students will know how to design, document and implement programmes based on object programming and network programming techniques. Students will also know how to utilise various data structures and databases in programming. They will be competent in designing and implementing programming applications using various application development tools.

Data structures and algorithms, 4 op KL17BTTT382 (study unit)

Lecturers Erkki Koponen, MA

EIKKI Koponen, MI

Objectives

Students will be familiar with various algorithmic and data structures as regards object and procedural programming. They will be competent in using them in programming software in the C++ language.

Content

- Short introduction to C++ language
- Sorting algorithms
- Search methods
- Dynamic memory management
- Data structures: linear lists, push-down lists, push-up lists, binary trees
- Classes and capsules
- Object-specific functions (constructors and destructures) is various data structures
- Inheritance and polymorphism

Literature / Study Material

- Hietanen P: C++ ja olio-ohjelmointi. Docendo, Sanoma WSOY.
- Material provided by the teacher

Learning Methods Lectures and exercises

Assessment Exam and exercises

Prerequisites Introduction to Programming I

Languages of Instruction Finnish

Object programming 1, 4 op KL17BTTT380 (study unit)

Lecturers Hilkka Niemelä, MA

Objectives

Students will be familiar with the basic principles and structure of object-oriented programming. They will be competent in using object-oriented programming to solve problems.

Content

- Classes and objects: structure, construction, inheritance and polymorphism, collections
- Interfaces, exceptions, threads

Literature / Study Material Material announced by the teacher

Learning Methods Lectures and programming practice

Assessment Assessment is based on an assignment and an exam.

Prerequisites Introduction to Programming I and II

Languages of Instruction Finnish

Object programming 2, 3 op KL17BTTT390 (study unit)

Lecturers Hilkka Niemelä, MA

Objectives Students will be competent in planning, programming, and documenting applications that utilise databases.

Content Processing transactions, user interface, handling databases

Literature / Study Material Material announced by the teacher

Learning Methods Lectures and programming practice

Assessment Assessment is based on an assignment and an exam.

Prerequisites Object-oriented Programming I

Languages of Instruction Finnish

Open Source software, 3 op KL17BTTT285 (study unit)

Lecturers Kari Aho

Objectives

Students will be familiar with open-source architecture, operating systems, databases and application software, the source code of which is in free distribution. In addition, students will have command of the development process of open-source software and the application developers therein.

Content

- Installing open-source software and applying it to practical work
- Familiarisation with the differences in properties of open-source software and simialr commercial products
- Common examples of open-source programmes are Linux distributions
- Open Office programme package
- Mozilla Firefox browser and MySQL database

Literature / Study Material Material provided by the teacher and open–source software documents

Learning Methods Lectures, exercises and assignment

Assessment Assignment

Languages of Instruction Finnish

Java, 3 op KL17BS30000 (study unit)

Lecturers Hilkka Niemelä, MA

Objectives Students will learn to plan, programme, and document database applications using Java.

Content Study Descriptions

- Java structures
- Class structure
- Objects
- Handling transactions
- User interface components
- Handling databases

Literature / Study Material Material announced by the teacher.

Learning Methods Lectures and assignments

Assessment Completed assignments and exam

Prerequisites Object Programming I and II

Languages of Instruction Finnish

Server programming 1, 3 op KL17BTEL300 (study unit)

Lecturers Markku Lahti, MA

Objectives

Students will become familiar with ASP.NET –technology. They will have command of ASP.NET technology and utilise the services it offers.

Content

- Basics of ASP.NET architecture
- Web-based documents
- Server controls
- Managing state,
- User identification and rights
- Basics of ADO.NET database programming

Literature / Study Material Material provided by the teacher

Learning Methods Lectures and exercises

Assessment Assignments, exercises

Prerequisites

- Introduction to Programming I
- Introduction to Programming II
- Database Programming

Languages of Instruction Finnish

Server programming 2, 3 op KL17BTEL310 (study unit)

Lecturers Markku Lahti, MA

Objectives

Students will become familiar with ADO.NET technology and utilise the services it offers. They will also acquire knowledge of processing XML-based connectionless data.

Content

- Basics of ADO.NET
- · Combining XML and a relational model
- Dataset
- Provider
- Parts of the ADO.NET object model
- Database maintenance
- Developed features of ASP.NET and ADO.NET

Literature / Study Material Material provided by the teacher

Learning Methods Lectures and exercises

Assessment Assignment, exercises

Prerequisites

- Database Programming
- Server Programming I

Languages of Instruction Finnish

Systems development project, 7 op KL17BTTT340 (study unit)

Lecturers Hilkka Niemelä, MA

Objectives

Students will be familiar with the production process for a software product and the more common methods for carrying out such processes. Upon completion of the course, students will have the readiness to participate in all phases of a software project and to document the results of the work.

Content

- Phases of producing a software project, documentation and applicable methods
- Production of a software product in a project: compilation of product and project documents

Literature / Study Material To be announced.

Learning Methods Lectures and project work

Assessment Assessment is based on the project work.

Languages of Instruction Finnish

Applied mathematics, 3 op KL17BTMT101 (study unit)

Lecturers Jyri Lamp, PhD

Objectives

Students will be competent in solving simple optimization problems using a computer. They will also be competent in using a statistics programme to illustrate and interpret empirical data.

Content

• Basic mathematical operations of a computer

Logical expressions needed in programming

Literature / Study Material To be announced.

Learning Methods Lectures, exercises, computer practice

Assessment Exercises and exam

Languages of Instruction Finnish

Thesis seminar, 3 op KL17BHSE300 (study unit)

Lecturers Erkki Koponen, MA

Objectives

The thesis seminar is divided into two parts:

- Part 1 takes place during the students' second year of study and prepares them for their practical training,
- introduces them to the thesis writing process and prepares them to choose a thesis topic.Part 2 takes place during the students' third year of study is intended to support students in their thesis writing process in which they utilise scientific and practical methods to independently complete their thesis.

Content

- Part 1: thesis process, evaluation of an earlier thesis in the field of data processing during a seminar
- Part 2: lectures and discussions about the topics, content and research methods of the theses, analysis in individual theses, defining the research problem, surveying literature, thesis plan written in a report and presentation of it

Literature / Study Material To be announced.

Learning Methods

Group discussions, student reports and active participation

Assessment

Students' reports, discussions and active participation

Languages of Instruction Finnish

Development of E-business, 20 op KL17BEVK01 (study entity)

Objectives: Students will be competent in creating an implementation plan for an e-business, defining and designing a network data processing system that meets regulations and in documenting it. They will create a web-service for their chosen technology that utilises interactive databases.

Data transfer between software's, 3 op KL17BEVK001 (study unit)

Lecturers Kari Aho, BBA

Objectives

Students will expand their skills in programming to encompass data transfer between programmes using common interfaces and transfer standards.

- API programming
- Data transfer between software and databases

- ODBC
- Data transfer between OVT organisations

Literature / Study Material Material provided by the teacher

Learning Methods Lectures, exercises

Assessment Assessment is based on an exam and an assignment.

Prerequisites

- Database Programming
- Structured Document and XML

Languages of Instruction Finnish

Server programming, 6 op KL17BETT284 (study unit)

Lecturers Markku Lahti, MA

Objectives

Students will be familiar with the more common technologies used in the programming of web applications. Students will gain advanced knowledge of embedded techniques (ASP and PHP). Both type of technologies will be discussed in depth during the course, and students will be familiar with the more significant components and differences in technologies.

Content

- Technologies in server programming, features and differences
- Basics chosen techniques
- Sending and receiving data
- Space management
- Object components used by the server
- Database connections and components

Literature / Study Material

- Material provided by the teacher
- · Guidebooks and recommendations for the technologies and software

Learning Methods Lectures and exercises

Assessment Assignment

Prerequisites

- New Media and Network Production
- Database Programming

Languages of Instruction Finnish

Network business (SCM), 4 op KL17BEVK300 (study unit)

Objectives

Students will be familiar with the central areas of e-business. They will understand the potential of networks and information technology in business operations, its processes, internal and external networking and management.

- Business operations and processes
- Information networks in business operations
- Areas of e-business

Literature / Study Material Material provided by the lecturer

Learning Methods Lectures and applications

Assessment Exam and report

Languages of Instruction Finnish

Construction of WEB-application project, 7 op KL17BTEL307 (study unit)

Lecturers Markku Lahti, MA

Objectives

Students will be competent in constructing a data processing system/application in the network environment. They will implement an interactive web-service they have defined and utilise various network programming techniques in their solutions. They will be familiar with the special features of database and server programming.

Content

- Central features of publishing software
- Managing the implementation environment
- Special features of creating a service
- Creating a service/implementation
- Documentation

Literature / Study Material

- Material provided by the teacher
- Manuals and guidebooks for the technology used in the course

Learning Methods Lectures and exercises

Assessment Completed implementation of a system and documentation of it

Prerequisites

- Database Programming
- Server Programming

Languages of Instruction Finnish

Business operations and ERP skills, 10 op KL17BELT01 (study entity)

Objectives: Students will understand the opportunities afforded by data networks and information technology in an enterprise including its internal and external processes (customer relations management, marketing, and production), the connections between those processes and the data transfer needs among various interest groups. Students will utilise data processing systems that support enterprise relations planning (ERP), and they will identify areas of development. Students will also have the opportunity to advance their knowledge in a particular area or programme.

Customer Relationship Management, 3 op KL17BELT300 (study unit)

Objectives

Students will possess a comprehensive understanding of customer relationship management. They will recognise the

changes and trends in the notion of customer-oriented thinking and develop customer management using data processing systems. Additionally, students will have command of various CRM systems in sales, customer services and marketing processes.

Content

The course comprises the following topics:

- Customership and customer relationship management
- Central elements of customer relationship management
- CRM systems and using CRM programmes

Literature / Study Material Material provided by the lecturer.

Learning Methods Lectures and assignments

Assessment Exercises and exam

Languages of Instruction Finnish

ERP-software, 5 op KL17BETT002 (study unit)

Lecturers Kimmo Salmenjoki

Objectives

Students will have command of the basic functions associated with ERP (enterprise resource planning) utilising a data processing system.

Content

- Familiarisation with marketing, materials management, product management, production control and the associated functions based on a case-study of a networked company
- Financial aspects of the above-mentioned processes

Assessment

Active participation in lectures and software assignments. Grading based on both a practical and theoretical exam.

Languages of Instruction Finnish

Network business strategies, 2 op KL17BELT400 (study unit)

Objectives

Students will understand the phases and central methods of the business development process. They will learn and recognize the business development potential brought about by information technology.

Content

- · Business development and management
- Organizational change and change management

Literature / Study Material Material provided by the lecturer

Learning Methods Lectures and assignments

Assessment Report

Languages of Instruction Finnish

Study Descriptions

Applied mathematics, 3 op KL17BTMT102 (study unit)

Lecturers Jyri Lamp, PhD

Objectives

Students will be competent in solving simple optimization problems using a computer. They will also be competent in using a statistics programme to illustrate and interpret empirical data.

Content

- Basic mathematical operations of a computer
- Logical expressions needed in programming

Literature / Study Material To be announced.

Learning Methods Lectures, exercises, computer practice

Assessment Exercises and exam

Languages of Instruction Finnish

Thesis seminar, 3 op KL17BEME303 (study unit)

Lecturers Erkki Koponen, MA

Objectives

The seminar is divided into two parts:

- Part 1 during students' 2nd year of study prepares students for their practical training, choosing a thesis topic and engaging in the thesis process.
- Part 2 during students' 3rd year of study supports their thesis writing process. They utilise field-related scientific and practical methods.

Content

- Part 1: Thesis writing process and evaluation of students' theses in the field information processing in the seminar
- Part 2: Lectures and discussions about the topic, content and methods of the thesis. Analysis of the topic of the thesis, defining the research problem, finding appropriate literature, research plan as a report and presenting it in the seminar

Literature / Study Material Material announced by the teacher

Learning Methods Discussions, student reports and active participation

Assessment Student reports, discussions and active participation

Languages of Instruction Finnish

Media communication and production, 23 op KL17BMMT (study entity)

Objectives: Students will acquire readiness in designing web-based and audiovisual media and working in specialist job positions. Emphasis is placed on business, such as marketing and other customer-based solutions that produce communal communication services. Students will have command of the phases involved in planning and implementing the produciton of products, contract practices associated with copyrights and media production projects, as well as issues

pertaining to distribution.

Basics of media production, 2 op KL17BMTT303 (study unit)

Lecturers

Tarja Keski-Mattinen, BBA

Objectives

Students will be familiar with the special characteristics of media production and the developments in the field. They will understand the more common copyright issues in media production and the activities of copyright organisations. Students will also be familiar with common contract practices and documents and the typical problems associated with the management of media production projects.

Content

- Phases in digital media production
- Phases of planning
- Copyrights
- Contract practices

Literature / Study Material

- Stenvall–Virtanen S. & Vähämäki M. (eds.). 2006. Mediatalous liiketoiminnan ja yrittäjyyden perusteet viestintäalalle.
- Salokannel M. 2001. Tekijänoikeus ja multimedia.
- Takki P. 2002. IT-sopimukset, käytännön käsikirja.

Learning Methods Lectures and exercises

Assessment Written exam

Languages of Instruction Finnish

Web publishing software, 3 op KL17BMTT002 (study unit)

Lecturers Jari Kattelus, BA

Objectives

Students will learn how to use web-publishing software and acquire the ability to produce web-pages and interactive www-environments.

Content

- Basic functions of web publishing software
- Creating a dynamic www-service
- Macromedia Dreamweaver MX
- Text formatting, tables, forms, frames and navigation elements (links, buttons etc.) for a web-site
- Web-graphics using Adobe Image Ready and/or Macromedia Fireworks software (image maps, GIF animations, interactive buttons)

Literature / Study Material

- Lyytikäinen, Miikka ja Mäkitalo, Mauri. Dreamweaver MX Toolkit. Docendo.
- Lyytikäinen, Miikka ja Mäkitalo, Mauri. Dreamweaver MX 2004 Quality. Docendo.

Learning Methods

Lectures, exercises, assignment and computer exam

Assessment Assignment and computer exam

Prerequisites

- Database Programming
- Internet Programming

Languages of Instruction Finnish

Media know-how and scriptwriting, 5 op KL17BTME313 (study unit)

Lecturers

Tarja Keski-Mattinen, BBA

Objectives

Students will be familiar with the script types and techniques of digital communication. They will also be familiar with the communicative opportunities and uses of text, image and sound in different distribution channels. They will analyse the communicative effects of different media elements and recognise cultural issues, target groups and communication objectives. Students will also learn about the visual and audiovisual designing, creation and application of landscapes for various uses.

Content

- Script writing process
- Content production, format and structure
- Communicative significance of text, image and sound

Literature / Study Material

- Luukkonen J. 2000. Digitaalisen median käsikirjoitus. Oy Edita Ab.
- Aaltonen J. 2003. Käsikirjoittajan työkalut, Audiovisuaalisen käsikirjoituksen tekijän opas.
- Lecturer's material

Learning Methods Lectures and exercises

Assessment Assignments and exercises

Prerequisites Basics of Media Production

Languages of Instruction Finnish

Server programming, 3 op KL17BTME323 (study unit)

Objectives

Student will learn about common technologies used in programming web applications. Students will gain advanced knowledge of embedded technologies (ASP and PHP). The chosen technologies and the more significant components will be discussed. If necessary, publishing software will be used.

Content

- Basics in chosen technology
- Sending and receiving data
- State management
- Object components used by the server
- Database connections and components

Literature / Study Material

- Material provided by the teacher
- Guidebooks and recommendations for the technologies and software

Learning Methods Lectures and exercises Assessment Assignment

Prerequisites

- Introduction to Programming I and II
- Database Programming

Languages of Instruction Finnish

Media entrepreneurship, 3 op KL17BTME333 (study unit)

Lecturers Tarja Keski–Mattinen, BBA

Objectives

Students will become familiar with entrepreneurship in a media–based economy, learn to observe their environment and find new areas to use multimedia, new multimedia products and business ideas. The aim is to find new business opportunities.

Content

- Innovation process
- Establishing a new business
- Compiling a business plan

Literature / Study Material

- Material provided by the teacher
- Stenvall–Virtanen Š. & Vähämäki M. (eds.). 2006. Mediatalous liiketoiminnan ja yrittäjyyden perusteet viestintäalalle.

Learning Methods Lectures and exercises

Assessment Exercises and an assignment

Languages of Instruction Finnish

Multimedia project, 7 op KL17BTME023 (study unit)

Lecturers Jari Kattelus, BA

Objectives

The aim of the course is to familiarise students with the management of a multimedia project and its independent phases: scripting (idea, synopsis, and content script), material processing, compilation, testing and distribution.

Content

During the project the students make a multimedia product to be distributed. The product may be a multimedia presentation on a CD/DVD in off-line format or an online web service with interactive elements made with Flash/Java. Students will utilise development environments such as Macromedia Director and Macromedia Flash and Macromedia Dreamweaver.

Literature / Study Material To be announced.

Learning Methods Active participation in the project, workshop

Assessment Grading is based on the multimedia product completed during the project or evaluation of the website.

Prerequisites

- Digital Production
- Hypermedia Development Systems

Languages of Instruction Finnish

Production of digital media, 10 op KL17BMDT (study entity)

Objectives: Students will have command of the production of digital media, media creation and editing with applicable media editing software with consideration of the channel of distribution. Students will be competent in applying the principles of graphic design to digital and printed publishing.

Desktop publishing graphics, 3 op KL17BTME017 (study unit)

Lecturers Tarja Keski–Mattinen, BBA

Objectives

Students will acquire readiness to design and implement various graphic publications and technical documents for printed and digital distribution. Students will be familiar with the principles of publications software and its opportunities. They will understand the significance of graphic design in a business's communications sector as a whole.

Content

- Graphic design: typography, images, layout, colours
- Community's visual image
- Graphics applications

Literature / Study Material

- Material provided by the teacher
- Pesonen, S. & Tarvainen, J. 2003. Julkaisun tekeminen. Docendo Finland Oy.

Learning Methods Lectures and exercises

Assessment Exercises and assignment

Languages of Instruction Finnish

Digital production, 3 op KL17BTME008 (study unit)

Lecturers Jari Kattelus, BA

Objectives

Students will advance their skills in media literacy and media editing. They will have command of the editing and using images, sound, video digitalization and digital material.

Content

- Using Adobe's editing programmes for digital media, such as Photoshop, Premiere Pro and Encore DVD
- Focus on DVD-video productions
- Familiarisation with Sony Sound Forge software

Literature / Study Material

- McClelland D. 2002. Photoshop 7 kuvankäsittely. Docendo.
- Weinmann, Lourekas & Kelby. Inside Photoshop 7. IT Press.
- Levy J. 2001. Digitaalinen videoeditointi. Suomen ATK-kustannus.
- Frederic J. Digivideoijan käsikirja. IT Press.

Learning Methods

Lectures, exercises, workshops, exam on computer and assignment

Assessment

The grade for the course is based on the computer exam where students exhibit their competence in using the various programmes. Students may raise their grade by doing an extra assignment.

Languages of Instruction Finnish

Hypermedia development system, 4 op KL17BTTT115 (study unit)

Lecturers Jari Kattelus, BA

Objectives

The course focuses on the creation of multimedia presentations by means of software such as Macromedia Director/Macromedia Flash and on the features of the software.

Content

Students produce a multimedia presentation that consists of different media elements. The course introduces Macromedia Director MX and Macromedia Flash MX software, which students will use to make interactive multimedia presentations.

Literature / Study Material

- Piiroinen J. Director 7 Trainer. IT Press.
- Gross P. Macromedia Director 7 & Lingo. IT Press.

Learning Methods Lectures, exercises and computer exam

Assessment

The grade for the course is based on the computer exam in which students exhibit their competence in using the programmes. The exercises completed in class also affect the grade (exercise bonuses).

Languages of Instruction Finnish

Thesis seminar, 3 op KL17BMME302 (study unit)

Lecturers Erkki Koponen, MA

Objectives

The thesis seminar is divided into two parts:

- Part 1 takes place during the students' second year of study and prepares them for their practical training, introduces them to the thesis writing process and prepares them to choose a thesis topic.
- Part 2 takes place during the students' third year of study is intended to support students in their thesis writing process in which they utilise scientific and practical methods to independently complete their thesis.

Content

- Part 1: thesis process, evaluation of an earlier thesis in the field of data processing during a seminar
- Part 2: lectures and discussions about the topics, content and research methods of the theses, analysis in individual theses, defining the research problem, surveying literature, thesis plan written in a report and presentation of it

Literature / Study Material To be announced.

Learning Methods Group discussions, student reports and active participation

Assessment Students' reports, discussions and active participation Languages of Instruction Finnish

Linux Operating System, 2 op KL17CCLP001 (study unit)

Objectives

Students will be competent in using and maintaining the more common Linux workstations.

Content

- · Linux interface and practising basic commands
- Linux installation
- KDE and Gnome desktop environments
- Maintaining workstations

Literature / Study Material Material provided by the lecturer

Learning Methods Lectures, and assignments in the laboratory or at home

Assessment Work during class and exam

Linux – Server, 4 op KL17CCLP002 (study unit)

Objectives Students will learn to use and maintain the more common Linux servers.

Content

- Linux for network and server use, using various commands
- Advanded learning of the operating principles and structure of the Linux system (compared to Linux I)
- Practice installing and maintaining various servers

Literature / Study Material

- Material provided by the teacher
- Linux Administration Handbook, Evi Nemeth, Gart Snyder, Trent R. Hein (not compulsory)

Learning Methods Lectures, assignments completed in the laboratory or at home

Assessment Work during class and exam

Telecommunications (Cisco), 10 op KL17CCCI (study entity)

- Objectives: Students will be familiar with the technologies and standards used in data transfer and know how to design data networks. Students who have successfully completed the course may apply for the international Cisco Certified Network Association diploma.
- Content: Basics in data transfer, OSI model, cabling, basics in local networks, routing, route programming, local network technologies, virtual networks, WAN theory and WAN technologies
- Literature/Study material: Cisco Network Academy material
- Learning methods: Students will enagage in online distance learning. In the classroom, students will do exercises and work in the laboratory also.
- Assessment: Lab work and online exam

Application development, 10 op KL17CCOR (study entity)

- Lecturers: Markku Lahti, MA
- Objectives: Students will be competent in creating a fairly extensive data processing system on a chosen platform, e.g. a web application or portal, which has a dynamic interactive database. The application will comprise components needed for maintaining and searching for information in a datbase. They may utilise Microsoft's .NET Framework or Oracle's various development modules for databases and applications. Students will familiarise themselves with the architectures as independently as possible.
- Literature/Study material: To be announced
- · Learning methods: Lectures, exercises
- Assessment: Developed application and documentation for it
- Language of instruction: Finnish

AV-manual scripting and media know-how, 3 op KL17VEAV001 (study unit)

Lecturers Tarja Keski–Mattinen, BBA

Objectives

Students will be familiar with the scriptwriting steps for an audiovisual product and the main features of it. They will be able to analyse the communicative effects of different media elements with consideration to various cultures, target groups and communication objectives.

Content

- Familiarisation with the features, forms and structures of a DVD product
- Audio visual scriptwriting techniques and features
- Familiarisation with the communicative opportunties of text, images, moving images, animation and sound and how to use them in producing a DVD
- Basic methods of analysis and various tools such as the Pierce toolbox and Barthe's codes

Literature / Study Material

- Material provided by the lecturer
- Aaltonen J. 2002. Käsikirjoittajan työkalut: audiovisuaalisen käsikirjoituksen tekijän opas.

Learning Methods Lectures and exercises

Assessment Exercises, completed script and exam on analysing

Languages of Instruction Finnish

AV-production and editing, 3 op KL17VEAV002 (study unit)

Lecturers Jari Kattelus, BA

Objectives

Students will be familiar with basic AV production equipment, including camera equiment, sound equipment and lighting, etc. and how it is used. They will be competent in using editing software for post–processing pictures and sound. Students will also have command of producing a DVD and menu structures.

- Use of production equipment
- Practising post-processing of AV material with editing programmes
- DVD production from edited AV material

• Adobe Premiere Pro, Adobe Encore DVD and Adobe Photoshop

Literature / Study Material

Levy, J. 2001. Digitaalinen videoeditointi. Suomen ATK kustannus.

Learning Methods Lectures, exercises and computer exam

Assessment

The garde for the course is based on the computer exam where students utilise an editing programme. The exercises completed in class also affect the grade for the course (exercise bonuses).

Languages of Instruction Finnish

DVD project, 4 op KL17VEAV003 (study unit)

Lecturers Jari Kattelus, BA

Objectives

Students will be familiar with video production projects and their stages: scriptwriting (idea, synopsis, script), purchasing material, processing and editing, and distribution.

Content

During the project, students will make a DVD (Digital Video Disc) that is playable on standard DVD players. The product may be a company presentation, training material, document project, etc.

Learning Methods Active participation in the project, workshops

Assessment

The grade for the course is based on the assessment of the completed DVD product.

Prerequisites AV Production and Editing

Languages of Instruction Finnish

THESIS, 15 op OPINNÄYT (study entity)

- Objectives: Students may do their thesis independently or as part of a more extensive research or development project. Students will apply the theory they have learned during their studies to carry out their own research. During the thesis writing process, students will develop their skills in problem solving, project work, in scientific and progressive thinking, gathering information independently, and presenting results in written form. They will present their results in a logical manner using correct language and field–related, academic terminology. The thesis also provides students will the opportunity to develop their creativity, to experiment and use original applications.
- Content: Students are responsible for choosing their thesis topic. Oftentimes, they are given a commission during their practical training. Students discuss their topic with their supervisor and define it more closely after which they present their thesis plan (and completed work) in a thesis seminar. Students are in close contact with their supervisor throughout the thesis process. Upon completion of the thesis, students will sit a Maturity Test in which they exhibit their knowledge of their thesis content and their ability to write clearly and logically.
- Literature / Study material: Material relevant to the thesis topic, which is approved by the supervisor.
- Assessment: Based on the thesis assessment criteria at Seinäjoki University of Applied Sciences.
- Previous studies: Research and the Thesis Writing Process

Thesis, 15 op KL17FYOT200 (study unit)

Objectives

Students may do their thesis independently or as part of a more extensive research or development project. Students will apply the theory they have learned during their studies to carry out their own research. During the thesis writing process, students will develop their skills in problem solving, project work, in scientific and progressive thinking, gathering information independently, and presenting results in written form. They will present their results in a logical manner using correct language and field–related, academic terminology. The thesis also provides students will the opportunity to develop their creativity, to experiment and use original applications.

Content

Students are responsible for choosing their thesis topic. Oftentimes, they are given a commission during their practical training. Students discuss their topic with their supervisor and define it more closely after which they present their thesis plan (and completed work) in a thesis seminar. Students are in close contact with their supervisor throughout the thesis process. Upon completion of the thesis, students will sit a Maturity Test in which they exhibit their knowledge of their thesis content and their ability to write clearly and logically.

Literature / Study Material

Material relevant to the thesis topic, which is approved by the supervisor.

Assessment

Based on the thesis assessment criteria at Seinäjoki University of Applied Sciences.

Prerequisites Basics in Thesis Writing

Degree Programme in Business Management (In Finnish)

Specialisations: After studies common to all, students select three, 12–credit elective study modules specialising in different fields of business studies.

Head of degree programme: Mr Päivö Laine, Tel. +358 40 830 4175, E-mail: paivo.laine@seamk.fi Student counsellor: Ms Ulla Autio, Tel. +358 40 830 6067 E-mail: ulla.autio@seamk.fi ECTS/International coordinator: Ms Ritva Leppänen, Tel. +358 20 124 5420, E-mail: ritva.leppanen@seamk.fi

Degree and degree title

Polytechnic degree in Business Studies, Bachelor of Business Administration

Access requirements

Please see the Applicant's Guide or the website www.seamk.fi.

Objectives of study

The objective of the degree programme is that the students attain knowledge and skills in business operations especially from the viewpoint of the small and medium–sized enterprises in the area. In the first and second years the focus is on *core knowledge of business* and the students learn to work in different business tasks.

Having completed studies common to all, the students can choose between specialisation modules, which allow the students to specialise in a particular area of business operations both in a domestic and international context.

On completing the specialisation modules in *marketing*, students should be able to cope with various practical marketing tasks as well as planning and management duties. Students can also do a study module on retail trade.

Having successfully completed the *accounting* modules, students will be able to maintain and develop information systems that support management and decision–making and make use of their knowledge of accounting and its methods in financial planning, management and decision–making.

The completion of the module in *human resource management* gives students proficiency in dealing with personnel management tasks.

The module in *entrepreneurship* focuses on application and development of business practices in SME business.

It is also possible to learn about *international business* by participating in the International Business modules together with students from partner institutions from Europe and other continents.

Another alternative is to study *electronic business* and learn about the implementation and development of online business sites.

Learning outcomes of the degree programme

In addition to generic learning outcomes common to all polytechnic degrees, the following subject–specific learning outcomes have been defined for the Degree Programme in Business Management in accordance with the national competence definitions:

Comprehensive business competence

A Bachelor of Business Administration

- is able to identify and describe the core processes of an enterprise and understands the interaction between the different areas of business economics
- understands the interaction between business operations and the operational environment and adopts an entrepreneurial approach to doing business
- understands the fundaments of profitable business and is able to analyse business operations and risks

- understands the impact of an individual on the operations of a company or organisation and can achieve results in his/her work
- understands the importance of communication and creates actively interrelations between both internal and external interest groups also in a global environment

Specialised business competence

A Bachelor of Business Administration

• has in-depth knowledge of a specialised area of business (marketing, accounting, business administration and entrepreneurship, online services, international business) in accordance with his/her personal curriculum

Methodological business competence

A Bachelor of Business Administration

- has a basic knowledge of research and development work required for the acquisition and adoption of in-depth business competence
- knows applied business mathematics and statistical methods and knows how to use information systems for these purposes
- has a knowledge of the application of qualitative and quantitative research methods

Applied business competence

A Bachelor of Business Administration

- knows how to apply the theories of business economics and has the ability of creative problem solution, for example in practical training, project studies and thesis work
- knows how to apply the most recent business knowledge at a workplace
- knows how to develop business processes and apply quality thinking

Learning methods

The implementation of the curriculum focuses on experiential learning. Learning starts from concrete experiences which are examined and reflected. Self–assessment contributes to the understanding of phenomena and development of new models of action.

Basic studies are integrated in running a virtual enterprise, and learning is based on practical tasks. Professional studies include real–life planning and research assignments, case studies and projects.

Studies can be conducted flexibly in cooperation projects in accordance with a student's personal curriculum. It is also possible for the student to integrate their studies in the development of their own enterprise. Courses can also be completed virtually in online learning environments. In these cases studies can be implemented in a way that differs from the learning methods presented in the study guide.

In the Bachelor's thesis theoretical knowledge is applied to practical problem-solving and business development.

Access to further study

Graduates are eligible for Master-level studies in business and administration in universities of applied sciences.

Regulations concerning the completion and assessment of studies

Legislation and decrees

Degree Programme in Business Management (In Finnish), 210 cr (1.9.2008) LITAKO 2008

Code	Name	Study Year			ar	CR
		1.	2.	3.	4.	

PERUS	BASIC STUDIES				66		
KD07ALOP	Liiketoimintaosaamisen perusteet			48			
KD07AYR001	Yrityksen toiminta	x				36	
KD07APKT012	Introduction to economics	x				4	
KD07APMT001	Basics of business mathematics	x				5	
KD07APTI015	Basics of statistics		x			3	
KD07AKIELET	Language studies					13	
KD07AYRU021	Business Swedish	x				4	
KD07CYRU220	Att tala svenska	x				2	
KD07AYEN020	Business English	x				4	
OPISKPROS	PERSONAL DEVELOPMENT AND STUDY PROCESS					5	
KD07AOA001	Study skills and professional growth					3	
KD07AITP001	Study skills and professional growth 1	x				1	
KD07AITP002	Study skills and professional growth 2		x			1	
KD07AITP003	Study skills and professional growth 3				x	1	
KD07ATH001	Information retrieval for business studies	x				2	
AMMATTI	PROFESSIONAL STUDIES					87	
KD07BYAO	Common professional studies				35		
KD07BLOL	Liiketoimintaosaamisen laajentaminen					35	
KD22CHHA250	Leadership		x			2	
KD07BHHA242	Project management		x			2	
KD07BHYR224	Quality Technology		x			2	
KD07BMMA101	Customer service as a competitive tool		x			3	
KD07BMMA130	Competitive tools in marketing		x			4	
KD07BLOI111	Company law		x			3	
KD07BLOL001	Basics of management accounting		x			2	
KD07BHOI200	Personal taxation		х			3	
KD07BLOL002	Value added taxation		х			2	
TOINEN	Take at least one course						
KD07BMMA002	Management of marketing communication		x			3	
KD07BLLA140	Continuation course in bookkeeping		x			3	
KOLMAS	Take at least three courses 9						
KD07BHHA003	Payroll administration		x			3	
KD07BLMT120	Spreadsheet computation		x			3	
KD07BITI110	Statistical processing		x			3	
KD07BHOI210	Labour law		x			3	
KD07BLOL003	Introduction to online business		x			3	
KD07BVAO	Alternative professional studies					36	
KD07CL01	Financial accounting			12			
KD07CLLA001	Company taxation				<u> </u>	4	
KD07CLE1001	Preparing financial statements					5	
KD07BLLA240	Auditing of the accounts					3	
KD07CL02	Management accounting					12	

KD07CLLA310	Cost management and result measurement				4	
KD07BLLA190	Budgeting as a management tool				5	
KD07BLLA132	Business management solutions				3	
KD07CL03	Financial statements and financial analysis				12	
KD07CLLA270	Financial statement analysis				4	
KD07CLLA290	Investment and financial planning				3	
KD07CLLA300	Liquidity management				3	
KD07BLOI242	Financial law				2	
KD07CM05	Utilisation of market information				12	
KD07BMMA135	Marketing research				6	
KD07BMMA170	Consumer behaviour				3	
KD07BMMA111	Customer relationship management				3	
KD07CM02	Marketing planning and management				12	
KD07CMMA002	Marketing plan as a management tool				3	
KD07BMMA161	Brand management				3	
KD07BMMA112	Marketing in an international environment				2	
KD07BMMA300	Financial management of marketing				2	
KD07DVOI43	Marketing law				2	
VÄHITTÄIS	MA3: Vähittäiskauppa liiketoimintana				12	
KD07BMMA222	Retail business and logistics				5	
KD07BMMA223	Retail business and logistics				5	
KD07DVMA05	Personal selling				2	
KD07CHR001	HR: Henkilöstöjohtaminen				12	
KD07CHHA001	Management of human resources				4	
KD07CHHA251	Knowledge management				4	
KD07CHHA200	Uranhallinta				2	
KD07CHHA201	Muutoksen johtaminen				2	
KH07CH003	YR: Yrittäjyys ja yrittäjänä toimiminen				12	
KD07CHYR400	Business agreements				4	
KD07CHYR401	Networking and Joint Ventures	\perp	_		4	
KD07CHYR402	Family business and succession	\perp	_		2	
KD07CHYR403	Business growth and development				2	
KD07CH03	Electronic business			1	12	
KD07CH03001	Yrityksen verkkopalvelun toteuttaminen		_		4	
KD07CH03002	Tietokantojen käyttö verkkopalvelussa		_		2	
KD07DVV013	Graphics of online services				3	
KD07CH03003	Sähköinen kaupankäynti				3	
KD07CIB01	International business 1 (In English)					
KD06BNMA630	International business operations (In English)				5	
KD06BNMA640	Internationalisation of the firm (In English)	+	—		5	
KD06BNMA650	Cross-cultural business (In English)				5	
KD07CIB02	International business 2 (In English)				9	
KD06CNMA731	Intopia (In English)				6	

KD06BNMA620	Business to business marketing (In English)					3
KD06CNMA681	Seminar on business in the Baltic area (In English)					2
KD06CNMA690	Seminar on business in Scandinavia (In English)					2
KD07CTU	Studies supporting research work					6
KD07CPTU010	Research work and academic writing			x		2
KD07CPTU020	Thesis seminar				x	2
KD07CPTU002	Quantitative research			x		2
KD07BKTU110	Qualitative research			x		2
KD07BKTU113	How to implement a development project			x		2
KD07BKIELET	Language studies					10
VAPVAL FREE-CHOICE STUDIES						12
OPINKYPS	YINKYPS THESIS AND MATURITY EXAMINATION					15
KD07FYOT200	Thesis				x	15
KD07FY0T100	Maturity examination				x	
TYÖHARJ	YÖHARJ PRACTICAL TRAINING					30
KD07HYTH120	Practical training			x		30

Study Descriptions

Liiketoimintaosaamisen perusteet, 48 op KD07ALOP (study entity)

Objectives: Students will be familiar with the establishment and operations of an enterprise. They will understand the process in which the enterprise acquires production factors and combines them in its production process and markets to acquire income. Students will understand the interaction of an enterprise with various intertest groups at the regional, national and international levels. Students will perceive the financial process of an enterprise and have knowledge of the basics of accounting. Having completed the module, students will have basic knowledge of business operations, marketing, accounting, business law and economics. The module is integrated into virtual business operations in students' practical training companies.

Yrityksen toiminta, 36 op KD07AYR001 (study unit)

Lecturers

Team of teachers coordinated by Tuulia Potka-Soininen

Objectives

Students will be familiar with the establishment of a company, entrepreneurship and business operations both in domestic and international environments. They will have knowledge of basic business operations, marketing, accounting, business law, computing, office technology and business communication.

Content

The themes of practical training business activities are:

- Team formation
- Company establishment
- Establishing a business
- Business planning and development, e.g. trade fairs
- Internationalisation
- Closing an account period and closing down a business

The training takes places in a virtual environment. In addition, students participate in projects with their real partner companies. The studies integrated in training include:

• Basics of business operations: entrepreneurship and company establishment, basic concepts of business economics, prerequisites of profitable business activities, efficiency of business processes, operational environment of business activities, organisation of business
- Basics of marketing: purpose and tasks of marketing, modern marketing thinking, operational environments of marketing, market segmenting, marketing tools
- Basics of accounting: basic concepts of accounting, accounting period and financial statements, official and statutory accounting reports, essentials of accounting legislation
- Business law: Finnish legal system, judicial concepts, contract law, commercial law, consumer protection legislation, debt relationship and collateral
- Basics of computing: basic computing concepts, presentation of data, structure and functions of a computer, hardware and software, LANs and the Internet, basics of data security, operating systems, use of e-mail, spreadsheets, database management
- Basics of office practice: the office as a working environment, office appliances, communication tools, archiving, recycling, ergonomics, data security, development of office work, typing, word processing, document management, presentation graphics, financial office work
- Business communication: basic concepts of business communication, characteristics of a good text, business letters, reports, job application documents, meetings and negotiations, presentation skills, informing
- Swedish and English business communication

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Participation in practice enterprise operations
- Lectures and exercises
- Independent reading
- Portfolios

Assessment

- Active participation in practice enterprise operations
- Portfolios (individual and firm-specific)
- Written examinations
- Self- and peer assessment

Introduction to economics, 4 op KD07APKT012 (study unit)

Lecturers Jorma Imppola

Objectives

Students will be familiar with the basic concepts of national economics and economic systems as well as with economic thinking and interdependencies. Upon completion of the course, students will be aware of the central concepts of national economics, know how to use economic statistics, be familiar with different forms of competition, understand economic growth, inflation and monetary policy, and the interdependencies involved in currency rates as regards the long term, and know the causes and effects of economic cycles.

Content

- Basics of microeconomics: demand, supply, consumer, enterprise, market, competition
- Concepts connected with national income: formation of national income, consumption, investments, saving, money, banks and financial institutions, economic cycles, economic growth, economic systems

Literature / Study Material To be announced.

Learning Methods Lectures and exercises (individual tasks and group assignments)

Assessment

The course grade consists of two parts: examination (70 %) and exercises (30 %). Both parts must be successfully completed to receive a grade for the course.

Languages of Instruction Finnish

Basics of business mathematics, 5 op KD07APMT001 (study unit)

Objectives

Upon completion of the course, students will possess the mathematical knowledge they need in commercial and industrial life. They will be competent in calculating percentages, interest, and compound interest.

Content

- Claculating percentages: taxation, pricing, indices, inflation, deflation, currencies, devaluation, and revaluation
- Calculating interest and compound interest: calculating short-term and long-term interest, calculations indicating the development of capital, real interest rates, periodic payments, types of financing, real annual interest, investment caculations

Literature / Study Material Saaranen P., Kolttola E. & Pöso, J. (2007). Liike–elämän matematiikkaa.

Learning Methods

Lectures, exercises (also on computer) and independent study

Assessment

Combined grades of two mid-term exams: if the combined grades are not enough to pass the course, then students must take a re-test for the entire course.

Languages of Instruction Finnish

Basics of statistics, 3 op KD07APTI015 (study unit)

Lecturers

Hannu Tuuri, MSSc (Pol. Sc.)

Objectives

Students will understand the basic concepts of statistics and learn to acquire data and use existing statistics. They will be competent in processing statistical data and presenting data using parametres, charts and diagrams with the Excel programme. Students will also know how to analyse the statistics they acquire.

Content

- Basic concepts
- Acquisition of research data and methods of sampling
- Scales
- Parametres
- Correlations
- Graphic presentation
- Excel, Pivot charts, and other programmes

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises (both in class and as homework)

Assessment Exam and exercises

Languages of Instruction Finnish

Further Information Research and development: 3 cr

Language studies, 13 op KD07AKIELET (study entity)

The objective of studies in language and communication is that students have functional knowledge of Swedish and of one or more foreign languages required by their profession. Students can acquire information in target languages using

various methods, and are able to communicate in a way that is appropriate for each situation. They are aware of the influence of cultural differences on communication and are able to interact with people from different cultures. They can utilize learning strategies that suit their needs, and self–assessment to form a realistic idea about their language skills. In their mother tongue students develop their communication skills and acquire an overall picture of the role of communication as a strategic tool. Students who have not completed upper secondary school courses in Swedish or English must take preparatory courses in these languages.

Business Swedish, 4 op KD07AYRU021 (study unit)

Lecturers Päivi Seppälä, MBA

Objectives

Students will possess the oral and written Swedish language skills needed in everyday communication and in business situations. They will be competent in finding field–related information in Swedish and utilising it in their work, and they will be familiar with basic business terminology. Thet will possess a positive attitude toward the development of their language skills. Upon completion of the course, students will

- know how to tell about themselves and their work experience,
- know how to tell about the jobs available in their field and what they involve,
- know how to use basic business terminology,
- know how to handle business issues by phone and e-mail,
- know how to advise and give instructions in issues pertaining to work, and
- know how to describe enterprises and what they do.

Content

- Telling about oneself and one's education, CV
- Work environments and duties
- Small talk
- Telephone and electronic communication
- Giving advice and instructions in work-related situations
- Company presentations

Literature / Study Material

Sandberg, Tuunanen: Flexhandel, Svenska för högskolor, 2005 or later version.

Learning Methods

- Oral presentations in pairs or groups
- Written assignments
- Computer-aided exercises
- Some tasks are done in the practical training companies

Assessment

- Active participation in lessons
- Oral and written exercises
- Written exam

Att tala svenska, 2 op KD07CYRU220 (study unit)

Lecturers Jaana Store, MA

Objectives

The students are able to talk and discuss in Swedish about everyday issues related to life, work and their professional field.

Content

- Oral exercises based on given topics
- Conversation exercises related to everyday issues, working life subjects and current topics on the student's professional field

Literature / Study Material Material collected by the teacher and the students

Learning Methods

Oral exercises, vocabulary related to a topic based on e.g. recordings, videos and articles

Assessment Continuous assessment, oral examination and/or interview

Prerequisites Business Swedish 1 (Affärssvenska 1)

Languages of Instruction Finnish and Swedish

Business English, 4 op KD07AYEN020 (study unit)

Lecturers Marja Matikka, MA

Objectives

Students will understand the basic concepts of business English and learn basic business vocabulary. They will be competent in communicating on issues associated with their studies, their own work and company, and getting along in everyday situations.

Content

- Education
- Working life, job seeking
- Business life
- Products and services in business
- Field of business

Literature / Study Material Niskanen, Vetter, Urbom. 2008. Business Express. WSOY.

Learning Methods Oral and written exercises, listening comprehension, group and pair work, lectures

Assessment Continuous assessment, participation, a written final exam

Languages of Instruction English and Finnish

Further Information This course is compulsory for all students in the Degree Programme in Business Management.

PERSONAL DEVELOPMENT AND STUDY PROCESS, 5 op OPISKPROS (study entity)

Objectives: Students will be familiarised with their learning environment, curriculum and different learning methods. They will create their personal curriculum on the basis of their own objectives. Students will be competent in seeking appropriate information for their needs.

Study skills and professional growth, 3 op KD07AOA001 (study unit)

Lecturers Ulla Autio, LBA (Econ. & Bus. Adm.), guidance counsellor

Objectives

Students will become familiar with the learning environment and community, degree programmes and learning methods, as well as their learning strategies and how to develop them. They will be aware of their responsibility as learners and later as active and influential members of a work community. Students will enhance their professional orientation and be competent in exhibiting their skills when applying for a job.

Study skills and professional growth 1, 1 op KD07AITP001 (study unit component)

Lecturers Ulla Autio

Objectives

Student will be familiar with the UAS learning environment and community, degree programmes and learning methods. They will plan their personal curriculum and develop their own learning strategies.

Content

- UAS as a learning environment
- Student support services such as health care, student financial aid, library servies, etc.
- · Learning strategies and assessment and development of one's own learning
- Structure, aims and content of the degree programme
- Planning one's own personal curriculum

Literature / Study Material

Study guides and other material provided by the teacher.

Learning Methods Online learning, lectures and assignments

Assessment Pass/fail

Study skills and professional growth 2, 1 op KD07AITP002 (study unit component)

Lecturers

Guidance counsellor and head of degree programme

Objectives

Students will develop their personal curriculum on the basis of their professional orientation. They will be aware of their responsibility as a learner and later as active and influential members of a work community. Students will be competent in acquiring a practical training position relevant to their professional growth. They will also seek a topic for their final thesis while doing their practical training.

Content

- Development of a personal curriculum
- Preparation for practical training
- Preparation for those taking part in an exchange programme
- Familiarisation with field-related duties and the profession in general
- Introduction to research and development

Learning Methods

Active participation in lectures and completed assignments

Assessment Pass/fail

Study skills and professional growth 3, 1 op KD07AITP003 (study unit component)

Lecturers

Guidance counsellor and head of the programme

Objectives

Students will seek a topic for their final thesis, preferably during their practical training period, which supports their professional development. They will assess the success of their personal curriculum. Students will possess the knowledge and skills needed to apply for various job positions, and they will be competent in presenting their professional skills when seeking a job.

Content

• Assessment of the success of the personal curriculum

- Job application training
- Qualifications and job titles in the field

Literature / Study Material Material provided by the teacher

Learning Methods

Active participation in lectures and other occasions, and completed assignments

Assessment Pass/fail

Information retrieval for business studies, 2 op KD07ATH001 (study unit)

Lecturers Jaana Latvanen, MSSc (Pol. Sc.)

Objectives

Upon completion of the course, students will be competent in analysing their information needs, be aware of the sources of information for business and entrepreneurship, and know how to select appropriate sources of information. Additionally, students will have command of the basic techniques of acquiring information.

Content

- Library and information services at Seinäjoki UAS
- Sources of information in the fields of business and entrepreneurship
- Use of databases
- Seeking information online
- Evaluation and application of information
- Citation

Studies during the first year of the course focus on the acquisition of basic and field–related information needed to study in business. The third–year studies support the thesis writing process and the information needed for it.

Literature / Study Material Material provided by the teacher

Learning Methods Lectures and exercises

Assessment Assessment is based on completed assignments. Pass/fail

Languages of Instruction Finnish

Further Information Research and development: 2 cr

Liiketoimintaosaamisen laajentaminen, 35 op KD07BLOL (study entity)

Extent: 35 credits The aim of the course is to expand and enhance students' expertise in business and the methods supporting that expertise. Students select one of the following courses:

- Comprehensive Marketing Communication
- Advanced Accounting

Students choose three (3) courses from the following:

- Payroll Administration
- Spreadsheet Computation
- Statistics Processing
- Labour legislation
- Introduction to Online Business

Leadership, 2 op KD22CHHA250 (study unit)

Objectives

Students will understand the significance of management work to the success and ability to function of the personnel. They will be familiar with the entire realm of management work and the implementation of business strategies. Students will have a clear picture of the duties and functions of a unit, team and manager.

Content

- Managing a business unit
- Motivating the personnel and sensitivity to its well-being
- Beginning and ending an employment relationship
- Self-management

Literature / Study Material

- Hyppöne, R. 2007. Esimiesosaaminen. Edita.
- Other material distributed by the teacher

Learning Methods

Lectures, groupwork, assignment based on an interview with a manager

Assessment Exam graded on a scale of 1–5.

Prerequisites Entrepreneurship

Project management, 2 op KD07BHHA242 (study unit)

Objectives

Students will understand the basic concepts associated with project work and the role of projects in the activities of an organisation. They will be competent in planning projects and know the various tasks involved in the phases of a project.

Content

- Projects as a form of management
- Creating ideas for projects
- Organisation and initiation of a project
- Project plan, phases and parts
- Guiding a project
- Risk management in projects

Literature / Study Material

- Pelin R. 2008. Projektihallinnan käsikirja.
- Other material announced by the teacher

Learning Methods Lecture and project plan

Languages of Instruction Finnish

Quality Technology, 2 op KD07BHYR224 (study unit)

Objectives

Students will understand the basic concepts associated with the activities in an organisation and the significance of them to the organisation. They will be competent in applying essential quality control and environmental management methods and principles in the administration of an organisation. Students will also be competent in critically evaluating issues pertaining to quality and environmental management.

Content

• Concepts and elements of quality and environmental management

- Quality and the use of environmental systems
- Life span
- Sustainable development

Learning Methods Lectures and report

Languages of Instruction Finnish

Customer service as a competitive tool, 3 op KD07BMMA101 (study unit)

Lecturers

Kristiina Mutka-Vierula, MBA (Econ. & Bus. Adm.)

Objectives

Students will understand the significance of customer service as a competitive tool in the marketing of goods and services. They will be familiar with the distinctive characteristics of marketing and know how to market services by including the customer in the production, consumption and quality process of the service. Students will understand the significance of networks and the company's internal interaction in the development of business.

Content

- Characteristics of services
- Customers as part of the production and consumption process
- Development of the quality of service
- Situations of serving customers and the development of them
- Role of marketing services in maintaining customer relations
- Personal performance in customer service

Literature / Study Material

- Pesonen H–L., Lehtonen J & Toskala A. 2002. Asiakaspalvelu vuorovaikutuksena. Markkinointia, viestintää, psykologiaa.
- Other materials given by the lecturer

Learning Methods

Lectures, groupwork and exercises

Assessment

Written exam (40 %), group assignment and exercises (60 %). Both parts must be successfully completed to receive a grade. Active participation influences the overall grade.

Languages of Instruction Finnish

Competitive tools in marketing, 4 op KD07BMMA130 (study unit)

Lecturers

Sirkku Rantalainen, MBA (Econ. & Bus. Adm.)

Objectives

Students will have command of the systematic use of competitive tools in creating competitive advantage and know how to apply them to services. Upon completion of the course, students will be competent in planning a company's effective competitive tool combination for each phase in a product's life span.

Content

- Decisions pertaining to products and groups of products
- Product development
- Factors influencing pricing and various approaches to pricing
- Pricing strategies and methods, price elasticity and price maneuvering
- Planning marketing channels and decisions pertaining to management
- External and internal availability
- Lifespan strategies of a product
- Special features of services and their impact on the use on competitive tools

Literature / Study Material

- Kotler P., Armstrong G., Saunders J. & Wong, V. 2008. Principles of Marketing. (chapters 11-15 and 19).
- Ylikoski T. 2000. Unohtuiko asiakas? (Part III).

Learning Methods Lecture and groupwork

Assessment

A written exam (50 %) and group assignments (50 %). Both parts must be successfully completed to receive a grade. Attendance and active participation affect the overall grade for the course.

Languages of Instruction Finnish

Company law, 3 op KD07BLOI111 (study unit)

Lecturers

Marja Salonen, Master of Laws

Objectives

Having successfully completed this course, students will possess knowledge and understanding of the types of companies in Finland, in particular partnerships and limited companies. They shall also be familiar with legislation pertaining to the Trade Register and commercial names. Upon completion of the course, students will understand what a company with a commercial name is like as well as the significance of the Trade Register. They will also be aware of the liabilities pertaining to various types of companies and be familiar with the legislation pertaining to company representation.

Content

- Commercial names and the Trade Register
- Legislation pertaining to partnerships
- Limited Liability Companies Act

Literature / Study Material To be announced.

Learning Methods Lectures and case studies

Assessment Assessment is based on a written examination.

Prerequisites Introduction to Jurisprudence

Languages of Instruction Finnish

Basics of management accounting, 2 op KD07BLOL001 (study unit)

Lecturers Juhani Palomäki, MBA (Econ. & Bus. Adm.)

Objectives

Students will be familiar with the basics of accounting and its purposes and how they can utilise it in a company. They will understand the role of internal accounting in a comapny.

Content

- Contribution margin calculation
- Cost accounting
- Profitability calcualtions and ratios

Literature / Study Material

• Material provided by the teacher

• Neilimo & Uusi-Rauva: Johdon laskentatoimi (appl. parts)

Learning Methods Lectures and exercises

Assessment Written examination

Prerequisites Basics in Accounting

Languages of Instruction Finnish

Personal taxation, 3 op KD07BHOI200 (study unit)

Lecturers Marja Salonen, Master of Laws

Objectives

Students will be familiar with the essential features of the taxation of private persons. Upon completion of the course, students will understand the organisation of taxation, the regulations set forth in the act on income taxes, and know how to make an appeal to the tax office.

Content

- Regulations in the act on income taxes
- Capital transfer tax
- Inheritance tax
- Other relevant taxes in brief

Learning Methods Lectures and exercises

Assessment Assessment is based on a written examination.

Prerequisites Introduction to Jurisprudence

Languages of Instruction Finnish

Value added taxation, 2 op KD07BLOL002 (study unit)

Lecturers

Juhani Palomäki, MBA (Econ. & Bus. Adm.)

Objectives

Students will be familiar with the basic concepts and legislation associated with value added tax (VAT) and know how to apply that knowledge in the various areas of financial administration. They will be competent in identifying and describing the essential factors that influence VAT. They will understand the significance of being familiar with VAT practices and applying them to various business transactions, and they will know how to analyse those transactions from the point of view of the VAT and the profitability of a company's entire operations. Students will also understand the connection between accounting and VAT taxation, and how VAT is taken into consideration in accounting. Students will be aware of the official control of VAT and the significance of it. They will be competent in acquiring information concerning VAT from various sources, and be capable of identifying and solving problems associated with VAT.

Content Essential parts of VAT legislation

Literature / Study Material

- Tomperi: Kehittyvä kirjanpitotaito + harjoituskirja
- Value Added Tax Act and decree

Learning Methods Lectures and exercises

Assessment Assignments and a written examination

Prerequisites Basics of Accounting

Languages of Instruction Finnish

Management of marketing communication, 3 op KD07BMMA002 (study unit)

Lecturers

Sirkku Rantalainen, MBA (Econ. & Bus. Adm.)

Objectives

Students will be familiar with the basic theories and tasks of communication and be able to plan and implement advertising campaigns in a target–oriented and integrated way in different organizations. Having completed the course, students will

- know the impact and importance of marketing communication in business image and brand building,
- be able to compare the means and forms of marketing communication and draw up an efficient plan for marketing communication, and
- be able to plan and implement a marketing campaign.

Content

- Impact of marketing communication and various models
- Role of communication in image and brand building
- Means and planning process of marketing communication
- Planning advertising
- Media planning and integrated communication thinking
- Participation in a marketing communication project (see Alternative Studies in Marketing: Marketing Communication Project) 2 cr

Literature / Study Material

- Vuokko P. 2003. Markkinointiviestintä merkitys, vaikutus ja keinot
- Material provided by the lecturer

Learning Methods

Lectures, group assignments and a company project in small groups

Assessment

A written exam (50 %) and group assignments and company project (50 %). Active participation influences the overall garde for the course.

Languages of Instruction Finnish

Further Information

Students who have chosen Alternative Professional Studies in Marketing are also required to take the Marketing Projects course (2 cr). Research and development: 1 cr

Continuation course in bookkeeping, 3 op KD07BLLA140 (study unit)

Lecturers

Tuulia Potka-Soininen, MSc (Econ.& Bus. Adm.)

Objectives

Students will be familiar with specific issues pertaining to a company's accounting and the problems and issues associated with preparing financial statements.

Content

- Issues pertaining to accounting and allocation in particular
- Options a company 's owner has to withdraw funds from the company in different company forms
- Focal points in the accounting legislation

Literature / Study Material

- Tomperi: Kehittyvä kirjanpitotaito + harjoituskirja
- Accounting Act
- Accounting Ordinance

Learning Methods Lectures and exercises

Assessment Exercises in class and a written examination

Prerequisites Introduction to Accounting

Languages of Instruction Finnish

Payroll administration, 3 op KD07BHHA003 (study unit)

Lecturers

Juhani Palomäki, MSc (Econ. & Bus. Adm.)

Objectives

Upon completion of the course, students will possess knowledge and understanding of payroll systems, job evaluation as a way to determine how much is paid to an employee, and payroll computation systems. They will also have command of payroll administration in practice.

Content

- Payroll administration as part of personnel administration: work motivation, payroll systems, job evaluation and evaluation systems, organisation of payroll administration
- Payroll computation: payroll computation systems, phases and implementation of payroll calculation, elements of payroll (such as various bonuses, fringe benefits, compensation, the effect of absences, holiday pay), settlements and reports

Literature / Study Material To be announced.

Learning Methods Lectures, exercises, and computer practice

Assessment

- A written and computer-assisted examination
- Grading based on a scale of 1–5

Languages of Instruction Finnish

Spreadsheet computation, 3 op KD07BLMT120 (study unit)

Lecturers Tarja Heikkilä, MA

Objectives

Upon completion of the course, students will be competent in planning, implementing and utilising various calculation models and graphically presenting the results. Students will also be able to utilise the various functions and other special features in the Excel programme to solve problems.

Content

- Excel programme for invoicing, payroll, taxation, credits, budgets, investments, etc.
- Excel functions, Pivot charts, databases, etc.

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, Excel exercises, and independent practice

Assessment

Assessment is based on the computer-aided exercises and exam. Students must complete the required number of exercises and pass the exam to receive a grade for the course.

Prerequisites

- Introduction to Business Mathematics
- Introduction to Business Information Technology

Languages of Instruction Finnish

Further Information Research and development: 1.5 cr

Statistical processing, 3 op KD07BITI110 (study unit)

Lecturers

- Tarja Heikkilä, MA
- Hannu Tuuri, MSSc

Objectives

Students will know the various phases of quantitative research and know how to process data with the SPSS statistics programme. They will understand the important principles of making statistical conclusions. A small–scale study may be appropriate to carry out while attending this course, for ex. as a project.

Content

- Quantitative research process
- SPSS for Windows
- Data entry and processing
- Presenting results using descriptive statistics, tables and graphs
- Examples of interdependencies between variables (correlations, cross-tabulation, Chi Square Tests and tests for comparing mean values)
- Analysing results
- Reliability and validity

Literature / Study Material

- Heikkilä T. 2001. Tilastollinen tutkimus. Edita.
- Additional material

Learning Methods Lectures, computer exercises and assignments

Assessment Exercises and an exam

Prerequisites Introduction to Statistics

Further Information Research and development: 3 cr

Labour law, 3 op KD07BHOI210 (study unit)

Lecturers

Marja Salonen, Master of Laws

Objectives

Students will be familiar with how to make an employment contract, issues concerning an employee's protection against unlawful dismissal, coolective labour agreements, and the regulations pertaining to social security for employees. Upon completion of the course, students will be competent in filling out employment agreements and know their right and responsibilities as an employee. They will understand the collective labour agreement system and be familiar with the unemployment security issues and legislation pertaining to the social security of an employee.

Content

- Making an employment contract
- Rights and responsibilities of employees
- Lay-offs, giving/receiving notice and annulment of an employment relationship
- Collective labour agreements
- Occupational accidents
- Pensions
- Legislation pertaining to unemployment security

Literature / Study Material

Kairinen, Martti: Työoikeus perusteineen (latest edition)

Learning Methods Lectures and case studies

Assessment Assessment based on a written exam.

Prerequisites Introduction to Jurisprudence

Introduction to online business, 3 op KD07BLOL003 (study unit)

Lecturers Osmo Mäkiniemi, MA

Objectives

Students will gain an overall picture of electronic business and online trade. They will be aware of the significance of functional online services for businesses and other organisations. Students will be competent in planning and implementing a functional online service (website) by means of publishing software. They will understand the principles of mark–up languages and stylesheets and know how to publish a website on the Internet.

Content

- Concepts and basic issues in e-business and online trade
- Significance of online services for businesses and other organisations
- Implementation of online services
- Tools for designing and implementing online services
- Basics of online services implementation (HTML, CSS, online publishing software)
- Publication of a website

Literature / Study Material Material provided by the teacher

Learning Methods

- Lectures
- Guided exercises
- Assignment

Assessment

• Assignment

- Active participation and coursework
- Assessment on a scale of 1 to 5

Prerequisites Basics in Information Technology

Languages of Instruction Finnish

Alternative professional studies, 36 op KD07BVAO (study entity)

Students select three, 12–credit elective study modules (E1–E11). Courses can also be completed in applicable company projects in accordance with the student's personal curriculum.

Financial accounting, 12 op KD07CL01 (study entity)

Objectives: Students will become familiar with specific questions concerning accounting, such as the valuation of inventories, income recognition, planned depreciation and financial entries. Students will have command of entrepreneurial taxation pertaining to the various types of companies and their owners. There is also discussion of the determination of an enterprise's taxable income. With regard to result planning, the factors influencing the profit target and the methods the company has at its disposal are examined. Other topics include the auditing process, auditing legislation and practices.

Company taxation, 4 op KD07CLLA001 (study unit)

Lecturers

Erkki Kytönen, DSc (Econ.& Bus.Adm.)

Objectives

Students will understand the basis and practical implementation of company taxation.

Content

The course discusses legislation pertaining to company taxation.

Literature / Study Material

- Tomperi: Yritysverotus ja tilinpäätössuunnittelu
- Oonline material published by the tax administration at www.vero.fi
- Material provided by the lecturer.

Learning Methods Lectures and exercises

Assessment Assessment is based on a written examination and assignment.

Languages of Instruction Finnish

Preparing financial statements, 5 op KD07CLE1001 (study unit)

Lecturers

Tuulia Potka-Soininen, MSc (Econ.& Bus. Adm.)

Objectives

Students will be familiar with the problems concerning preparing the financial statements and the underlying issues associated with the preparation of financial statements. They will recognize the differences between the book result, the result used as a basis for taxation and the operational result of a company. The course involves theoretical studies, which will be linked to various exercises.

Content

The more important criteria involved in the planning of financial statements in different types of corporations.

Literature / Study Material

- Tomperi: Kehittyvä kirjanpitotaito + harjoituskirja
- Accounting Act
- Accounting Ordinance

Learning Methods Lectures

Assessment Exercises and a written examination

Prerequisites Introduction to Accounting

Languages of Instruction Finnish

Auditing of the accounts, 3 op KD07BLLA240 (study unit)

Lecturers

Tuulia Potka-Soininen, MSc (Econ. & Bus. Adm.)

Objectives

Students will understand the auditing process and the standards defined in the Auditing Act. They will be competent in forming a true and fair view of a company's financial situation.

Content

- Auditing in general
- Auditing administration
- Accounting records and financial statements
- Auditor's reports and legislation regulating auditing

Literature / Study Material

- Kokkonen: Tilintarkastuksen perusteet ja käytäntö
- KHT-yhdistys: Tilintarkastuskertomukset ja tilintarkastajan lausunnot

Learning Methods Lectures and exercises in class

Assessment Written examination

Languages of Instruction Finnish

Further Information Tuulia Potka–Soininen

Management accounting, 12 op KD07CL02 (study entity)

Objectives: Students will understand the utilization of management accounting in decision-making. The module focuses on the methods of management accounting that can be used for business planning and the evaluation of results. The techniques of cost accounting, such as incremental accounting and activity-based accounting, will be examined. Other topics include accounting techniques for planning and evaluation, such as budgeting and score cards. In addition, the module deals with business management systems that can be used as management tools.

Cost management and result measurement, 4 op KD07CLLA310 (study unit)

Lecturers Aapo Länsiluoto, DSc (Econ. & Bus.Adm.)

Objectives

Upon completion of the course, students will understand the ways of using information produced through management accounting for operative and strategic decision-making in business management.

Content

The course focuses on the central accounting techniques: activity-based cost accounting and Balanced Scorecard.

Literature / Study Material

- Järvenpää M., Partanen V. & Tuomela T.S. Moderni taloushallinto. Edita. (appl. parts)
- Neilimo K. & Uusi-Rauva E. Johdon laskentatoimi. Edita: Helsinki. (appl. parts)
- Lumijärvi O. P. Toimintolaskenta käytännössä. OR
- Horngren C., Foster G & Datar S. Cost Accounting. A Managerial Emphasis, Englewood Cliffs, Prentice Hall. (appl. parts)
- Länsiluoto. Kustannusjohtaminen & suoritemittaus
- Additional material provided by the lecturer

Learning Methods Lectures, exercises and case studies

Assessment The criteria are agreed upon at the beginning of the course.

Prerequisites Basics of Management Accounting

Languages of Instruction Finnish

Budgeting as a management tool, 5 op KD07BLLA190 (study unit)

Lecturers

- Aapo Länsiluoto, DSc (Econ. & Bus. Adm.)
- Tarja Heikkilä, MA

Objectives

Upon completion of the course, students will understand the significance of financial planning and monitoring in business management. Students will also see connections between phenomena in economic life and form applicable models of these phenomena.

Content

- Budget planning
- Monitoring and internal reporting
- Financial management in an enterprise
- Profit-centred management
- Functions representing demand, supply, expenses, profit and results

Literature / Study Material

- Neilimo K. & Uusi-Rauva E. Johdon laskentatoimi. Edita: Helsinki. (appl. parts). Chapters 11–13 in the 2001 edition.
- Järvenpää M., Partanen V. & Tuomela T.S. Moderni taloushallinto. Edita. (appl. parts). Chapters 8–10 in the 2001 edition.
- Länsiluoto A. Lecture hand–out.
- Other possible material distributed by the teacher

Learning Methods

Lectures, exercises (also on computer), and independent practice

Assessment

Assessment criteria will be discussed at the beginning of the course.

Prerequisites

• Introduction to Management Accounting

• Introduction to Financial Mathematics

Languages of Instruction Finnish

Business management solutions, 3 op KD07BLLA132 (study unit)

Lecturers

Juhani Palomäki, MSc (Econ. & Bus. Adm.)

Objectives

Upon completion of the course, students will have an overall picture of a company's business management system.

Content

The course focuses on the use of an integrated system and on the management of the order–delivery chain. The following system modules are covered: customer/supplier management, tender calculation, sales orders, invoicing/accounts receivable, purchase orders, accounts payable, and stock control.

Literature / Study Material

- Berglund, Järvenpää, Lehtinen ja Ylinen (2002). Toiminnan ohjausjärjestelmien hyväksikäytön nykytila Keski–Pohjanmaan, Seinäjoen ja Vaasan ammattikorkeakoulujen toimialueella
- Other material provided by the lecturer

Learning Methods Lectures and case studies

Assessment Assessment is based on an examination and the case studues.

Prerequisites

- Introduction to Internal Accounting
- Computer-aided Accounting
- Value-added Taxation

Languages of Instruction Finnish

Financial statements and financial analysis, 12 op KD07CL03 (study entity)

Objectives: Students will deepen their knowledge and improve their skills in using accounting information and methods to plan, implement and analyze financing. Students will understand and examine the monetary processes of an enterprise in a modern business environment. They will be competent in handling demanding tasks in financial planning, implementation and monitoring, as well as in working in the financial market. The focus of the module is on the analysis of financial statements, short– and long–term financial planning, how financial markets function, sources of funding and international financing.

Financial statement analysis, 4 op KD07CLLA270 (study unit)

Lecturers Erkki Kytönen, DSc (Econ.& Bus.Adm.)

Objectives

Upon completion of the course, students will be competent in carrying out a financial analysis of an enterprise's operational preconditions and utilize the information obtained in the analysis.

Content

The course focuses on the purpose and principles involved in analyzing financial statements, editing basic data, traditional ratio analysis, cash-flow calculations and market-based ratios using case studies.

Literature / Study Material

- Kallunki-Kytönen 2007
- Uusi tilinpäätösanalyysi

- Bergevin: Financial Statement Analysis: An Integrated Approach
- Yritystutkimusneuvottelukunta: Yritystutkimuksen tilinpäätösanalyysi
- Kytönen: Lecture hand-out

Learning Methods Lectures and exercises

Assessment Assessment is based on an examination and an assignment.

Languages of Instruction Finnish

Investment and financial planning, 3 op KD07CLLA290 (study unit)

Lecturers Juhani Palomäki, MSc (Econ.& Bus. Adm.)

Objectives

Students will have command of investment and financial planning, as well as management in an enterprise.

Content

The course comprises the following topics:

- Investment planning
- Investment process
- Strategic evaluation of investments
- Capital structure and costs
- Factors contributing to uncertainty in investment planning
- Company valuation

Literature / Study Material

- Niskanen Niskanen: Yritysrahoitus
- Brealey -Myers -Marcus: Fundamentals of corporate finance, international edition
- Other material provided by the lecturer

Learning Methods Lectures, case studies, calculations

Assessment Examination

Languages of Instruction Finnish

Liquidity management, 3 op KD07CLLA300 (study unit)

Lecturers Erkki Kytönen, DSc (Econ. & Bus. Adm.)

Objectives

Students will be familiar with the practical problems in decision-making associated with liquidity management in a company.

Content

Liquidity management involves the management of a company's short-term assets and debts, as well as risk management of the central elements. Topics include financial management, credit management and short-term debt management.

Literature / Study Material

- Maness-Zietlow: Short-term Financial Management (2004)
- Kytönen: Lecture hand-out

Learning Methods Lectures and exercises Assessment A written examination and assignment.

Languages of Instruction Finnish

Financial law, 2 op KD07BLOI242 (study unit)

Lecturers

Marja Salonen, DSc (Pol. Sc.)

Objectives

Students will understand the legal issues associated with financing. They will be familiar with the various tools used in financing, as well as property and life insurance. Students will also obtain an overall picture of the legal issues involved in stocks.

Content

- Tools for financing
- Property and life insurance and debt
- Legislation pertaining to credit information
- Legal issues involved in stocks

Literature / Study Material Material distributed by the teacher

Learning Methods Lectures and case studies

Assessment Written exam

Prerequisites Introduction to Law

Utilisation of market information, 12 op KD07CM05 (study entity)

Objectives: Upon completion of the module, students will be competent in planning and implementing marketing research. Additionally, students will understand the needs of various consumers as well as their purchasing and consumption behaviour. They will also be competent in managing customer relationships in various various of the lifespan. Students will be capable of utilising customer and consumer information the decision–making pertaining to marketing.

Marketing research, 6 op KD07BMMA135 (study unit)

Lecturers

- Sirkku Rantalainen, MBA (Econ. & Bus Adm.)
- Tarja Heikkilä MA

Objectives

Students will be capable of planning and carrying out market analyses and effectively using them in a company's marketing decision-making.

Content

- Decision-making perspective on marketing research,
- Ethical issues
- Marketing research design process: research purpose and objective, research approach, research tactics, data collection, analysis, and reporting
- Implementation of small-scale marketing research for a company

Literature / Study Material

• Aaker D., Kumar V. & Day G. 2006. Marketing Research (appl. parts).

- Mäntyneva M., Heinonen J., & Wrange K. 2008 Markkinointitutkimus.
- Other material distributed by the teacher

Learning Methods

Lectures, small-group work and a small-scale research project

Assessment

A written exam (50 %), small–group work and project (50 %). All parts must be successfully completed to receive a grade. Active participation affects the grade for he course.

Prerequisites

In addition to this course, students must complete Processing Statistical Material (3 cr).

Languages of Instruction Finnish

Further Information Research and development: 6 cr

Consumer behaviour, 3 op KD07BMMA170 (study unit)

Lecturers

Terhi Kortesmäki LSc (Econ. & Bus.Adm.)

Objectives

Students will understand the significance of consumption in today's society. The will be aware of the visible and non–visible factors infuencing consumer behaviour. Students will also understand the needs of various consumers, as well as their purchasing and consumption bevaiour. They will be competent in applying this knowledge in marketing decision–making.

Content

- Finnish consumption society
- Consumer behaviour as an individual and as a member of a group
- Gathering consumer information: needs, motives, values, attitudes and involvement
- Purchasing and decision-making process of consumers
- Various types of consumers, cultures, subcultures, and lifestyles

Literature / Study Material

- Solomon M., Bamessy G. & Askegaard S. Consumer Behaviour European Perspective.
- Articles selected by the lecturer

Learning Methods

Lectures and assignments independently and in groups

Assessment

Written exam (50 %), small–group work (50 %). Students must pass both parts to receive a grade for the course. Active participation affects the overall grade for the course.

Languages of Instruction Finnish

Customer relationship management, 3 op KD07BMMA111 (study unit)

Lecturers

Kristiina Mutka-Vierula, MSc (Econ. & Bus. Adm.)

Objectives

Students will be aware of the special features of relations marketing especially in the context of marketing goods. They will understand the role of relations marketing in the various phases the a product's/service's lifespan and in the maintenance and development of customer relations. Students will also be competent in managing customer relations in the various phases of the lifespan.

Content

- Relations marketing
- Marketing of services/goods in the various phases of the lifespan of a service/goods
- Customer management in the lifespan of the customer relationship

Literature / Study Material

- Gummesson E. 2004. Suhdemarkkinointi 4 P:stä 30 R:ään
- Mäntyneva M. 2001. Asiakkuudenhallinta
- Other material provided by the lecturer

Learning Methods

Lectures and groupwork

Assessment

Assessment is based on an examination (40 %) and groupwork (60 %). Students must pass both parts to receive a grade for the course.

Languages of Instruction Finnish

Marketing planning and management, 12 op KD07CM02 (study entity)

Objectives: Upon completion of the module, students will be competent in systematically performing in competitive situations in the market. They will be capable of creating solutions on the strategic and operational levels in the mentioned competitive situations. They will know how to create a maketing plan for a company and utilising it to develop the company's marketing operations. Students will be competent in analysing, planning, creating, developing and manitaining brands and work innovatively in situations that build and develop brands. In addition, students will be capable of utilising economic information and abiding by legal norms when making decisions about marketing.

Marketing plan as a management tool, 3 op KD07CMMA002 (study unit)

Lecturers

Terhi Kortesmäki, LSc (Econ. & Bus. Adm.)

Objectives

Students will be competent in analysing companies and their operational environments. They will understand the impact of marketing procedures on competition and be capable of creating a marketing plan and utilising it to develop a company's marketing operations.

Content

- Analyses
- Determining competitive advantage and competitive position
- Marketing strategies
- Marketing plans

Literature / Study Material

- Lahtinen J. & Isoviita A. 1998. Markkinoinnin suunnittelu.
- Hooley G., Piercy N., Nicoulaud B. 2007. Marketing Strategy and Competitive Positioning.
- Kotler P. & Keller K. 2006. Marketing Management
- Trout J. & Hafren G. 2003. Erilaistu tai kuole. Selviytyminen tappavan kilpailun aikakautena.

Learning Methods

Lectures, groupwork (project)

Assessment

Assessment is based on a written report about the project and the oral presentation of it. Participation in the presentations of other groups influenes the overall grade for the course.

Prerequisites Introduction to Marketing

Languages of Instruction Finnish *Further Information* The course includes 3 R&D credits.

Brand management, 3 op KD07BMMA161 (study unit)

Lecturers

Terhi Kortesmäki LSc (Econ. & Bus.Adm.)

Objectives

Students will understand the meaning of brand management when determining and attaining a market position. They will be competent in analysing, planning, creating, and maintaining brands. They will also be competent in using methods for constructing and developing brands, and they will do so innovatively and creatively.

Content

- Defining a brand
- Personality of brands
- Core promise and values
- Meaning of brands to consumers and companies
- Constructing a brand and the obstacles associated with them
- Managing the lifespan of a brand
- Measuring the performance of a brand

Literature / Study Material

- Aaker D. 2002. Building Strong Brands
- Laakso H. 2003. Brandit kilpailuetuna. Miten rakennan ja kehitän tuotemerkkiä
- Malmelin M. & Hakala J. 2007. Radikaali brändi
- Other material announced by the lecturer

Learning Methods Lectures, journal and small–group work

Assessment

Journal (50 %), small–group work (50 %). Students must pass both parts to receive a grade for the course. Active participation affects the overall grade for the course.

Prerequisites Introduction to Marketing

Languages of Instruction Finnish

Marketing in an international environment, 2 op KD07BMMA112 (study unit)

Lecturers

Kristiina Mutka-Vierula, MSc (Econ. & Bus. Adm.)

Objectives

Students will be competent in analysing the special features of markets and cultures. They will understand the special requirements of marketing when making decisions in an international environment.

Content

- Cultural environment of international business
- Marketing management in an international environment (competitive tools)
- Marketing strategies and business operations in an international business environment

Literature / Study Material

- Cateora P. R. & Graham J. L. International Marketing. (appl. parts).
- Other material announced by the lecturer

Learning Methods Lectures, groupwork, assignments

Assessment

Exam (60 %) and assignments (40 %). All parts must be completed to receive a grade for the course. Active participation affects the overall grade for the course.

Languages of Instruction Finnish

Financial management of marketing, 2 op KD07BMMA300 (study unit)

Lecturers

Aapo Länsiluoto, DSc (Econ.& Bus. Adm.)

Objectives

Students will be competent in applying financial information when making marketing decisions concerning products and prices.

Content

- Profit margin analysis
- Product-based cost accounting
- Pricing

Literature / Study Material

- Neilimo K. & Uusi-Rauva E. 2005. Johdon laskentatoimi
- Material provided by the lecturer

Learning Methods Lectures and exercises

Assessment To be discussed at the beginning of the course.

Marketing law, 2 op KD07DVOI43 (study unit)

Lecturers Marja Salonen, DSc (Pol. Sc.)

Objectives

Students will be familiar with central legislation concerning rights of sale and the significance of copyrights on the Internet in particular. Upon completion of the course, students will

- have command of the legislation associated with competition,
- be familiar with the laws pertaining to the security of products,
- be aware of issues of privacy in marketing,
- be familiar with the copyright law particularly in connection with the online environment, and
- understand the laws pertaining to what a brand should be like.

Content

- Legislation associated with restrictive trade practices
- Consumer protection
- Legislation pertaining to the safety of products
- Legislation pertaining to inappropriate procedure in business
- Copyrights on the Internet

Literature / Study Material To be announced at a later date.

Learning Methods Lectures and case studies

Assessment Assessment is based on a written examination.

Languages of Instruction Finnish

MA3: Vähittäiskauppa liiketoimintana, 12 op VÄHITTÄIS (study entity)

Upon completion of the module, students will have command of the business models and processes needed in commercial activities. They will understand the significance of comprehensive marketing as a support for competetiveness in retailing. Students will be capable of working in duties of planning, implementation and management in retailing.

Retail business and logistics, 5 op KD07BMMA222 (study unit)

Objectives

Students will understand the central requirements, business models and processes for the management of a commercial enterprise. They will also be aware of the value of customer–oriented production in a global business environment. Students will be competent in managing and developing a commercial enterprise.

Content

- Business chain models
- Franchising
- Online business
- Selling specialty goods
- Central features of managing a commercial enterprise (strategic and operative management, customre value, development of business concepts)

Literature / Study Material

- Hukka M. 2005. Ketjuuntumisesta kilpailuetu. Ketjuuntuminen suomalaisessa erikoiskaupassa
- Kautto M & Lindblom A. 2005. Ketju. Kaupan liiketoiminta
- Other material distributed by the teacher

Learning Methods

Lectures, journal and small-group work

Assessment

Journal (60 %) and groupwork (40 %). Both parts must be successfully completed to receive a grade for the course. Active participation affects the overall grade for the course.

Prerequisites

- Introduction to Marketing
- Competitive Tools in Marketing
- Customer Service as a Competitive Tool
- Comprehensive Marketing Communication

Retail business and logistics, 5 op KD07BMMA223 (study unit)

Objectives

Students will understand the significance of comprehensive marketing communication in the maintenance and development of the competitive edge of a retail company. Upon completion of the cuorse, students will possess the readiness needed in duties pertaining to planning and implementation in a retail company. They will be competent in planning marketing strategies and in choosing appropriate operative competitive tools. Students will also be competent in managing and developing a commercial enterprise.

Content

- Retail shop as a business environment
- Managing the product range
- Pricing
- Data-processing systems
- Long-standing customers
- Marketing communication
- Visual marketing
- Shop environment

- Customer service
- Strategies pertaining to location
- Logistics
- Purchasing

Literature / Study Material

- McGoldrick P. Retail Marketing.Markkanen S. 2008. Myymäläympäristö elämysten tuottajana
- Other material distributed by the teacher

Learning Methods

Lectures, journal, small-group work (groups have different topics)

Assessment

Journal (50 %) and groupwork (50 %) – Both parts must be successfully completed to receive a grade for the course. Active participation affects the overall grade for the course.

Prerequisites

- Introduction to Marketing
- Competitive Tools in Marketing
- Customer service as a Competitive Tool
- Comprehensive Marketing Communication

Personal selling, 2 op KD07DVMA05 (study unit)

Objectives

Students will understand the role of personal selling as a one means of markeiing communication. They will be familiar with the central concepts demands associated with selling. Students will also understand issues concerning development in selling management. Upon completion of the course, students will be competent in planning and implementing a productive selling event and possess readiness to work in jobs requiring selling.

Content

- Planning and implementing a selling event
- Management of the selling process
- Selling techniques
- Personal selling as a means of marketing communication
- Characteristics of a good salesperson
- Management of selling

Literature / Study Material

- Rubanovitsch M & Aalto E. 2007. Haasteena myynnin johtaminen.
- Laine P. 2008. Myynnin anatomia. Anna asiakkaan ostaa.
- Pekkarinen U., Pekkarinen E. & Vornanen J. 2006. Menestyvän myyjän käsikirja.

Learning Methods

Lectures practical exercises and written assignments

Assessment

The grade for the course comprises the practical exercises (50 %) and written assignments (50 %). Both parts must be completed successfully to receive a grade for the course. Active participation in the lessons influences the overall grade for the course.

Prerequisites

- Introduction to Marketing
- Competitive Tools of Marketing
- Customer Service as a Competitive Tool
- Comprehensive Marketing Communication

Further Information

The course may be replaced with the master salesclerk training (2 cr).

HR: Henkilöstöjohtaminen, 12 op KD07CHR001 (study entity)

Objectives: Students will be familiar with the area of personnel management and understand the significance of the management and development of personnel resources and of identifying personnel expertise to develop the business in a company. They will possess the knowledge and skills needed in duties requiring expertise in personnel management. Students will understand processes of change and the management of them in the development of business.

Management of human resources, 4 op KD07CHHA001 (study unit)

Lecturers Pirjo Ojanperä, M.S.(Econ.)

Objectives

Students shall gain knowledge of the various aspects of human resource management and they shall understand human resource guidance as part of business development.

Content

The course discusses strategic human resource management, the concept of HRM and its various aspects, practical duties pertaining to HRM and the development of HRM.

Literature / Study Material Maritta Österberg, Henkilöstöasiantuntijan käsikirja, Edita

Learning Methods Lectures, assignments, and exam

Assessment Depending on the implementation, scale 1–5

Prerequisites Leadership

Languages of Instruction Finnish

Knowledge management, 4 op KD07CHHA251 (study unit)

Objectives

Students will understand the significance of identifying, managing and developing expertise to the development of business in a company. They will be familiar with various ways to evaluate, identify and develop expertise in an organisation.

Content

Students will understand the significance of identifying, managing and developing expertise to the development of business in a company. They will be familiar with various ways to evaluate, identify and develop expertise in an organisation.

Literature / Study Material

- Honeycutt J. 2001. Tietämyksenhallinta. Edita. (appl. parts)
- Sydänmaanlakka. 2000. Älykäs organisaatio. Kauppakaari.
- Other material announced by the teacher

Learning Methods

Lectures, guest lecturers, groupwork

Assessment

The grade for the course comprises two parts: an exam (50 %) and groupwork (50 %). Both parts must be completed successfully to receive a grade for the course.

Prerequisites Human Resource Management

Languages of Instruction Finnish

Study Descriptions

Uranhallinta, 2 op KD07CHHA200 (study unit)

Objectives

Students will understand the area of career management as part of human resource management.

Content

- The meaning of work in the different phases of life
- Age management
- Career anchoring
- Phases of a professional career
- Changes in working life and employment contracts –typical employment relationships)
- Lay-offs, employment security and outplacement

Literature / Study Material To be announced.

Learning Methods Lectures, exercise, assignments and examination

Assessment Grades 1 to 5

Prerequisites Human Resource Management

Muutoksen johtaminen, 2 op KD07CHHA201 (study unit)

Lecturers Ulla Autio, LSc (Econ. & Bus. Adm.)

Objectives

Students will understand processes of change and how to manage them in the development of a company's operations. They will also understand the significance of communicating about change, and they will have the readiness needed to improve their skills in communicating about change.

Content Change:

- Concept and various types of change
- Bases of successful change, problems associated with the process of change
- Process of change and the management of it
- Resistance to change
- Significance and means of communicating change

Literature / Study Material

- Stenvall J. & Virtanen P. 2007. Muutosta johtamassa. Edita.
- Mattila P. 2007. Johdettu muutos: avaimet organisaation hallittuun uudistamiseen. Talentum.

Learning Methods Lectures, assignments, exercises and exam

Assessment Grades 1 to 5

Prerequisites Other courses in the Human Resource Management Module

Business agreements, 4 op KD07CHYR400 (study unit)

Lecturers Kirsti Sorama, DSc (Econ. & Bus. Adm.)

Objectives

Students will be familiar with the central issues involved in establishing a business, e.g. evaluating a new business idea and creating a business plan. Upon completion of the course, students will know why and when a business plan is planned, have command of the area of business planning, its elements and how they fit together. Students will be familiar with the difficult albeit necessary process involved in business planning that entrepreneurs encounter when establishing a new enterprise.

Content

The course offers students the opportunity to apply their business training and experience to an extremely practical project. Working in small groups, students will prepare a comprehensive strategy for establishing a new business. They will identify the target markets for a new product/service, plan the marketing, selling development and business processes, as well as create the necessary financial calculations.

Literature / Study Material

- McKinsey & Company. 2001. Ideasta kasvuyritykseksi. ISBN 951-0-25225-5
- Lawrence & Moyes. 2001. Writing a Successful Business Plan (hand-out)
- Sahlman W. A. 1997. How to Write a Great Business Plan. Harvard Business Review. July–August. *Examples of business plans
- Other material distributed during lectures

Learning Methods

Learning is based on the principles of explorative learning: contact lessons (group presentations, discussions, and lectures), independent groupwork.

Assessment

The grade for the course is based on mid-term assignments, a completed business plan and the presentation of it, and peer evaluation.

Prerequisites Introduction to Business

Languages of Instruction

Finnish

Networking and Joint Ventures, 4 op KD07CHYR401 (study unit)

Lecturers

Elina Varamäki, DSc (Eco. & Bus. Adm.)

Objectives

Students will become familiar with various models for networking and understand the significance of networking in creating and developing a business.

Content

- Concepts associated with networking
- Core expertise and networking
- Bilateral and multilateral models of networking
- Added value of networking in the phases of a company's life-cycle
- Initiating and developing co-operation
- Prerequisites for success, as well as problems
- Network management

Literature / Study Material

- Material distributed by the lecturer
- Vesalainen. 2002. Yhteistyön malleja. Käsikirja yhteistyön edistäjille (www.yrittajakoulu.com/yrittajyyden_oppia)
- Varamäki. 2002. Pk-yritysten monenkeskeinen yhteistyö. Akateeminen yrittäjäkoulu (www.yrittajakoulu.com/yrittajyyden_oppia)
- Niemelä. 2002. Menestyvä yritysverkosto Verkostonrakentajan ABC

Learning Methods

Lectures, discussions, independent groupwork

Assessment Assignment and the presentation of it

Prerequisites Introduction to Business

Languages of Instruction Finnish

Further Information Research and development: 4 cr

Family business and succession, 2 op KD07CHYR402 (study unit)

Lecturers

Taru Hautala, DSc (Econ. & Bus. Adm.)

Objectives

Students will become familiar with key issues concerning family businesses, such as combining family and business, management and decision–making in a small business, and in particular, the planning and initiation of change in generation.

Content

- Special features of a family business
- Board of Directors in a family business
- Management by both spouses
- Planning and initiating a business's change in generation from the point of view of ownership, responsibility of management, and the transfer of expertise

Literature / Study Material

- Material distributed by the lecturer
- Koiranen: Juuret ja siivet
- Koiranen: Perheyrittäjyys –huomioita suku– ja perheyrityksistä. Akateeminen yrittäjäkoulu: www.yrittajakoulu.com
- Hautala. (ed.). Vetäjä vaihtuu- opaskirja yrittäjäpolvenvaihdoksiin

Learning Methods

Lectures, guest lecturers, case studies

Assessment

The grade for the course comprises two parts: pair exam (70 %) and a case study (30 %). Both parts must be successfully completed to receive a grade for the course. An alternative way to complete the course is to draw up a plan for a change of generation for one's own family business.

Prerequisites Introduction to Business

Further Information

The course is especially suitable for students who have a background in family business and who intend to continue the family business, and for those who are interested in becoming the owner of a family business.

Business growth and development, 2 op KD07CHYR403 (study unit)

Lecturers Seppo Luoto, MSc (Econ. & Bus. Adm.)

Objectives

Students will be familiar with the existing challenges of increasing business from the point of view of an SME. Upon completion of the course, students will be competent in compiling a strategy to increase the business in an SME.

Content

- Further developing a company's existing business idea
- Sources of growth

- Internal and external strategies of growth
- Phases of growth
- Financing growth
- Managing growth and challenges of growth
- Role of consultation in the promotion of the growth of an SME

Literature / Study Material

- Material distributed by the lecturer
- Virtanen M. 2001. Liiketoiminnan suunnittelu ja kasvurahoitus (www.yrittajakoulu.com)
- Routamaa V. 2001. Yrityksen kasvu ja organisoituminen (www.yrittajakoulu.com)
- Laukkanen. (ed.). 2007. Kasvuyritys. Talentum.

Learning Methods Lectures and groupwork

Assessment The garde for the course is based on the groupwork.

Prerequisites Indtroduction to Business

Further Information Research and development: 2 cr

Electronic business, 12 op KD07CH03 (study entity)

Students will gain an overview of online business and understand its prerequisites, opportunities and problems in business. They will acquire knowledge of the production processes associated with online services and be familiar with different areas of content production, such as operational and graphic design as well as technical implementation. Students will also be able to take usability factors into consideration, and know how to plan, implement and develop the online services of a company or other organization.

Yrityksen verkkopalvelun toteuttaminen, 4 op KD07CH03001 (study unit)

Lecturers Osmo Mäkiniemi, MSc

Objectives

Students will have command of the design and implementation of a functional, interactive service website using a standard mark–up language and style sheets. They will also be competent in using a desktop publishing program in the implementation and publish the website on a server.

Content

- Company websites as part of online business
- Usability and access
- Designing process of an online service
- XHTML language
- CSS language
- Basics of XML
- RSS input as part of online services
- Using desktop publishing programmes to create online servies
- Publishing a website

Literature / Study Material Material provided by the teacher

Learning Methods

- Lectures
- Practice on the computer with the guidance of the teacher
- Assignment

Assessment

- Active participation and continuous assessment
- Assignment
- Assessment on a scale of 1–5

Prerequisites Introduction to Online Business

Languages of Instruction Finnish

Further Information Research and development: 2 cr

Tietokantojen käyttö verkkopalvelussa, 2 op KD07CH03002 (study unit)

Lecturers Osmo Mäkiniemi, MSc

Objectives

Students will be familiar with the various ways of using and of the technical implementations of databases in online services. They will be capable of creating a database and link it to an online service facility. They will be able to publish this type of service on the Internet.

Content

- Designing and creating a database
- Designing the user interface of a database for an Internet browser
- Testing a database and publishing it on a server

Literature / Study Material Material provided by the teacher

Learning Methods

- · Lectures and exercises on a computer
- Assignment

Assessment

- Active participation
- Assignment
- Assessment on a scale of 1–5

Prerequisites Introduction to Online Business

Languages of Instruction Finnish

Graphics of online services, 3 op KD07DVV013 (study unit)

Lecturers Riitta Ylihärsilä

Objectives

Students will be familiar with the more important forms of computer graphics and ways of using them in online services. They will be able to create and edit online graphics applications using appropriate devices and programs: scanners, digital cameras and image processing programs.

Content

- Introduction to computer graphics
- Use of a vector graphics program
- Use of a pixel graphics program
- Animated graohics (e.g. Flash animation in an online service)
- Publishing in pdf format

Literature / Study Material Lecturer's material

Learning Methods Guided exercises on a computer and independent assignments

Assessment

- Active participation
- Independent assignments
- Computer-based exam
- Grades: 1–5

Prerequisites Introduction to Information Technology

Languages of Instruction Finnish

Sähköinen kaupankäynti, 3 op KD07CH03003 (study unit)

Lecturers Osmo Mäkiniemi, MA

Objectives

Upon completion of the course, students will be familiar with the concepts and opportunities of electronic business. They will be able to assess the usability of existing electronic stores. Students will be competent in designing and implementing an electronic store containing the basic shopping functions as a part of the online services of a company.

Content

- Concepts of electronic business
- Specifications and usability of an electronic store
- Most common e-commerce software
- Planning, implementing and maintaining an electronic store

Literature / Study Material

- · Lecturer's material
- Online material

Learning Methods

- Lectures
- Practice on a computer with the guidance of the teacher
- Independent assignments

Assessment

- Active participation
- Assignment
- Assessment on a scale of 1–5

Prerequisites Introduction to Online Business

Languages of Instruction Finnish

Further Information Research and development: 1 cr

International business 1, 15 cr KD07CIB01 (study entity)

• Objectives: Students will understand the fundamentals of international business. This includes various modes of operation in international markets, the strategies of internationalization and the cultural environment of

international business. Upon completion of the studies in this module, students will be capable of evaluating, planning and executing decisions in the above-mentioned areas.

• Course units: International Business Operations (5 cr), Internationalization of an Enterprise (5 cr), Cross–Cultural Business (5 cr)

International business operations, 5 cr KD06BNMA630 (study unit)

Lecturers

Anu Kohtamäki, MSc (Econ. & Bus. Adm.)

Objectives

Students will be familiar with the various forms and modes of international business operations, their advantages and disadvantages particularly from the viewpoint of small and medium–sized companies.

Content

- Exporting, licensing, franchising
- Direct foreign investments
- Pros and cons of mentioned modes

Literature / Study Material To be announced at a later date.

Learning Methods Lectures and groupwork

Assessment To be announced at a later date.

Prerequisites Introduction to Business

Languages of Instruction English

Internationalisation of the firm, 5 cr KD06BNMA640 (study unit)

Lecturers Jukka–Pekka Luostarinen, MSc (Econ. & Bus. Adm.)

Objectives Students will understand the dynamics and strategies of internationalizing a company, particularly from the viewpoint of an SME.

Content The course involves discussion of the strategies for internationalising companies.

Literature / Study Material To be announced at a later date.

Learning Methods Lectures and groupwork

Assessment To be announced at a later date.

Prerequisites Introduction to Business

Cross-cultural business, 5 cr KD06BNMA650 (study unit)

Lecturers Cory Isaacs, MSc (Econ. & Bus. Adm.)

Objectives

Students will understand the dynamics of cross-cultural interaction in business contexts and acquire skills in confronting various cultures and culture shock in professional environments.

Content

- Business etiquette
- Export marketing
- Intercultural communication
- Negotiation in business
- National characteristics

Literature / Study Material

Gesteland Richard R. Cross-Cultural Business Behavior Copenhagen Business School Press. Online EBRARY book, 374 pages

Learning Methods Lectures and group work

Assessment Scale 1–5

Prerequisites Intercultural Communication 2 cr

Languages of Instruction English

International business 2, 9 cr KD07CIB02 (study entity)

Objectives: Students will learn how to manage strategic management issues in the areas of marketing, finance, production, administration and logistics in a simulated environment. In addition, students will deepen their knowledge of a chosen topic, e.g. based on a certain market area. Course units: Intopia (6 cr), and (3 cr) from the following courses: Business–to–Business Marketing (3 cr), Japanese Market Management (2 cr), Marketing Communication in a Multicultural Environment (3 cr), Seminar on Business in the Baltic Area (2 cr), Seminar on Business in Scandinavia (2 cr) + additional area–specific seminars

Intopia, 6 cr KD06CNMA731 (study unit)

Lecturers

- Ville–Pekka Mäkeläinen, LSc (Tech.)
- Sirkku Rantalainen, MSc (Econ. & Bus. Adm.)
- Tuulia Potka-Soininen MSc(Econ. & Bus. Adm.)

Objectives

Students will understand the practical, strategic management issues pertaining to a multinational company via a computerized business simulation program. Students will receive a comprehensive and integrated view of various management disciplines such as marketing, finance, production, administration and logistics.

Content

The course involves discussions of international business in the following areas:

- Marketing
- Finance
- Production
- Administration
- Logistics

Literature / Study Material

Literature and instructions for the Intopia business simulation

Learning Methods

Lectures and groupwork in the simulation environment

Assessment Tests, reports, Intopia simulation process and presentations

Prerequisites Introduction to Business

Languages of Instruction English

Business to business marketing, 3 cr KD06BNMA620 (study unit)

Lecturers

Ville–Pekka Mäkeläinen, LSc (Tech.)

Objectives

Students will be familiar with the dynamics of buyer–seller interactions and inter–company networks and their significance in business–to–business marketing.

Content

- Relations marketing and its role in B–to–B marketing
- Formation of competitive advantage in B-to-B markets
- Organizational purchasing behaviour
- Diffusion process of innovations
- Segmentation in B-to-B markets

Literature / Study Material Material distributed by the lecturer

Learning Methods Lectures and groupwork

Assessment To be announced at a later date.

Prerequisites Introduction to Business

Languages of Instruction English

Seminar on business in the Baltic area, 2 cr KD06CNMA681 (study unit)

Lecturers Ritva Leppänen MSc (Econ. & Bus. Adm.)

Objectives

Students will be familiar with the special dynamics in the "post-communist" business environment, particularly in Estonia. They will also learn about the economic and cultural environments in the Baltic area.

Content

The course comprises the following topics:

- Historical and cultural overview
- Current politics in Estonia
- Current economic trends and forecasts for the future
- Economic transformation in Estonia
- Challenges in management

Literature / Study Material

Material provided by the lecturer/distributed during the seminar

Learning Methods Seminar in Tallinn, lectures, company visits, assignments
Assessment Journal, active participation

Languages of Instruction English

Further Information ritva.leppanen@seamk.fi

Seminar on business in Scandinavia, 2 cr KD06CNMA690 (study unit)

Lecturers

- Sirkku Rantalainen, MSc (Econ. & Bus. Adm.)
- Päivi Seppälä, MSc (Econ. & Bus. Adm.)

Objectives

Students will become familiar with Scandinavia as a market area. They will understand the features of the economic, political and cultural environment, be aware of the channels of distribution, and utilise various marketing strategies. Focus will be on Finland and Sweden as market areas.

Content

The course involves a field trip to Sweden, visits to companies in various fields, case studies of companies, journal writing, and presentations.

Literature / Study Material Material distributed by the lecturers and online material

Learning Methods

Independent study, teamwork, lectures in companies, journals, case studies and presentations

Assessment

Active participation in the seminar, completing reports, presentations, as well as active, positive and constructive attitude toward the seminar, group work, and journal.

Languages of Instruction English

Further Information Students are liable to pay for some of the expenses arising during the course.

Studies supporting research work, 6 op KD07CTU (study entity)

Objectives: Students will develop their professional profile and prepare for the labour market. They will possess knowledge in the fundamentals of research work and be familiar with the most significant R&D methods related to their thesis. Students will also be able to describe their research process, justify the choices they have made and produce a research report. Courses common to all:

- Research Work and Academic Writing
- Thesis Seminar

One of the following alternatives must be chosen:

- Qualitative Research
- Quantititive Research
- Initiating Development Project

Research work and academic writing, 2 op KD07CPTU010 (study unit)

Lecturers

- Ulla Autio, LSc (Econ. & Bus. Adm.)
- Ilpo Kempas, PhD

Objectives

Students will possess knowledge of the fundamentals of research work and research processes. They will be capable of reporting the results of their research or development project.

Content

The course comprises three parts, all of which must be successfully completed to receive a grade for the course: 1. Research work

- Introduction to research and development work: research topic, research process, principal methods 2. Review of information acquisition = participation in information acquisition workshops (3 h) in which students seek thesis-related information with guidance by the teacher. 3. Academic writing
- Requirements of scientific writing, academic style, language form, process writing, use of sources, citation, structure of the thesis

Literature / Study Material

- Seinäjoki University of Applied Sciences: Instructions for Writing a Thesis.
- Knivilä, Lindblom–Ylänne and Mäntynen. 2007. Tiede ja teksti. WSOY Oppimateriaalit Oy.

Learning Methods

Lectures, exercises, workshops, and reports

Assessment

- Pass/fail
- Active participation
- Completed assignments
- Exam

Languages of Instruction Finnish

Further Information Research and development: 2 cr

Thesis seminar, 2 op KD07CPTU020 (study unit)

Lecturers

- Ulla Autio, LSc (Econ. & Bus. Adm.)
- Terhi Kortesmäki, LSc (Econ. & Bus. Adm.)
- Erkki Kytönen, DSc (Econ. & Bus. Adm.)

Objectives

Students will present their research topic and research results and assess the research process of other students.

Content

Seminar work: discussion of research topic and plan and presentation and processing of the research results in a group

Assessment Pass/fail

Languages of Instruction Finnish

Further Information Research and development: 2 cr

Quantitative research, 2 op KD07CPTU002 (study unit)

Lecturers Tarja Heikkilä, MA

Objectives

Students will know how to process research material using statistical applications, how to interpret and report their results. They will deepen their knowledge of essential statistical tests to assist them in selecting appropriate statistical

methods of analysis for prosessing their material and finding correlations and other interdependences between the variables.

Content

- SPSS software
- Statistical methods suitable for the research material of the students participating in the course (for instance, presentation of the results of question groups, variance analysis, T-test, nonparametric tests)
- Data- and phase-specific guidance for students in small groups or individually

Literature / Study Material

- Heikkilä T. 2008. Tilastollinen tutkimus.
- Additional material provided by the teacher

Learning Methods Computer–based lessons, assignments and exercises

Assessment Participation in lectures and an assignment: pass/Fail

Prerequisites Statistical Processing

Languages of Instruction Finnish

Further Information Research and development: 2 cr

Qualitative research, 2 op KD07BKTU110 (study unit)

Lecturers Ulla Autio, LSc (Econ. & Bus. Adm.)

Objectives

Students will be competent in compiling a qualitative research plan, gathering the required material and analyzing it using various techniques.

Content

Features and process in qualitative research

- What is qualitative research
- Differences between qualitative and quantitative research
- Types of qualitative research
- Methods for gathering data for a qualitative study (interviews)
- Analysing qualitative data
- Reporting a qualitative study
- Reliability of a qualitative study
- Examples of qualitative studies

Literature / Study Material Material announced by the teacher

Learning Methods Lectures, exercises and an assignment

Assessment

- Pass/fail
- Active participation
- Assignments

Languages of Instruction Finnish

Further Information Research and development: 2 cr

How to implement a development project, 2 op KD07BKTU113 (study unit)

Objectives

The aim of the course is to support the thesis process, which involves a development project. Upon completion of the course, students will understand the difference between research work and a development project. They will be familiar with the objectives and methods involved in development work.

Content

- Meaning and purpose of development work
- Methods for the implementation of a development project
- Reporting and evaluation of the project

Literature / Study Material Vilkka H. & Airaksinen T. 2004. Toiminnallinen opinnäytetyö. Tammi.

Learning Methods Lectures, exercises, plan for one's own development project

Assessment Pass/fail

Languages of Instruction Finnish

Language studies, 10 op KD07BKIELET (study entity)

Students may select language courses from the language programme at the Business School. The language programme includes information about the required extent of the language studies.

FREE-CHOICE STUDIES, 12 op VAPVAL (study entity)

Students may select courses from the the elective courses offered by the Business School or other faculties at the Seinäjoki University of Applied Sciences. Information concerning available courses at http://ops.seamk.fi

Thesis, 15 op KD07FYOT200 (study unit)

Objectives

The bachelor's thesis can be done individually or as a part of a larger research or development project. The aim of the thesis is to determine how well students apply the theoretical knowledge they have acquired during their studies. During the thesis process, students practice problem–solving skills, acquire knowledge of project work, utilize scientific thinking skills, carry out independent information retrieval, and report research results. Student must present the results of their research logically using correct language and professional terminology. The thesis process also allows students to be creative, to experiment and use innovative applications.

Content

Students are responsible for the choice of topic, which they often find during their practical training. Students discuss their choice of topic with their advisor for approval. Students must keep in touch with their advisor throughout the thesis process. Students present their research plan (and the completed work) at a seminar. The thesis is accompanied by a Maturity Test, in which students must demonstrate their command of the subject and their ability to use language clearly and consistently.

Literature / Study Material

Material associated with research and the students' own topic. The choice of material must be discussed with the supervisor.

Assessment

According to the criteria set for the assessment of theses at the Seinäjoki University of Applied Sciences

Further Information Research work and thesis process

Maturity examination KD07FY0T100 (study unit)

Lecturers Thesis advisor

Objectives

Students are required to sit a Maturity Test to receive their univerity of applied sciences degree. Students shall write about a topic related to the thesis, which indicates their knowledge of the topic and of Finnish or Swedish. If a student has received their education in a language other than Finnish or Swedish, the head of the degree program may allow the students to take the Maturity Test in another language.

Content

Students must demonstrate that they master the content of their thesis, and produce a clear and consistent written presentation.

Assessment

The content and use of language in the Maturity Test is evaluated on a pass/fail basis. The thesis advisor evaluates the Maturity Test.

Prerequisites

Students may register for the Maturity Test after they have have submitted their thesis for final assessment.

Further Information

More information concerning registration for the Maturity Test and writing instructions is available on the Business School's web-site.

Practical training, 30 op KD07HYTH120 (study unit)

Lecturers

Practical training supervisor and head of degree program

Objectives

Students will become familiar with the tasks, practices and culture(s) of their professional field in the working world, and learn to apply what they have learned to situations in practice. They will obtain an overall picture of the activities of the organization or business where they are placed. The practical training provides students with the opportunity to obtain ideas and/or topics for their final thesis.

Content

- Applying for a practical training placement
- Practical training
- Reporting (before, during, and after the training period)

Learning Methods Learning-by-doing and compiling reports

Assessment Pass/Fail

Language Programme at the Business School (In Finnish)

Language Programme at the Business School (In Finnish) (1.9.2008) LITAKI 2008

Code	Name	CR
DENGLANTI	ENGLISH	
KD07DWEN050	English, preparatory course	2
KD07AYEN020	Business English	4
KD19AYEN030	English 1	3
KD19AYEN031	English 2 (In English)	3
KD07CYEN162	Business Communication	4
KD07CYEN120	Marketing English	3
KD07CYEN130	Financial English	2
KD07CYEN140	Business Management English	2
KD07CWEN113	Spoken English (In English)	2
KD07CYEN330	Writing skills (In English)	2
KD07DWEN112	British Studies	3
KD07CYEN291	North American studies	3
KD07CYEN031	English for e-commerce (In English)	3
KD07BNA110	Communication on the Web (In English)	2
KD07CYEN190	Finnish–English business translation	2
DRUOTSI	SWEDISH	
KD07DWRU050	Swedish, preparatory course	2
KD07AYRU021	Business Swedish	4
KD07CYRU220	Att tala svenska	2
KD07CYRU100	Swedish business communication	3
KD07CYRU170	Swedish for marketing	3
KD07CYRU905	Swedish for accounting	2
KD07CYRU181	Swedish for administration	2
KD07CYRU301	Study trip to Sweden	2
KD07CYRU211	Swedish listening, speaking and writing skills	2
KD07CYRU140	Swedish–Finnish translation	2
KD07DVVK001	The Nordic Countries and the EU	3
KD07DVVK004	Välfärdsstaterna i Norden	3
KD07DVVK003	Scandinavian literature, arts and music	3
DSAKSA	GERMAN	
KD07AYSA022	Introduction to business German	2
KD07AYSA052	Business German	4
KD07AYSA030	German, Business communication 1	3
KD07CYSA150	German, Business communication 2	3
KD07CYSA122	Saksa, suullinen viestintä/Gesprächkurs	2
KD07AYSA020	German 1, elementary course	4
KD07AYSA101	German 2, continuation course	4

KD07DWSA030	German 3, oral communication	2
KD07DWSA001	Kultur– und Landeskunde Online	3
DRANSKA	FRENCH	
KD07DWRA010	Basics in French	4
KD07DWRA020	French 2, continuation course	3
KD07CYRA140	Thème – Finnish –French translation	2
DESPANJA	SPANISH	
KD07AYES010	Spanish 1	4
KD07CYES100	Spanish 2	4
KD07CYES110	Spanish 3	4
KD07CYES120	Spanish 4	3
DPORTUGALI	PORTUGUESE	
KD07AYPO010	Portuguese 1	4
KD07AYPO020	Portuguese 2	4
DVENÄJÄ	RUSSIAN	
KD07CYVE010	Russian 1, elementary course	4
KD07CYVE100	Russian 2, continuation course	4
DFINNISH	Finnish for foreigners	
KD19APSU20	Finnish, survival course	2
KD19APSU21	Finnish 2	2
KD19APSU22	Finnish 3	2
KD19APSU23	Finnish 4	2
KD19APSU24	Finnish, elementary course (In English)	4
KD19APSU25	Finnish, continuing course (In English)	4
DMUUTKIELET	OTHER LANGUAGES	

Study Descriptions

English, preparatory course, 2 op KD07DWEN050 (study unit)

Lecturers Marja Matikka, MA

Objectives Students review and strengthen their skills of English before starting their credit courses in Business English

Content Tasks in which the students practise and improve their knowledge of English structures and vocabulary.

Literature / Study Material To be announced by the lecturer

Learning Methods Spoken and written exercises, listening practise, contact tuition

Assessment Participation, a written exam

Languages of Instruction Finnish and English

Further Information

Compulsory for those students who have a vocational or business college diploma but no matriculation exam certificate or diploma from upper secondary school. These students will get the credits from the course. Also other students can participate in the course but will not accrue credits.

Business English, 4 op KD07AYEN020 (study unit)

Lecturers Marja Matikka, MA

Objectives

Students will understand the basic concepts of business English and learn basic business vocabulary. They will be competent in communicating on issues associated with their studies, their own work and company, and getting along in everyday situations.

Content

- Education
- · Working life, job seeking
- Business life
- Products and services in business
- Field of business

Literature / Study Material Niskanen, Vetter, Urbom. 2008. Business Express. WSOY.

Learning Methods Oral and written exercises, listening comprehension, group and pair work, lectures

Assessment Continuous assessment, participation, a written final exam

Languages of Instruction English and Finnish

Further Information This course is compulsory for all students in the Degree Programme in Business Management.

English 1, 3 op KD19AYEN030 (study unit)

Further Information See the course description for Business English (KD07AYEN030).

English 2, 3 cr KD19AYEN031 (study unit)

Lecturers Cory Isaacs, M.Sc. (Econ.& Bus.Adm.)

Objectives

The student learns to communicate in different business situations in both speech and writing and masters the concepts and vocabulary of foreign trade.

Content business contacts, trips and visits

- telephoning, emailing
- presentations
- meetings and negotiations
- intercultural differences
- documents in foreign trade
- inquiries, offers, orders and confirmations

Literature / Study Material To be announced later.

Learning Methods

- lectures
- oral exercises
- written assignments

Assessment

- participation in lectures
- oral and written exercises
- written examination

Languages of Instruction English

Business Communication, 4 op KD07CYEN162 (study unit)

Lecturers Marja Matikka, MA

Objectives

The student will achieve skills to manage in written and oral English language communication situations and can detect cultural differences between the Finnish and English usage.

Content

Business correspondence, communication on the phone, presentations, meetings and negotiations

Literature / Study Material Airas–Junkkari: New Business Friends 3, WSOY 2001 or later

Learning Methods Spoken and written exercises, listening and dictation practises, contact tuition

Assessment Active participation, written exam

Languages of Instruction English and Finnish

Marketing English, 3 op KD07CYEN120 (study unit)

Lecturers Marja Matikka, M.A.

Objectives

Students shall acquire new English vocabulary and understand the concepts of marketing in English. They shall also acquire skills for coping with marketing situations in English.

Content

The course comprises texts, exercises and recordings associated with marketing, international fairs and exhibitions, and product demonstrations.

Literature / Study Material Material to be announced by the lecturer.

Learning Methods Written and oral exercises, listening comprehension, lectures

Assessment Active participation and a written exam

Languages of Instruction English and Finnish

Financial English, 2 op KD07CYEN130 (study unit)

Lecturers Päivö Laine. PhD

Objectives

The student knows the basic concepts of accounting, banking and financing. He/she is able to communicate in subject–related situations orally and in writing and read texts on accounting topics.

Content

- accounting terminology: bookkeeping, financial statements, management accounting
- banking and financing terminology
- annual reports and financial reviews

Literature / Study Material Material provided by the teacher

Learning Methods

Contact tuition, oral and written exercises, a case study

Assessment

Continuous assessment, oral and written output, a written exam

Business Management English, 2 op KD07CYEN140 (study unit)

Objectives

Students know basic concepts related to business administration, public administration and international organisations. They understand texts and speech dealing with these topics and can discuss them.

Content

- vocabulary of business and public administration
- texts and articles of the field

Literature / Study Material Material announced by the teacher

Learning Methods Contact classes, oral and written exercises

Assessment

Continuous assessment, oral and written output, a written examination

Spoken English, 2 cr KD07CWEN113 (study unit)

Lecturers Cory Isaacs, B.Com

Objectives

The aim of the course is to get the student to speak English with confidence and train them in listening comprehension. After taking the course, the student

- is able to actively take part in conversations
- comprehend spoken English and the various pronunciations
- exchange thoughts and opinions with others using the English language

- business small talk
- giving advice and instructions
- presenting and discussing a topic
- article discussions

Literature / Study Material Teacher's own material; students' own material

Learning Methods Dialogues, discussions, listening exercises, role plays

Assessment Active participation in classroom work; spoken test

Further Information Opetuspiste: Liiketalouden yksikkö

Writing skills, 2 cr KD07CYEN330 (study unit)

Lecturers Cory Isaacs, B.Com

Objectives

The student learns to distinguish between formal and informal business communication. After taking the course, the student

- is able to identify differences between American and Finnish business messages
- is able to express himself/herself accurately in various styles of written communications
- becomes aware of the importance of writing tone

Content

- memos
- reports
- summaries
- business letters
- e-mails

Literature / Study Material Teacher's own material

Learning Methods Written exercises

Assessment Written test, portfolio

Languages of Instruction English

Further Information Classes on Thursdays starting at 2 pm in Business School

British Studies, 3 op KD07DWEN112 (study unit)

Lecturers Marja Matikka, MA

Objectives

The student is familiar with the background information that is needed in international contacts with Britain.

Content British society, culture and history, intercultural business communication

Literature / Study Material James O'Driscoll: Britain, Oxford University Press. Material to be announced by the teacher, partly on the Internet

Learning Methods Lectures, an individual study project to be shared, contact tuition Assessment Active participation, a written final exam.

Languages of Instruction English

Further Information

This course takes place on Thursday afternoons starting at 13.50 or 14.15 and is meant for students from other faculties as well as the Business School students

North American studies, 3 op KD07CYEN291 (study unit)

Lecturers Cory Isaacs, M.Sc

Objectives

After the course, students have advanced knowledge of Canadian and American economy, the Canadian and American states, current political issues, NAFTA, and North America's place in world affairs. Furthermore, students are acquainted with the culture and identity of North America. (Symbols, myths, cultural expressions, sport, music, film, art and literature).

Content

This course provides students with an introduction to North America. Focus will be on: Contemporary North America Historical North America North American politics North American economy North American culture The role of French Canada North America and the future Finnish immigration to North America

Literature / Study Material Teacher's own material plus material to be announced by the teacher

Learning Methods Lectures, an individual study project to be shared, contact tuition research paper

Assessment Active participation, a written final exam, presentation and research paper

Languages of Instruction English

Further Information The course is held at Seinäjoki Business School.

English for e-commerce, 3 cr KD07CYEN031 (study unit)

Lecturers Päivö Laine, PhD

Objectives

Having completed the course, the learner is familiar with the language of electronic commerce and the various ways in which language is used for communication and interaction in online shopping and sales. The learner is expected to perceive differences between his/her native language and the target language in e-commerce related communication.

Content

- Various formats available for communicating on websites
- Linguistic composition of an e-commerce webpage
- Differences between web–writing and print
- · Grammatically correct language and appropriate terminology for online shopping
- Informative and persuasive use of language
- Structural, conceptual and cultural differences between the mother tongue and the target language in the context of e-commerce
- Translating and localizing e-commerce websites

Further Information

The course is completed in the internet-based learning environment Moodle.

Communication on the Web, 2 cr KD07BNA110 (study unit)

Lecturers Päivö Laine, PhD

Swedish, preparatory course, 2 op KD07DWRU050 (study unit)

Objectives

Students shall improve their communication skills in Swedish, both verbally and literally. They shall expand their vocabulary will expand and master the basic structures of Swedish. They shall be competent in writing a text that varies in construction. They shall also acquire a positive attitude towards developing their language skills.

Content

The course comprises the following topics:

- Basic language structures
- Texts
- Listening and oral exercises
- Essays

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

Lectures, oral and written assignments, exercises in language laboratory, computer-assisted exercises

Assessment

Active participation in lessons and exercises, and a written examination

Languages of Instruction Finnish and Swedish

Further Information

Compulsory for the students who have a vocational or business college diploma but no matriculation exam certificate or diploma from upper secondary school. These students will receive the credits from the course. Other students can also participate in this course, but it will not accrue any credits.

Business Swedish, 4 op KD07AYRU021 (study unit)

Lecturers Päivi Seppälä, MBA

Objectives

Students will possess the oral and written Swedish language skills needed in everyday communication and in business situations. They will be competent in finding field–related information in Swedish and utilising it in their work, and they will be familiar with basic business terminology. Thet will possess a positive attitude toward the development of their language skills. Upon completion of the course, students will

- know how to tell about themselves and their work experience,
- know how to tell about the jobs available in their field and what they involve,
- know how to use basic business terminology,
- know how to handle business issues by phone and e-mail,
- know how to advise and give instructions in issues pertaining to work, and
- know how to describe enterprises and what they do.

- Telling about oneself and one's education, CV
- Work environments and duties
- Small talk
- Telephone and electronic communication
- Giving advice and instructions in work-related situations
- Company presentations

Literature / Study Material Sandberg, Tuunanen: Flexhandel, Svenska för högskolor, 2005 or later version.

Learning Methods

- Oral presentations in pairs or groups
- Written assignments
- Computer-aided exercises
- Some tasks are done in the practical training companies

Assessment

- Active participation in lessons
- Oral and written exercises
- Written exam

Att tala svenska, 2 op KD07CYRU220 (study unit)

Lecturers

Jaana Store, MA

Objectives

The students are able to talk and discuss in Swedish about everyday issues related to life, work and their professional field.

Content

- Oral exercises based on given topics
- Conversation exercises related to everyday issues, working life subjects and current topics on the student's professional field

Literature / Study Material

Material collected by the teacher and the students

Learning Methods Oral exercises, vocabulary related to a topic based on e.g. recordings, videos and articles

Assessment Continuous assessment, oral examination and/or interview

Prerequisites Business Swedish 1 (Affärssvenska 1)

Languages of Instruction Finnish and Swedish

Swedish business communication, 3 op KD07CYRU100 (study unit)

Lecturers Päivi Seppälä, MSc (Econ. & Bus.Adm.)

Objectives

Upon completion of the course, students will be able to communicate in Swedish both orally and in writing in key business communication situations related to starting a business relationship, inquiries, requests for quotation, offers, orders and complaints/claims.

Content

- Communication related to starting a business relationship
- Requests for quotation
- Offers
- Communication related to ordering
- Communication related to complaints

Literature / Study Material To be announced.

Learning Methods

Contact lessons, oral and written exercises: some assignments will be done online.

Assessment

Active participation in lessons and in oral and written exercises, an examination

Prerequisites Business Swedish (Affärssvenska)

Languages of Instruction Finnish and Swedish

Swedish for marketing, 3 op KD07CYRU170 (study unit)

Lecturers

Päivi Seppälä, M.S.(Econ. & Bus.Adm.)

Objectives

Students shall master the basic concepts of marketing, selling and advertising. They shall be able to communicate interactively and cope both orally and in writing with various duties in their professional field.

Content The course involves

- texts related to marketing and selling,
- the basic concepts of marketing and selling,
- exhibitions and product demonstrations,
- sales conversations, and
- advertising.

Literature / Study Material To be announced by the lecturer.

Learning Methods Lectures, oral and written exercises, listening comprehension, computer–assisted exercises, working in pairs and groups

Assessment Active participation in lectures, oral and written exercises, group presentation, and written examination

Prerequisites Business Swedish (Affärssvenska)

Languages of Instruction Finnish, Swedish

Swedish for accounting, 2 op KD07CYRU905 (study unit)

Lecturers Jaana Store, MA

Objectives

Students learn the basic concepts of accounting, banking and financing in Swedish. They understand texts and spoken language in their professional field and are able to communicate both orally and in writing about issues connected with their field.

Content

- basic concepts of accounting, banking and financing
- texts related to business economics and to banking and financing
- annual reports of enterprises
- services of banks and financing institutes

Literature / Study Material Material announced by the teacher *Learning Methods* Contact lessons, oral and written exercises

Assessment

Active participation in tuition and exercises, written and oral outputs, a written examination

Prerequisites Business Swedish 1 (Affärssvenska 1)

Languages of Instruction Finnish, Swedish

Swedish for administration, 2 op KD07CYRU181 (study unit)

Lecturers Jaana Store, MA

Objectives

Students become familiar with the basic concepts related to corporative and public administration and to social activities and organisations. They get practice in understanding texts and spoken language of the field and master different service and communication situations both orally and in writing.

Content

- basic concepts and functions of corporative and public administration
- texts related to corporative and public administration
- activities of organisations
- job application situations
- meetings

Literature / Study Material Material announced by the teacher

Learning Methods Contact lessons, oral and written exercises

Assessment Participation in tuition and exercises, written and oral outputs, a written examination

Prerequisites Business Swedish 1 (Affärssvenska 1)

Languages of Instruction Finnish, Swedish

Study trip to Sweden, 2 op KD07CYRU301 (study unit)

Objectives

Students get to know Swedish business life and culture. They are able to arrange company visits and meetings and to report about them. They can independently seek for related information and use it.

Content

Study visit; company visits in Sweden and getting to know Swedish culture.

- meetings for planning the study trip
- contacting the companies and organising company visits
- other trip arrangements such as visiting the travel agency
- case-exercises during the trip
- reporting after the journey

Literature / Study Material Homepages of the target companies

Learning Methods

Journey and company visit arrangements in practice, company visits, getting to know the culture, oral and written exercises

Assessment Active participation in the trip arrangements and during the company visits, oral and written reports

Prerequisites Affärssvenska – Business Swedish

Languages of Instruction Swedish, Finnish

Swedish listening, speaking and writing skills, 2 op KD07CYRU211 (study unit)

Lecturers Päivi Seppälä, M.Sc.(Econ.& Bus.Adm.)

Objectives Students understand normal–speed spoken language, are able to take notes from what they hear and discuss the topics.

Literature / Study Material Material handed out by the teacher

Learning Methods Listening exercises, oral and written assignments

Assessment Listening exercises, various oral and written assignments, a listening comprehension test

Prerequisites Affärssvenska 1 –Business Swedish 1

Languages of Instruction Finnish, Swedish

Swedish–Finnish translation, 2 op KD07CYRU140 (study unit)

Lecturers Päivi Seppälä, M.Sc.(Econ.& Bus.Adm.)

Objectives

Students are able to translate texts related to the fields of business and administration from Swedish to Finnish and are able to take the structural differences between the languages into consideration.

Content

Swedish-Finnish translation and interpretation of texts on current topics dealing with social life and business; special attention is paid to the structural differences of the languages

Learning Methods Lectures, translation exercises

Assessment Participation in tuition and exercises, a written examination using dictionaries

Prerequisites Affärssvenska –Business Swedish

Languages of Instruction Finnish, Swedish

The Nordic Countries and the EU, 3 op KD07DVVK001 (study unit)

Lecturers

Coordinator: Savonia University of Applied Sciences

Objectives

Students get to know the principles of operation and the importance of the EU for the Nordic countries from the economic perspective. They are able to search for information and to read texts on EU topics as well as to communicate

on these matters in Swedish.

Content

The functions and the structure of the EU, the causes and effects of joining the EU/staying out of the EU in the Nordic countries, the importance of the EU for economy and competitiveness, and the Nordic Dimension

Literature / Study Material Online material

Learning Methods

Online course: information retrieval, reading and writing exercises, discussions and commenting.

Assessment

Assignments and a written examination; the participation in the exam requires the submission of the network assignments in accordance with a given timetable

Prerequisites

Compulsory studies in Swedish required by the degree programme; e.g. Affärssvenska – Business Swedish

Languages of Instruction Swedish

Further Information

There are three institutions involved in the Swedish web education programme: Helia, Savonia and Seinäjoki University of Applied Sciences. Each institution has their own courses which enrol approximately 20 of their own students and about 4 to 6 students from the other participating institutions. More information from Päivi Seppälä. The course is provided by the Business School.

Välfärdsstaterna i Norden, 3 op KD07DVVK004 (study unit)

Lecturers

Päivi Seppälä, M.Sc.(Econ.& Bus.Adm.)

Objectives

Students familiarise themselves with the society of the Scandinavian countries, the focus is on Sweden. They will also gain a general knowledge on Nordic administration, social systems such as education, health care, employment and industries. They get to know the Scandinavian media and are able to search and read information on matters related to the above–mentioned subjects in online newspapers and also to discuss these topics.

Content

Scandinavian (focus being on Sweden) administrative systems, social systems such as education, health care and employment, industries, media and online newspapers.

Literature / Study Material Online material

Learning Methods

Online course: information retrieval, reading and writing exercises, discussions and commenting.

Assessment

Exercises and a written examination; the participation in the exam requires the submission of online assignments in accordance with a given timetable

Prerequisites

Compulosry Swedish studies required by the degree programme; e.g. Affärssvenska -Business Swedish

Languages of Instruction Swedish

Further Information

There are three institutions involved in the Swedish web education programme: Helia, Savonia and Seinäjoki University of Applied Sciences. Each institution has their own courses which enrol approximately 20 of their own students and about 4 to 6 students from the other participating institutions. More information from Päivi Seppälä. The course is provided by the Business School.

Scandinavian literature, arts and music, 3 op KD07DVVK003 (study unit)

Lecturers

Coordinator: Savonia University of Applied Sciences

Objectives

Students familiarise themselves with various aspects of the Icelandic, Norwegian, Swedish and Danish cultures. They will also gain a general knowledge on the literature, visual arts and music of these countries and are able to search information on related issues and discuss these.

Content

Icelandic, Norwegian, Swedish and Danish literature, visual arts and music

Literature / Study Material

Online material and other material announced by the teacher

Learning Methods

Online course: information retrieval, reading and writing exercises, discussions and commenting.

Assessment

Assignments and a written examination; the participation in the exam presupposes the submission of online assignments in accordance with a given timetable

Prerequisites

Compulsory studies in Swedish required by the degree programme; e.g. Affärssvenska 1-Business Swedish

Languages of Instruction Swedish

Further Information

There are three institutions involved in the Swedish web education programme: Helia, Savonia and Seinäjoki University of Applied Sciences. Each institution has their own courses which enrol approximately 20 of their own students and about 4 to 6 students from the other participating institutions. More information from Päivi Seppälä. The course is arranged by the Business School.

Introduction to business German, 2 op KD07AYSA022 (study unit)

Lecturers Tuula Stenbacka, MA

Objectives

Students will become familiar with vocabulary and topics pertaining to business German. They will also manage the essential structures of the language better. Upon completion of the course, students will have command of the terminology of business German be able to discuss isses related to their studies, working life and business.

Content

- Introducing oneself
- Presenting one's workplace and job duties
- Selling and buying situations
- Telling about one's hobbies and leisure time
- Small talk

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, written and oral exercises, written examination

Assessment

Active participation in lectures, written and oral exercises, written examination.

Prerequisites

Three-year course at the upper secondary school or corresponding studies.

Languages of Instruction German, Finnish

Business German, 4 op KD07AYSA052 (study unit)

Lecturers Tuula Stenbacka, MA

Objectives

Students become familiar with the language related to economic life and the knowledge of culture and manners in German–speaking countries. They learn to communicate both orally and in writing in various situations of working life and business. After completing this course, the students

- can tell about their work tasks, company and studies and manage the job seeking situation in target language
- can tell about their home country and their place of residence
- can manage in various situations related to business travelling

Content

- telling about one's education and working experience
- job application, drafting a CV, job interview
- the organisation and tasks of the work place
- Finnish and German education systems
- telephone conversations
- situations in restaurants and hotels
- travel arrangements
- exhibitions
- e-mail communicating
- differences in business life between Finland and Germany
- telling about Finland in German

Literature / Study Material

Rakkolainen, Tuomiala-Mäkelä, Bürkel: Deutsch im Berusfsleben (Edita)

Learning Methods

Contact tuition, written and oral exercises, written examination

Assessment

Active participation in contact tuition, written and oral exercises, a written examination

Prerequisites

Three-year course at upper secondary school or corresponding studies

Languages of Instruction German, Finnish

German, Business communication 1, 3 op KD07AYSA030 (study unit)

Lecturers Tuula Stenbacka, MA

Objectives

Students learn to draw up business letters and become familiar with the terminology needed in export activities. After completing this course the students can

- act in the most important situations in business communication
- draw up the most common business letters
- communicate on the telephone

- contacting a business partner or an organisation
- inquiries, offers, orders, confirmations of orders
- telephone and e-mail messages

Literature / Study Material Will be announced at the beginning of the course

Learning Methods Contact tuition, written and oral outputs, a written examination

Assessment

Active participation in contact tuition, business letters and translations, portfolio, oral exercises, a written examination

Prerequisites Three-year course at the upper secondary school or corresponding studies

Languages of Instruction German, Finnish

German, Business communication 2, 3 op KD07CYSA150 (study unit)

Lecturers Tuula Stenbacka, MA

Objectives

Expanding and deepening the 'Business communication 1' course, the emphasis is on oral communication. After completing this course the students

- can act in the essential situations related to business and company communication
- get confidence in using the language in negotiations and when dealing with problems.

Content

- written and oral complaints and adjustments
- company presentation
- selling and negotiation situations

Literature / Study Material Will be announced at the beginning of the course.

Learning Methods Contact tuition, written and oral exercises

Assessment Active participation in contact tuition, oral exercises, oral presentation, a take-home examination

Prerequisites

Three-year course at the upper secondary school or corresponding studies, Liikeviestintä 1 – German Business communication 1

German 1, elementary course, 4 op KD07AYSA020 (study unit)

Lecturers Tuula Stenbacka, MA

Objectives

Students learn the basics of the German language and get to know German-speaking countries and their culture and customs. After completing this course, students

- are able to communicate in everyday situations in German
- can tell about themselves, their education, job, family and their home.

- introduction and personal data
- education
- working hours and tasks
- company premises
- eating out
- family and housing

Literature / Study Material

- Kauppi-Simon: Fahrplan, texts and vocabularies
- Kauppi–Simon: Fahrplan, grammar and exercises

Learning Methods

Contact tuition, written and oral exercises

Assessment Active participation in tuition, written and oral exercises, two (2) written examinations

Languages of Instruction German, Finnish

Further Information The course is provided by the Business School.

German 2, continuation course, 4 op KD07AYSA101 (study unit)

Lecturers Tuula Stenbacka, MA

Objectives

Students learn more of the structures of the language and their vocabulary increases (continuation course to the German elementary course). After completing this course, students

- can make travel arrangements e.g. at the airport and at a hotel
- learn telephone terminology
- can tell about their home city and country and instruct a German-speaking person to the right address using the target language

Content

- introducing one's home town or area
- on the phone
- booking a hotel room
- a trip to Munich
- at the airport
- using public transportation

Literature / Study Material Kauppi–Simon: Fahrplan, tekstit ja sanastot Kauppi–Simon: Fahrplan, kielioppi ja harjoitukset (Tammi)

Learning Methods Contact tuition, written and oral exercises

Prerequisites Saksa 1, alkeiskurssi –German 1, elementary course or corresponding studies

Languages of Instruction German, Finnish

Further Information The course is provided by the Business School.

German 3, oral communication, 2 op KD07DWSA030 (study unit)

Lecturers Tuula Stenbacka, MA

Objectives

Students increase their vocabulary and activate their oral expression interactively. After completing this course, students are more confident in managing everyday situations using the German language.

- telling about one's education and workplace
- hobbies
- daily chores
- family, home place
- travelling
- visiting a German family
- running errands in stores and offices
- interactive communication

Literature / Study Material Will be announced at the beginning of the course

Learning Methods Participating in conversation practice and oral assignments

Assessment Active participation in exercises, acceptable performing of the assignments

Prerequisites Saksa 1 & 2 –German 1 & 2 or corresponding studies

Languages of Instruction German, Finnish

Further Information

- further information from the lecturer
- max 18 participants

Kultur– und Landeskunde Online, 3 op KD07DWSA001 (study unit)

Lecturers Heli Simon, MA

Objectives

Students are able to search for information on the Internet using the German language, process this information, prepare summaries, essays, and other written outputs, and make a presentation in German.

Content

Germany, Austria and Switzerland:

- general knowledge of the countries
- economic life
- political systems
- culture

Learning Methods Online course in the Moodle learning environment

Assessment Learning assignments, a final examination

Prerequisites Three–year course at the upper secondary school or corresponding studies

Languages of Instruction German

Further Information From the lecturer The course is provided by the Business School.

Basics in French, 4 op KD07DWRA010 (study unit)

Lecturers Ilpo Kempas, PhD

Objectives

Students learn the basics of the French language. They understand and can use the most essential vocabulary and structures of the language both in speech and in writing. After completing this course, the students

- can present their personal data
- can manage certain everyday communication situations using the target language
- can describe their environment and express their opinions
- can give advice and instructions related to everyday life

Content

- telling about oneself
- shopping situations, ordering food in a restaurant
- presenting your home place
- giving advice and instructions

Literature / Study Material

Material handed out by the teacher

Learning Methods

Contact tuition, written and oral assignments

Assessment

Active participation in class tuition, performing written and oral assignments, two (2) examinations both of which have to be passed

Languages of Instruction French, Finnish

Further Information

- the tuition takes place on Thursdays starting 14 o'clock
- the course takes place during periods 3 and 4

French 2, continuation course, 3 op KD07DWRA020 (study unit)

Lecturers Ilpo Kempas, PhD

Objectives

Students learn more about the basics of the French language. They increasingly understand and are able to use the most essential vocabulary and structures of the language both in speech and in writing. After completing this course, the students

- can tell about past events
- can tell about their hobbies
- can discuss things related to health
- can tell about their home country and place of residence in French

Content

- telling about one's hobbies
- various communication situations
- telling about journeys

Literature / Study Material Material handed out by the teacher

Learning Methods Contact tuition, written and oral assignments

Assessment

Active participation in class tuition, performing written and oral assignments, a written examination

Prerequisites Ranska 1, alkeiskurssi –French 1, elementary course Languages of Instruction French, Finnish

Thème – Finnish –French translation, 2 op KD07CYRA140 (study unit)

Lecturers Ilpo Kempas, PhD

Objectives

Students can express themselves fluently in French and increase their vocabulary. They also become aware of the essential differences between their mother language and French. After completing this course, the students

- are able to produce text that is as fluent and as grammatically correct as possible
- can effectively utilise the different instruments of written expression

Content Translation exercises

Literature / Study Material Material handed out by the teacher, some basic grammar book of French, dictionaries, Internet material

Learning Methods Contact tuition, written translation exercises

Assessment

Active participation in contact tuition, performing written assignments and exercises. The grade is based on three evaluated translations done in the latter part of the course and the student's learning diary.

Prerequisites Ranska, yleiskieli – French, general course

Languages of Instruction French, Finnish

Spanish 1, 4 op KD07AYES010 (study unit)

Lecturers Ilpo Kempas, PhD

Objectives

Students learn the basics of Spanish. They understand and know how to use the key vocabulary and structures in speech and writing. After completing this course, the students

- know how to tell about themselves
- cope with certain everyday communication situations in the target language
- are able to describe their environment and express their opinions
- are able to give advice and instructions in everyday situations
- are able to tell about their home town and country in the target language

Content

- telling about oneself
- shopping situations, ordering food in a restaurant, asking and telling the way
- introducing one's home town
- giving advice and instructions

Learning Methods

Class tuition, written and oral exercises

Assessment

Active participation in classroom work, performing written exercises and assignments, two (2) examinations both of which must be passed

Languages of Instruction Spanish, English

Spanish 2, 4 op KD07CYES100 (study unit)

Lecturers Ilpo Kempas, PhD

Objectives

Students learn more about the basics of the Spanish language. They increasingly understand and are able to use the key vocabulary and structures of the language both in speech and in writing. After completing this course, the students

- are able to talk about their interests and preferences
- cope with certain telephone communication situations in the target language
- are able to talk about past events
- are able to talk about the weather

Content

- shopping travel situations
- weather expressions
- talking about past events (studies, career etc.)

Literature / Study Material Kattán–Ibarra: Teach yourself Spanish

Learning Methods

Class tuition, written and oral exercises, practising oral communication with a native teacher

Assessment Active participation in classroom work, performing written exercises and assignments, a written and an oral examination

Prerequisites Espanja 1 – Spanish 1

Spanish 3, 4 op KD07CYES110 (study unit)

Lecturers

Ilpo Kempas, PhD and Julio Vallejo, Architect

Objectives

Students deepen their skills in managing the basic structures of Spanish. They increasingly understand and are able to use the most essential vocabulary and structures of the language both in speech and in writing. After completing this course, the students

- can present their personal data
- can manage certain everyday communication situations using the target language
- can describe their environment and express their opinions
- can give advice and instructions related to everyday life
- can tell about their home town and country using the target language

Content

- describing events
- telling about Finland
- telling about one's eating habits
- preparing a journey

Literature / Study Material Kautto, Laine & Lehmussaari: Entre Amigos

Learning Methods

Contact tuition, written and oral exercises, practising spoken communication with the guidance of a native teacher

Assessment

Active participation in the class tuition, performing written and oral exercises, a written and an oral examination

Prerequisites Espanja 2 –Spanish 2

Spanish 4, 3 op KD07CYES120 (study unit)

Lecturers Ilpo Kempas, PhD

Objectives

Students learn to understand authentic Spanish formal text, also related to the field of business. After completing this course, students

- are able to read formal text with the help of some resources (e.g. dictionaries)
- are familiar with the most essential vocabulary related to business life
- can draw up an official letter in Spanish

Content

- business language
- vocabulary related to the student's orientation
- drawing up a letter in Spanish

Literature / Study Material

Kautto, Laine ja Lehmussaari: Entre Amigos; material handed out by the teacher

Learning Methods Contact tuition, written and oral exercises

Assessment Active participation in class tuition, performing written and oral assignments, a written examination

Prerequisites Espanja 3 –Spanish 3

Languages of Instruction Spanish, Finnish

Portuguese 1, 4 op KD07AYPO010 (study unit)

Lecturers Ilpo Kempas, PhD

Objectives

Students learn the basics of Portuguese. They understand and can use the most essential vocabulary and structures of the language both in speech and in writing. After completing this course, the students

- can present their personal data
- can manage certain everyday communication situations using the target language
- can describe their environment and express their opinions
- can give advice and instructions related to everyday life
- can tell about their home town and country using the target language

Content

- telling about oneself
- shopping situations, ordering food in a restaurant, telling the way
- introducing one's home town
- giving advice and instructions

Learning Methods

Contact tuition, written and oral assignments

Assessment

Active participation in class tuition, performing written exercises and assignments, two (2) examinations of which both have to be passed.

Languages of Instruction Portuguese, Finnish *Further Information* In Business School

Portuguese 2, 4 op KD07AYPO020 (study unit)

Lecturers Ilpo Kempas, PhD

Objectives

The students learn more about the basics of Portuguese language. They increasingly understand and are able to use the most essential vocabulary and structures of the language both in speech and in writing. After completing this course, the students

- can tell about past events
- can tell about their hobbies
- can discuss things related to health and illnesses
- can tell about their home town and coungtry in the target language

Content

- telling about one's hobbies
- various communication situations
- telling about journeys

Literature / Study Material Melo e Abreu: Lusomania

Learning Methods Contact tuition, written and oral assignments

Assessment

Active participation in class tuition, performing written exercises and assignments, a written examination

Prerequisites Portuguese 1

Languages of Instruction Portuguese, Finnish

Further Information

- tuition takes place on Tuesdays starting at 2 pm.
- the course takes place during periods 3 and 4

Russian 1, elementary course, 4 op KD07CYVE010 (study unit)

Lecturers Tanja Kuivinen

Objectives

Creating a basic knowledge of the Russian language. After completing this course, the students can manage in everyday practical communication situations.

Content

- basic grammar
- telling about oneself
- language ability
- cafe and restaurant situations
- asking and telling the way
- making appointments
- knowledge of the Russian country and culture

Literature / Study Material

Nikiforow -Keränen -Alikov: Saljut 1. Venäjän alkeiskurssi (An elementary course in Russian)

Learning Methods

Contact tuition, written and oral assignments

Assessment

Active participation in class tuition, written exercises and assignments, two (2) examinations both of which must be passed.

Languages of Instruction Russian, Finnish

Russian 2, continuation course, 4 op KD07CYVE100 (study unit)

Lecturers

Tanja Kuivinen

Objectives

Developing a basic language proficiency. After completing this course, the students cope with various everyday practical communication situations and are able to carry out simple business life conversations.

Content

- increasing the basic grammar/vocabulary skills
- contact information, jobs and duties
- hobbies, habits
- age, family, education
- basics of telephone language
- basic shopping items
- acquiring tickets to the theatre etc.
- time, days, opening hours
- private visits

Literature / Study Material Nikiforow – Keränen– Alikov: Saljut 1. Venäjän alkeiskurssi (An elementary course in Russian) 1

Learning Methods Contact tuition, written and oral assignments

Assessment

Active participation in class tuition, performing written exercises and assignments, two (2) examinations both of which must be passed.

Prerequisites Russian, elementary course or corresponding skills

Languages of Instruction Russian, Finnish

Further Information In Business School

Finnish, survival course, 2 op KD19APSU20 (study unit)

Lecturers Sirkka Nieminen

Objectives

Students learn basic vocabulary, grammar and phrases of the Finnish language. After the course, they are able to tell and write about themselves using simple expressions and to communicate in simple everyday situations. Furthermore, students are acquainted with Finland as a country.

Content

This course provides students with an introduction to Finland and the Finnish language:

- greetings
- introducing oneself
- some expressions of time

- basic vocabulary (e.g. numbers)
- basic information about Finland (Level A1)

Literature / Study Material

White, Leila 2001. From Start to Finnish: A Short Course in Finnish. Helsinki: Finn Lectura. Facts about Finland 2002. Helsinki: Otava.dsdsds

Assessment

- active participation in contact lessons
- written exercises
- final exam

Finnish 2, 2 op KD19APSU21 (study unit)

Lecturers Sirkka Nieminen

Objectives

Students learn more basics of the Finnish language; they extend their knowledge of vocabulary and grammar. After the course, students also have a better understanding of the Finnish way of life.

Content

Students are able to tell and write about themselves, their family and hobbies using simple expressions and to communicate in simple everyday situations, e.g. shopping and eating in a restaurant. Students learn some facts about Finnish society. (Level A1)

Literature / Study Material

White, Leila 2001. From Start to Finnish: A Short Course in Finnish. Helsinki: Finn Lectura. Facts about Finland 2002. Helsinki: Otava.

Assessment

- active participation in contact lessons
- written exercises
- final exam

Finnish 3, 2 op KD19APSU22 (study unit)

Lecturers Sirkka Nieminen

Objectives

Students gain more confidence in using Finnish in simple everyday situations. They extend their knowledge of basic vocabulary, grammar and typical structures of the Finnish language and get acquainted with the Finnish way of life.

Content

Students are able to communicate in everyday situations, e.g.:

- asking the way
- telling about places
- explaining directions. (Level A1)

Literature / Study Material

White, Leila 2001. From Start to Finnish: A Short Course in Finnish. Helsinki: Finn Lectura.

Assessment

- active participation in contact lessons
- written exercises
- final exam

Finnish 4, 2 op KD19APSU23 (study unit)

Lecturers Sirkka Nieminen

Objectives

Students extend their knowledge of vocabulary, grammar and structures of the Finnish language and are able to use it. They are able to understand slow, clear speech in everyday situations and to understand the main contents of written text. They also get further acquainted with the Finnish way of life.

Content

Students are able to communicate in everyday situations about the topics of the course. (Level A1)

Literature / Study Material

White, Leila 2001. From Start to Finnish: A Short Course in Finnish. Helsinki: Finn Lectura.

Assessment

- participation in contact lessons
- written exercises
- final exam

Finnish, elementary course, 4 cr KD19APSU24 (study unit)

Lecturers Sirkka Nieminen, MA

Objectives

Students learn basic vocabulary, grammar and phrases of the Finnish language. After the course, they are able to tell and write about themselves using simple expressions and to communicate in simple everyday situations. Furthermore, students are acquainted with Finland as a country and also have a better understanding of the Finnish way of life.

Content

This course provides students with an introduction to Finland and the Finnish language:

- greetings
- introducing and telling about oneself, family and hobbies
- some expressions of time
- basic vocabulary (e.g. numbers)
- basic information about Finland
- simple everyday situations, e.g. shopping and eating in a restaurant (Level A1)
- basic information about Finland.

Literature / Study Material

White, Leila 2001. From Start to Finnish: A Short Course in Finnish. Helsinki: Finn Lectura. Facts about Finland 2002. Helsinki: Otava.

Assessment

- active participation in contact lessons
- written exercises
- final exam

Languages of Instruction English and Finnish

Finnish, continuing course, 4 cr KD19APSU25 (study unit)

Lecturers Sirkka Nieminen, MA

Objectives

Students gain more confidence in using Finnish in simple everyday situations. They extend their knowledge of basic vocabulary, grammar and typical structures of the Finnish language. They are able to understand slow, clear speech in everyday situations and to understand the main contents of written text. They also get further acquainted with the Finnish way of life.

Content

Students are able to communicate in everyday situations, e.g.:

- asking the way
- telling about places
 explaining directions. Students are able to communicate in everyday situations about the topics of the course. (Level AI)

Literature / Study Material White, Leila 2001. From Start to Finnish: A Short Course in Finnish. Helsinki: Finn Lectura.

Assessment

- active participation in contact lessons
- written exercises
- final exam

Languages of Instruction English and Finnish

Degree Programme in Conservation (In Finnish)

Degree Programme in Conservation (In Finnish), 240 cr (1.9.2008) KONS 2008

Code	ne	Study Year			ar	CR
		1.	2.	3.	4.	
KH12AK10	BASIC STUDIES					30
KH12AK10041	Information technology	х				4
KH12AK10042	ArchiCAD	x				2
KH12AK10070	English 1	x				3
KH12AK10080	English 2		х			3
KH12AK10100	Swedish		x			3
KH12AK10051	Communication skills			x		2
KH12AK10050	Informatics	x				2
KH12AK10052	Seminar work		х			2
KH12AY1003	Entrepreneurship			x		3
KH12AY1002	Marketing			x		3
KH12AY1001	Cost planning			x		3
KH12AOP	PROFESSIONAL STUDIES					153
KH12BK01	Technical and Scientific Subjects Module					33
KH12AK10081	Physics	х				3
KH12BK60011	Chemistry 1	x				3
KH12BK60021	Chemistry 2		x			2
KH12BK60031	Chemistry 3			x		3
KH12BK40011	Basics of construction technology 1	х				3
KH12BK40021	Basics of construction technology 2		x			3
KH12BK40031	Construction physics		x			3
KH12BK40061	Concrete and metal structures			x		3
KH12BK60051	Research methods 1	x				2
KH12BK60061	Research methods 2			x		3
KH12BK60071	Microbiology		х			3
KH12BK60081	Klimatologia			x		2
KH12BK02	Conservation of Timber Structures Module					
KH12BK60012	Materials: Timber	х				5
KH12BK40041	Timber structures 1	х				5
KH12BK40050	Timber structures 2		х			4
KH12BK50040	Conservation of timber structures 1	х				11
KH12BK50050	Conservation of timber structures 2		x			8
KH12BK50062	Conservation of timber structures 3			x		8
KH12BK03	Conservation of masonry structures Module					19
KH12BK40080	Masonry structures 1		x			3
KH12BK40051	Masonry structures 2			x		3

KH12BK60032	Materials of masonry constructions		x		3
KH12BK50081	Conservation of masonry structures 1		x		3
KH12BK50082	Conservation of stone			x	3
KH12BK50091	Conservation of masonry structures 2			х	4
KH12BK04	Conservation of Materials Complementing Finished Frame Module				30
KH12BK60024	Surfice materials and techniques 1	х			7
KH12BK60023	Surface Treatment Materials and Techniques 2		x		5
KH12BK50061	Conservation of treated surfaces 1		x		5
KH12BK50072	Conservation of treated surfaces 2			х	10
KH12BK60042	Materials complementing the frame			х	3
KH12BK05	Artistic and Museum Subjects Module				30
KH12BK10091	History of built environment 1	х			4
KH12BK10101	History of built environment 2		х		5
KH12BK50031	Documentation 1	x			4
KH12BK50041	Documentation 2		x		5
KH12BA10001	Ethics of profession	x			3
KH12BA10004	Museology and ethics of profession			х	3
KH12BA10003	Seminars and site visits		x		6
KH12VVO	FREE CHOICE STUDIES				 12
KH12BV10007	Machines and safety	x			2
KH12BV10008	Preparation of a profile handplane		x		2
KH12BV10003	Gilding			x	2
KH12BV10004	Decorative painting			х	2
KH12BV10005	Plaster work			x	2
KH12BV10011	Wallpaper preparation			x	4
KH12BV10010	Bricklaying of oven		x		3
KH12FK80	Thesis				15
KH12EH	Practical training				 30

Study Descriptions

Information technology, 4 op KH12AK10041 (study unit)

Objectives

Students will be familiar with the principles of information technology in general and at the Seinäjoki University of Applied Sciences. Students will learn to use word processing programs, spreadsheets, databases, graphics and other software necessary for their studies. They will also understand what the creation of digital pictures involves and be able to process images.

- Information technology in general and at the Seinäjoki University of Applied Sciences Main topics of the course
- Using computers and auxiliary devices
- Using the Internet, Seinäjoki UAS's Intranet and e-mail
- Moodle learning environment and how to use it
- Word processing and spreadsheets
- Graphics programmes
- Structure and properties of digital pictures, editing and saving digital pictures

• Digitalizing pictures, editing, use and archiving

Literature / Study Material

Manuals for programmes and devices, lectures handouts for the programmes and lecture notes

Learning Methods

Lectures, computer work/use, assignments and independent study

Assessment Active participation, approved assignments and examinations

Languages of Instruction Finnish

ArchiCAD, 2 op KH12AK10042 (study unit)

Lecturers Marita Viljanmaa, MSc (Eng.)

Objectives Students will gain basic knowledge of ArchiCAD applications for drawing buildings.

Content

- Computer-aided design in construction drawing using ArchiCAD
- ArchiCAD's user interface and functions
- Computer-aided design

Literature / Study Material

Manuals for the programmes and devices, lecture handouts for the programmes and lecture notes

Learning Methods Lectures, computer work/use, assignments, and independent study

Assessment Active participation and approved assignments

English 1, 3 op KH12AK10070 (study unit)

Lecturers Hanna Mäki–Hallila, MA

Objectives

Students will have command of the written and spoken English language skills needed in the field of conservation. They will be able to describe the type of education and work experience they have, be familiar with the job hunting process, and know how to write a job application and CV in English. Students will be introduced to written communication and business correspondence, and they will become familiar with field–related texts with which they will learn field–related terminology to be used when speaking and writing.

Content

- Conservation
- Restoration
- Vocabulary for the field of construction
- Reading, writing and speaking in English using field-related terminology
- Oral presentation
- Compiling a job application

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, presentations, listening comprehension and conversations, and language laboratory work

Assessment

Active participation in the during lessons, approved exercises and examination

Languages of Instruction Finnish and English

English 2, 3 op KH12AK10080 (study unit)

Lecturers Hanna Mäki–Hallila, MA

Objectives

Students will have command of the written and spoken English language skills needed in the field of conservation. They will strengthen their written and oral skills and maintain and improve their existing language skills. They will learn to write a summary and learn about the procedures and vocabulary specific to meetings. Students will also read demanding texts related to the field of conservation, understand the vocabulary in such texts and be able to use the vocabulary to summarize the texts either orally or in writing. They will also use this advanced vocabulary in spoken and written English.

Content

- Conservation
- Restoration
- Vocabulary related to the field of conservation
- Reading, writing and speaking using field-related terminology
- Oral presentation
- Procedures of a meeting.

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, presentations, listening comprehension and conversation, and work in the language laboratory

Assessment

Active participation in the lessons, approved exercises and examination

Languages of Instruction Finnish and English

Swedish, 3 op KH12AK10100 (study unit)

Lecturers Hanna Mäki–Hallila, MA

Objectives

Students will be competent in spoken and written Swedish necessary in conservation.

Content

- General, field-related texts
- Vocabulary associated with construction and conservation
- Reading and listening comprehension
- Written and oral exercises

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, translations, presentations, listening comprehension and conversation

Assessment Approved exercises and examination, as well as active participation in the lessons

Communication skills, 2 op KH12AK10051 (study unit)

Objectives

Students will acquire written and oral communication skills as required in the field of conservation.
Content

- Writing a formal text
- Writing as a process
- Improving oral and written communication skills

Literature / Study Material

- Lecturer's material
- Seinäjoki UAS's Instructions for Writing a Thesis and Instructions for Writing a Report
- Lecture notes

Learning Methods Lectures and assignments

Assessment

Active participation in the lessons, oral communication practice, approved exercises and examination

Informatics, 2 op KH12AK10050 (study unit)

Lecturers

- Risto Känsälä, MA
- Pasi Selin, Information Specialist

Objectives

Students will have basic knowledge of the channels for obtaining information related to their field and possess readiness to independently use various sources of information. They will also be competent in writing formals texts and have command of the layout of such texts.

Content

- Online library services
- Obtaining information from databases, the Internet, and producers of field-related information
- Critical evaluation of information
- Noting down obtained information and editing it
- Writing reports related to conservation, archives research reports and structural historical reports
- Language maintenance
- Writing formal texts
- Texts layouts

Literature / Study Material

- Instructions for archives, e.g The National Library of Finland: Patron Guidebook
- Seinäjoki UAS's Instructions for Writing a Thesis
- Lecturer's material
- Lecture notes

Learning Methods Lectures and assignments

Assessment Assignments, active participation in lectures

Seminar work, 2 op KH12AK10052 (study unit)

Lecturers

Conservator Outi Orhanen MCE

Objectives

Students will be capable of producing formal academic texts pertaining to building conservation.

Content

- · Scientific way of thinking and approaching solutions to problems
- Significance of critically evaluating sources of information for scientific texts

Literature / Study Material

- Lecturer's material
- Lecture notes
- Seinäjoki UAS's Instructions for Writing a Thesis and Instructions for Writing a Report
- Karjalainen, Launis, Pelkonen & Pietarinen. 2002. Tutkijan eettiset valinnat

Learning Methods Lectures and assignments

Assessment

Active participation in the lessons, approved written seminar work and oral presentation

Entrepreneurship, 3 op KH12AY1003 (study unit)

Lecturers Designer Merja Juppo

Objectives

Students will have command of the modes of business operations related to their professional field.

Content

- Familiarisation with the business world
- Establishing a business and the operations therein
- Concepts associated with economy and financial management

Literature / Study Material

- Lecturer's material and lecture notes
- YSE1998

Learning Methods Lectures and assignments

Assessment Active participation in the lessons, approved assignments and examination

Marketing, 3 op KH12AY1002 (study unit)

Lecturers Designer Merja Juppo

Objectives

Students will have command of marketing as it is related to their professional field.

Content

- Customer-oriented marketing: methods and strategies
- Competitive tools
- Profitability of marketing

Literature / Study Material

- Lecturer's material
- Lecture notes

Learning Methods Lectures and assignments

Assessment

Active participation in the lessons, approved assignments and examination

Cost planning, 3 op KH12AY1001 (study unit)

Lecturers

Designer Merja Juppo

Objectives

Students will have command of the methods for calculating costs and understand the significance of it to their professional field.

Content

- Planning costs in conservation work
- Quantity surveying
- Pricing
- Operating costs
- Offer calculations
- Materials handling
- Schedules
- General terms of agreement

Literature / Study Material

- YSE1998
- Instructions for quantity surveying
- Lecture notes
- Lecturer's material

Learning Methods Lectures and assignments

Assessment Active participation in the lessons, approved assignments and examination

Physics, 3 op KH12AK10081 (study unit)

Lecturers Heikki Kokkonen, MA

Objectives

Students will have command of solving calculations associated with physics shall understand the terminology and principles of calculations and provide accurate answers to those equations. They will also be knowledgeable of the physical concepts associated with their professional field.

Content

- Magnitude and unit systems of measurement
- Mechanics
- Light and color
- Nuclear physics
- Thermology

Literature / Study Material Lecturer's material and lecture notes

Learning Methods Lectures, group work, calculations and independent study

Assessment Approved calculations and examination

Chemistry 1, 3 op KH12BK60011 (study unit)

Lecturers Art Conservator Nina Jolkkonen–Porander

Objectives

Students will have command of the basic concepts of chemistry with special emphasis on the chemistry associated with cleaning.

Content

- Basic terminology associated with inorganic chemistry
- Dirt and cleaning in chemistry
- Material categories of organic chemistry
- Laboratory work: cleaning tests

Literature / Study Material

- Ashley–Smith, J. Science for Conservators Volume 1. An Introduction to Materials. Concervation Science Teaching Series. The Conservation Unit. London.
- Ashley–Smith, J. Science for Conservators Volume 2. Cleaning. Concervation Science Teaching Series. The Conservation Unit. London
- Torraca, G. Solubility and Solvents for Conservation Problems. Iccrom. Rome.
- Horie, C.V. 1987 Materials for Conservation: organic consolidants, adhesives and coatings.
- Butterworth-Heineman Ltd. Oxford.
- Lecturer's material

Learning Methods Lectures, exercises and laboratory work

Assessment Approved exercises and examination, and laboratory work

Languages of Instruction Finnish

Chemistry 2, 2 op KH12BK60021 (study unit)

Lecturers

Art Conservator Nina Jolkkonen-Porander

Objectives

Students will understand the basic phenomena involved in chemistry and apply them to conservation.

Content

- Chemistry of colors, chemical and physical properties of pigments
- Practical pigment analysis
- Old, historic pigment examples

Literature / Study Material

- Ulla Knuutinen: Pigmentit
- Seppo Rihlama: Värioppi
- Veikko Kiljunen: Taidemaalarin materiaalioppi
- Pappismunkki Arseni: Ikonikirja: Historiaa, teologiaa ja tekniikkaa
- Lecturer's material and lecture notes

Learning Methods Lectures, laboratory work and assignments

Assessment Active participation in the lessons, laboratory work, assignments and exam

Prerequisites Chemistry 1

Languages of Instruction Finnish

Chemistry 3, 3 op KH12BK60031 (study unit)

Lecturers

Art Conservator Nina Jolkkonen-Porander

Objectives

Students will understand the basic phenomena involved in chemistry and apply them to conservation.

Content

The course involves the chemistry and analysis of natural glues, varnishes and binding agents for paints used in conservation.

Literature / Study Material

- Maschalein-Kleiner: Vanhat sideaineet, lakat ja kiinnitteet. Mills.
- Horie, C.V., 1987 Materials for conservation: Organic consolidants, adhesives and coatings. Butterworth–Heineman Ltd. Oxford.
- Pentti Pietarila, Rakennusten värit ja koristetyylit
- Lecturer's material and lecture notes

Learning Methods Lectures, laboratory work and assignments

Assessment Active participation in the lessons, laboratory work, assignments and exam

Prerequisites Chemistry 2

Languages of Instruction Finnish

Basics of construction technology 1, 3 op KH12BK40011 (study unit)

Lecturers

Conservator Outi Orhanen, MCE

Objectives

Students will be familiar with building as a process and be able to identify the various structures, techniques and materials in a building. Students will have command of the pronciples of construction drawing.

Content

- Various parties involved in construction projects and their duties
- Applications for building permits
- Status and responsibilities of a conservator
- Technical and material aspects of a building as a whole
- Technical functions of a building, nomenclature and functions of various parts of a building
- Drawings associated with construction and knowing how to interpret them

Literature / Study Material Lecturer's material and lecture notes

Learning Methods Lectures and assignments

Assessment Active participation, assignments and examination

Languages of Instruction Finnish

Basics of construction technology 2, 3 op KH12BK40021 (study unit)

Lecturers Conservator Outi Orhanen, MCE

Objectives

Students will be familiar with the structures, techniques and materials in modern buildings.

Content

- Constructing the foundation: soil types, properties and drainage
- Foundation types, reinforcement and methods of repair
- Base floor structures and load-bearing structures
- HVAC technology

Literature / Study Material Lecturer's material and lecture notes

Learning Methods Lectures and assignments

Assessment Active participation, assignments and exam

Languages of Instruction Finnish

Construction physics, 3 op KH12BK40031 (study unit)

Lecturers Marita Viljanmaa, MSc (Eng.)

Objectives

Students will be familiar with the physical phenomena and stress associated with buildings.

Content

- Constructional-physical functions of structures and their significance, as well as the regulations and instructions associated with them
- Air flow and pressure, transfer of heat and moisture
- Drying building elements and permeability of gases
- Structural fire protection
- Tools for measuring moisture
- Literature / Study Material
 - Siikanen: Rakennusfysiikka
 - National Building Code of Finland, RakMk
 - Lecturer's material

Learning Methods Lectures, exercises and laboratory work

Assessment Approved laboratory assignments, exercises and examination

Languages of Instruction Finnish

Concrete and metal structures, 3 op KH12BK40061 (study unit)

Lecturers Conservator Outi Orhanen, MCE

Objectives Students will be familiar with the structures made from concrete and metals and their properties.

Content

- History, manufacturing methods and use of concrete structures
- Metals and metal structures
- Manufacturing methods and ways to connect metal structures

Literature / Study Material

- Lecturer's material
- Betoni Suomessa 1860-1960
- Museum of Finnish Architecture: Rautaiset rakenteet -rauta ja teräs suomalaisessa arkkitehtuurissa
- Lecture notes

Learning Methods

Lectures, field trips and assignments

Assessment Active participation in lectures, assignments and examination

Languages of Instruction Finnish

Research methods 1, 2 op KH12BK60051 (study unit)

Lecturers

- Högne Junger, PhD
- Conservator Anni Lehtimäki
- Conservator Outi Orhanen, MCE

Objectives

Students will be familiar with and know how to apply various research methods in the field of conservation.

Content

Methods of dating and studying materials:

- Dendrology
- Radio carbon dating
- Studying wood materials

Literature / Study Material

- Fagerstedt et al. Mikä puu –mistä puusta
- Lecturer's material
- Lecture notes

Learning Methods Lectures and assignments

Assessment Active participation, assignments and approved reports on assignments

Languages of Instruction Finnish

Research methods 2, 3 op KH12BK60061 (study unit)

Lecturers Conservator Liisukka Oksa

Objectives

Students will be familiar with and know how to use various research methods in the field of conservation.

Content

- Methods for studying and dating materials, structures and conditions
- Preparation of samples and microscopic examination
- Use of research equipment and practical applications

• Ultraviolet and infrared depiction as research tools

Literature / Study Material

- Lecturer's material
- Manuals for equipment and computer programs
- Lecture notes

Learning Methods Lectures, description exercises and laboratory work

Assessment Active participation, exam/report

Languages of Instruction Finnish

Microbiology, 3 op KH12BK60071 (study unit)

Lecturers Marjatta Salminen, MSc (Eng.)

Objectives

Students will be able to identify various bacteria, moulds and mushrooms and know their prerequisites for growth.

Content

- Principles of microbiology
- Prerequisites for growth and mechanisms of biodegrading in construction materials
- Microbe cultivation
- Disinfection and other preventive methods

Literature / Study Material

- Allsopp–Seal: An Introduction to Biodeterioration
- Luotonen-Viitanen: Rakennusten mikrobi- ja hyönteisongelmat
- Salkinoja–Salonen: Yleinen mikrobiologia

Learning Methods Lectures, written exercises and laboratory work

Assessment Approved exercises and exam

Languages of Instruction Finnish

Klimatologia, 2 op KH12BK60081 (study unit)

Lecturers Hannu Pyy, MA

Objectives

Stundents will be familiar with the conditions of and impacts on the environment and know how to react to them when necessary.

Content

- Climate and weather
- Climate change and air pollution and their impact on various materials
- Prevention of damage caused by air pollution

Literature / Study Material

- Lecturer's material
- Annual Report for Seinäjoki Region Air Quality

• Lecture notes

Learning Methods Lectures, exercises and field trips

Assessment

Participation in the lectures, practical assignments and field trips, and an approved exam

Languages of Instruction Finnish

Conservation of Timber Structures Module, 41 op KH12BK02 (study entity)

Objectives: Students will gain comprehensive understanding of historical wooden structures and the ways in which they are preserved.

Materials: Timber, 5 op KH12BK60012 (study unit)

Lecturers Conservator Matti Laine

Objectives

Students will be familiar with wood materials and how to use it, as well as the processes of deteriaration and preservation of wood.

Content

- Domestic and foreign species of wood used in buildings and fixed interiors
- Micro- and makcro-structures of wood
- Identifying species of wood
- Growth, use and properties of wood
- Deterioration processes of wood (wood pests, types of decay)

Literature / Study Material

- Lecturer's material
- Ilvessalo-Pfaffli: Puun rakenne; publication 84 of the Dept. of Education, University of Helisinki
- Fagerstedt et al. Mikä puu -mistä puusta
- Sweingruber: Mikroskopische Holzanatomie
- Itämies, Viro: Sisätilojen tuholaiset
 Metsälä: Puukirja
- Laho ja sen torjunta
- Old, field-related literature
- Lecture notes

Learning Methods

Lectures, personal lecture notes, assignments, practical exercises

Assessment

Active participation in the lectures (min. 80 % attendance), approved exercises, laboratory assignments and examination

Timber structures 1.5 op KH12BK40041 (study unit)

Lecturers

Conservator Matti Laine

Objectives Students will have command of wood structures and how they are made.

Content

- Wooden structures in old buildings: roof structures, log structures and how they function
- Materials used for structures, measuring building elements, joints, function and nomenclature
- · Wood inlay work

Literature / Study Material

- Lecturer's material
- Itämies, Viro: Sisätilojen tuholaiset
- Metsälä: Puukirja
- Kaila, Pietarila, Tomminen: Talo kautta aikojen, julkisivujen historia
- Kaila, Vihavainen, Ekbom: Rakennuskonservointi
- Härö, Kaila: Pohjalainen talo
- National Board of Antiquities repair index
- Old, field-related literature
- Lecture notes

Learning Methods

Lectures, personal lecture notes, assignments, and practical exercises

Assessment

Active participation in the lectures (min. 80 % attendance), approved assignments and examination

Timber structures 2, 4 op KH12BK40050 (study unit)

Lecturers Conservator Matti Laine

Objectives

Students will be familiar with old wood structures and the ways they are made and preserved.

Content

- Wood protection and conservation methods
- Old wood structures of buildings, porches, base floor structures, intermediate floor structures, roofing structures
- Windows, doors, outdoor cladding, sanitary areas
- Materials used in satructures, measurment of building elements, joints, functions and nomenclature

Literature / Study Material

- Lecturer's material
- Itämies, Viro: Sisätilojen tuholaiset
- Metsälä: Puukirja
- Kaila, Pietarila, Tomminen: Talo kautta aikojen, julkisivujen historia
- Kaila, Vihavainen, Ekbom: Rakennuskonservointi
- Härö, Kaila: Pohjalainen talo
- National Board of Antiquities repair index
- Old, field-related literature
- Lecture notes

Learning Methods Lectures, personal lecture notes, assignments and practical exercises

Assessment

Active participation in the lectures (min. 80 % attendance), approved assignments and examination

Conservation of timber structures 1, 11 op KH12BK50040 (study unit)

Lecturers

Conservator Matti Laine

Objectives

Students will be familiar with the various alternatives and techniques involved in preserving buildings.

Content

- Various stages and techniques involved in building conservation
- Documentation of the conservation site/object
- Surveying damage
- Compiling conservation plans
- Preventive conservation work

• Alternative techniques as regards preservation

Literature / Study Material

- Lecturer's material
- Kaila, Vihavainen, Ekbom: Rakennuskonservointi. Talo kautta aikojen, parts 1 and 2
- Renovation files from the National Board of Antiquities.
- B.M. Feilden: Building Conservation.
- Lecture notes

Learning Methods

Lectures, written assignments, laboratory work, practical training periods. For the most part, teaching takes place on conservation sites: conservation of wood materials, restoration and reconstruction and adding new structures to supplement the old ones, conservation of building elements to supplement frames (windows, doors, sheet and veneer surfaces, fixtures, cladding, etc.), compiling a conservation report and maintenance programme.

Assessment

Active participation in the assignments and training periods (min. 80 % attendance), personal, approved reports about the training and assignments.

Languages of Instruction Finnish

Conservation of timber structures 2, 8 op KH12BK50050 (study unit)

Lecturers Conservator Matti Laine

Objectives

Students will be familiar with the alternatives and techniques associated with preserving buildings.

Content

- Various stages and techniques involved in building conservation
- Documentation of the conservation site/object
- Surveying damage
- Compiling conservation plans
- Preventive conservation work
- Alternative techniques as regards preservation

Literature / Study Material

- Lecturer's material
- Old field-related literature
- Kaila, Vihavainen, Ekbom: Rakennuskonservointi; Talo kautta aikojen, parts 1 and 2
- Museoviraston korjauskortisto;
- B.M. Feilden: Building Conservation
- Lecture notes

Learning Methods

Lectures, written assignments, laboratory work, practical training periods. For the most part, teaching takes place on conservation sites: conservation of wood materials, restoration and reconstruction and adding new structures to supplement the old ones, conservation of building elements to supplement frames (windows, doors, sheet and veneer surfaces, fixtures, cladding, etc.), compiling a conservation report and maintenance programme.

Assessment

Active participation in the assignments and training periods (min. 80 % attendance), personal, approved reports about the training and assignments.

Languages of Instruction Finnish

Conservation of timber structures 3, 8 op KH12BK50062 (study unit)

Lecturers Conservator Matti Laine

Objectives

Students will be familiar with the alternatives and techniques associated with preserving buildings.

Content

- Various stages and techniques involved in building conservation
- Documentation of the conservation site/object
- Surveying damage
- Compiling conservation plans
- Preventive conservation work
- Alternative techniques as regards preservation

Literature / Study Material

- Lecturer's material
- Old field-related literature
- Kaila, Vihavainen, Ekbom: Rakennuskonservointi, Talo kautta aikojen, parts 1 and 2
- Museoviraston korjauskortisto
- B.M. Feilden: Building Conservation
- Lecture notes

Learning Methods

Lectures, written assignments, laboratory work, practical training periods. For the most part, teaching takes place on conservation sites: conservation of wood materials, restoration and reconstruction and adding new structures to supplement the old ones, conservation of building elements to supplement frames (windows, doors, sheet and veneer surfaces, fixtures, cladding, etc.), compiling a conservation report and maintenance programme.

Assessment

Active participation in the assignments and training periods (min. 80 % attendance), personal, approved reports about the training and assignments.

Conservation of masonry structures Module, 19 op KH12BK03 (study entity)

Objectives: Upon completion of the module, students will possess a comprehensive understanding of the materials and working techniques used in masonry structures. They will be familiar with the principles of preserving masonry and natural stone structures.

Masonry structures 1, 3 op KH12BK40080 (study unit)

Lecturers Conservator Outi Orhanen, MCE

Objectives

Studens will have command of the basic issues pertaining to natural stone and brick.

Content

- Modern structures made of natural stone and brick, how they are made and used
- Foundations, wall structures, vaults, fireplaces and chimneys
- Regulations pertaining to masonry structures

Literature / Study Material

- National Building Code of Finland
- Lecturer's material
- Lecture notes

Learning Methods Lectures, field trips and assignments

Assessment Active participation, assignments and examination

Languages of Instruction Finnish

Masonry structures 2, 3 op KH12BK40051 (study unit)

Lecturers

Conservator Outi Orhanen, MCE

Objectives

Students will be familiar with history of structures made of brick and stone materials and old structures and their development.

Content

• Masonry structures of natural stone and brick and their history

Literature / Study Material

- Lecturer's own material
- Ringbom: Stone, Style & Truth
- Dürhkop-Saretok-Šneck-Svendsen: Laasti, muuraus, rappaus
- Feilden: Conservation of Historic Buildings
- Byggforskningsrådet: Äldre murverkshus. Reparationer och ombyggnad
- Lecture notes

Learning Methods Lectures, field trips and assignments

Assessment Actice participation, assignments and examination

Languages of Instruction Finnish

Materials of masonry constructions, 3 op KH12BK60032 (study unit)

Lecturers Conservator Outi Orhanen, MCE

Objectives

Students will be familar with brick and natural stone as building materials.

Content

The course discusses the properties of stone and brick and the damage that can be caused to them.

Literature / Study Material

- · Lecturer's material
- Lecture notes

Learning Methods Lectures and exercises, field trips

Assessment Active participation in the lessons, exercises and examination

Languages of Instruction Finnish

Conservation of masonry structures 1, 3 op KH12BK50081 (study unit)

Lecturers Kari Uotila, PhD

Objectives

Students will be familiar with the ways in which stone and brick structures may become damaged and how these structures can be preserved.

Content

- Damage to masonry structures
- Principles and methods for perserving stone and brick structures
- Conservation methods for natural stone and brick
- Preventive measures, reinforcing Ennaltaehkäisevät toimenpiteet, muurauskappaleiden ja rakenteiden vahvistaminen, tuenta, puhdistus jne.
- Muurattuihin rakenteisiin liittyvät, muuta materiaalia olevat rakenteet ja pintakäsittelyt.

Literature / Study Material

- Lecturer's material
- Duhrkop, Saretok, Sneck, Svedsen: Laasti, muuraus, rappaus
- Råman: Uudet laastit vanhoissa kivimuureissa
- Perander et al: Historiallisten kivirakenteiden laastit
- Byggforskningsrådet: Äldre murverkshus
- Feilden: Conservation of Historic Buildings
- ICCROM: Structural Conservation of Stone Masonry
- Lecture notes

Learning Methods Lectures, written and practical assignments

Assessment Active participation in lectures, assignments and examination

Languages of Instruction Finnish

Conservation of stone, 3 op KH12BK50082 (study unit)

Lecturers Concernator Virue Si

Conservator Virve Suominen

Objectives

Students will become familiar with the history of stone as a building material, it properties, structural solutions and conservation of natural stone.

Content

- Chemical and physical properties of natural stone
- Stone as a building material, working with stone and decay of the material
- Various physical properties of natural stone
- Principals of stone preservation and restoration

Literature / Study Material

- Lecturer's material and lecture notes
- Lahdensivu J. 2004. Luonnonkiviverhottujen maassiivitiiliseinien vaurioituminen ja korjausperiaatteet.
- Solin B., Kuula-Väisänen P. & Ermala S. 2004. Luonnonkiven restaurointi.
- Solin B., Kuula-Väisänen P. & Ermala S. 2004. Luonnonkiven restauroinnin ja konservoinnin peruskemia

Learning Methods

Lectures, assignments and field trips

Assessment Active participation, practical work and examination

Languages of Instruction Finnish

Conservation of masonry structures 2, 4 op KH12BK50091 (study unit)

Objectives

Students will understand the ways in which structures made of brick and stone may become damaged and be familiar with the principles of preserving stone and brick structures.

Content

- Damage to masonry structures
- · Principles and methods for preserving stone and brick structures
- Methods for the conservation of natural stone and brick
- Preventive measures: reinforcement of masonry structures, support, cleaning, etc.
- Other structures and surface treatment associated with brick and stone structures

Literature / Study Material

- Lecturer's material
- Dürhkop, Saretok, Sneck, Svendsen: Laasti, muuraus, rappaus
- Råman: Uudet laastit vanhoissa kivimuureissa
- Perander et al. Historiallisten kivirakenteiden laastit
- Byggforskningsrådet: Äldre murverkshus
- Feilden: Conservation of Historic buildings
- ICCROM: Structural Conservation of Stone Masonry
- Lahdensivu J. 2004. Luonnokiviverhottujen massiivitiiliseinien vaurioituminen ja korjausperiaatteet
- Solin B., Kuula-Väisänen P. & Ermala Š. 2004. Luonnonkiven restaurointi
- Solin B., Kuula–Väisänen P. & Ermala S. 2004. Luonnonkiven restauroinnin ja konservoinnin peruskemia
 Lecture notes

Learning Methods Lectures, written and practical assignments

Assessment Active participation, examination and assignments

Languages of Instruction Finnish

Conservation of Materials Complementing Finished Frame Module, 30 op KH12BK04 (study entity)

Objectives: Upon completion of the module, students will be familiar with the properties of materials used in surface treatment and frames and the preservation techniques of those materials.

Surfice materials and techniques 1, 7 op KH12BK60024 (study unit)

Lecturers

Conservator Liisukka Oksa

Objectives

Students will become familiar with traditional surface-treatment agents and techniques. They will understand the concept of compatibility among materials and hoe they behave in various structures. Students will also have knowledge of the history of the mentioned materials. They will be competent in painting, papering, and bracing and have command of various decoration methods and stencil-type painting.

Content

- Traditional binding agents, paints and varnishes
- History of material, wallpapers and painting bases
- Methods for painting and wallpapering

Literature / Study Material

- Maschalein, Kleiner: Vanhat sideaineet, lakat ja kiinnitteet
- Talo kautta aikojen, parts 1 and 2
- Old books from the foeld of painting
- Dörner: Maaliaineet ja niiden käyttö taidemaalauksessa
- Kiljunen: Taidemaalarin materiaalioppi
- Materials used in the field of painting
- Knuutinen: Paperin säilyvyyden kemia
- Råman: Uudet laastit vanhoissa kivimuureissa
- Perander et al.: Historiallisten kivirakenteiden laastit
- Lecturer's material
- Pietarila: Väri ja tyyli

- Kaila, Pietarila, Tomminen: Talo kautta aikojen, julkisivujen historia
- Heikkinen et al.: Talo kautta aikojen kiinteän sisustuksen historia
- Old literature from the field
- Lecture notes

Learning Methods Lectures, practical exercises and laboratory work, protfolio

Assessment Exercises, portfolio and examination

Languages of Instruction Finnish

Surface Treatment Materials and Techniques 2, 5 op KH12BK60023 (study unit)

Lecturers Conservator Liisukka Oksa

Objectives

Students will become familiar with traditional surface-treatment agents and techniques. They will understand the concept of compatibility among materials and hoe they behave in various structures. Students will also have knowledge of the history of the mentioned materials. They will be competent in painting, papering, and bracing and have command of various decoration methods and stencil-type painting. Students will also be knowledgeable in the approaches conservators take to their work.

Content

- Traditional binding agents, varnishes and paints
- History of materials, wall-papers and painting bases
- Priming work
- Painting and wallpapering methods

Literature / Study Material

- Maschalein, Kleiner: Vanhat sideaineet, lakat ja kiinnitteet
- Talo kautta aikojen, parts 1 and 2
- Old books associated with the field of painting
- Dörner: Maaliaineet ja niiden käyttö taidemaalauksessa
- Kiljunen: Taidemaalarin materiaalioppi
- Materials used in the field of painting
- Knuutinen: Paperin säilyvyyden kemia
- Råman: Uudet laastit vanhoissa kivimuureissa
- Perander, et al.: Historiallisten kivirakenteiden laastit
- Lecturer's material
- Pietarila: Väri ja tyyli
- Kaila, Pietarila, Tomminen: Talo kautta aikojen, julkisivujen historia
- Heikkinen, jne.: Talo kautta aikojen kiinteän sisustuksen historia
- Old, field-related literature
- Lecture notes

Learning Methods

Lectures and practical assignments, laboratory work and portfolio

Assessment Assignments, portfolio and examination

Languages of Instruction Finnish

Conservation of treated surfaces 1, 5 op KH12BK50061 (study unit)

Lecturers Conservator Liisukka Oksa

Objectives

Students will have command of various types of surface cleaning methods, reinforcements and colour fixation. They will be able to identify various materials and know how to take samples and analyse them.

Content

- Conservation, restoration and cleaning techniques
- Aging of material

Literature / Study Material

- Lecturer's material
- Kaila, Vihavainen, Ekbom: Rakennuskonservointi. Talo kautta aikojen, parts 1 and 2
- Theses of previous graduates
- Pietarila: väri ja tyyli
- Lecturer's material

Learning Methods Lectures, written and practical assignments

Assessment Assignments and examination

Languages of Instruction Finnish

Conservation of treated surfaces 2, 10 op KH12BK50072 (study unit)

Lecturers Conservator Liisukka Oksa

Objectives

Students will be familiar with the cleaning techniques, reinforcement, and colour fixation of various surfaces. They will be able to identify various materials and know how to take samples and analyse them.

Content

- Stretching
- · Conservation and restoration of surface and surface treatments
- Cleaning techniques and aging of material

Literature / Study Material

- Lecturer's material
- Kaila, Vihavainen, Ekbom: Rakennuskonservointi. Talo kautta aikojen, parts 1 and 2
- Theses by students who have graduated
- Pietarila: Väri ja tyyli
- Lecture notes

Learning Methods Lectures, written and practical work

Assessment Assignments and examination

Languages of Instruction Finnish

Materials complementing the frame, 3 op KH12BK60042 (study unit)

Lecturers

- Conservator Anna Häkäri, MA
- Conservator Heikki Häyhä, MA
- Conservator Päivi Ukkonen

Objectives

Students will become familiar with materials used in various buildings and their conservation.

Content

- Properties of glass, ceramic, textiles, and paper
- Damage mechanisms and conservation

Literature / Study Material

- Matiskainen: Suomalaisen lasin historia
- Jylhä–Vuorio: Keramiikan materiaalit
- Knuutinen: Paperin säilyvyyden kemia
- Lecturer's material

Learning Methods Lectures, written and practical assignments

Assessment Participation in the lectures, exercises, and examination

Languages of Instruction Finnish

Artistic and Museum Subjects Module, 30 op KH12BK05 (study entity)

Objectives: Students will acquire a comprehensive understanding of the development and of the built environment, as well as of documentation and the professional codes of conduct.

History of built environment 1, 4 op KH12BK10091 (study unit)

Objectives Students shall acquire an understanding of the history and styles of buildings.

Content The course discusses cultural history and buildings in Finland during Swedish rule (1500–1800).

Literature / Study Material

Ars Suomen taide 1-6 (Finnish Art). Talo kautta aikojen, parts 1 and 2 (The house throughout the ages). Lecturer's material.

Learning Methods Lectures and assignments

Assessment Active participation in lectures, examination

Languages of Instruction Finnish

History of built environment 2, 5 op KH12BK10101 (study unit)

Lecturers Landscape Architect Marketta Nummijärvi

Objectives Students will acquire an understanding of the historical phases and styles of buildings in Finland.

Content

- Cultural history in 19th- and 20th-century Finland
- Finnish building styles and methods from the empire to the era of redevelopment

Literature / Study Material

- Lecturer's material
- Ars Suomen taide 1–6 (Finnish Art)
- Talo kautta aikojen, parts 1 and 2
- Lecture notes

Learning Methods Lectures and exercises

Assessment Active participation, assignments and examination

Languages of Instruction Finnish

Documentation 1, 4 op KH12BK50031 (study unit)

Lecturers COnservator Matti Laine

Objectives

Students will be familiar with the principles and methods of documentation and its use.

Content

- Fundamentals and methods of documentation in conservation work
- Design and presentation of written documentation report including measurements, drawings, photographs and research findings
- Significance of photography in conservation, fundamentals of photography and preservation of pictures taken
- Types of cameras, film and paper material, chemicals and their storage
- Discovery and documentation of the history of the conservation site/object, materials and structural properties of an object prior to conservation
- Using documented material and archiving
- Digital pictures

Literature / Study Material

- Heinonen, Lahti: Museologian perusteet, osa: dokumentointi
- · Lecturer's material on photography
- Lecture notes

Learning Methods

Lectures and personal lecture notes, practical work, e.g. measurements, drawings, photography and developing of photos

Assessment

Active participation in the lectures (min. 80 % attendance) and approved assignments and exam

Languages of Instruction Finnish

Documentation 2, 5 op KH12BK50041 (study unit)

Lecturers Conservator Liisukka Oksa

Objectives Students will be familiar with the principles and working methods of surface–layer documentation.

Content

- Surface-layer documentation, analysis of the colour layer and taking colour samples
- Analysing wall-paper samples and archiving
- Research photography in documentation
- Making surface-layer fragments and documenting them
- Surveying damage to surface layers and reporting about them

Literature / Study Material

- Restoration of old state-owned buildings
- Lecturer's material
- Common documentation templates
- Lecture notes

Learning Methods Lectures and practical exercises

Assessment Approved exercises

Languages of Instruction Finnish

Ethics of profession, 3 op KH12BA10001 (study unit)

Lecturers Conservator Liisukka Oksa

Objectives

Students will become familiar with profession of the conservator and the problematics and ethics associated with it. They will also gain insight into the history and development of conservation.

Content

- Familiarisation with conservation and the profession of the conservator
- Ethics and philosophy of conservation
- · Familiarisation with various sectors of conservation and conservators and their work environments
- Duties of the building conservator and future prospects
- History and theory of building conservation and restoration
- Change and development of the concepts of conservation during various eras

Literature / Study Material

- Lecturer's material
- Jokilehto: A History of Architectural Conservation
- Lecture notes

Learning Methods Participation in lectures and field trips

Assessment Exam and assignments

Museology and ethics of profession, 3 op KH12BA10004 (study unit)

Lecturers

- Conservator Liisukka Oksa
- Conservator Outi Orhanen, MCE

Objectives

Students will become familiar with the problematics of building preservation and the various actions to take in preservation and the opportunities it provides. They will also be familiar with the organisation of museums and how they operate, and the conservation work that takes place in them. Students will be introduced to the profession of the conservator and the problematics and ethical aspects of the profession. Additionally, students will develop an understanding of the history and development of conservation.

Content

- Part 1: concepts and regulations pertaining to building preservation, ways to carry out building preservation in Finland, preservation process and the phases involved in the process, the part conservation plays in building preservation, building regulations and zoning
- Osio 2: duties of museums and legislation pertaining to museums, safety in museums, museum collections and handling them

• Osio 3: conservation in museums, philosophy and ethics of conservation, familiarisation with the sectors within conservation and getting to know various conservators and their work, duties of the conservator and future prospects, history and theory of building conservation and restoration, change and development of the concepts of conservation throughout various eras

Literature / Study Material

- Part 1: Lecturer's material, international regulations and recommendations, legislation, lecture notes
- Part 2: Lecturer's material, De Guichen: Climate in Museums, Heinonen-Lahti: Museologian perusteet,
- recommendations from the Finnish Museums Association, lecture notes
- Part 3: Lecturer's material, international recommendations, Jokilehto: A History of Architectural Conservation, lecture notes

Learning Methods

Lectures, assignments, seminars and field trips

Assessment

Active participation, assignments, report and exams

Seminars and site visits, 6 op KH12BA10003 (study unit)

Objectives

Students will become familiar with the field of conservation and the bodies associated with it as well as with the current discussions taking place in the field.

Content

- Field trips to conservation sites, conservation institutions and other related sites
- Participation in topical seminars and the acquisition of the latest data associated with the field

Literature / Study Material

Lecturer's material and material obtained during various visits, as well as lecture notes

Learning Methods Participation in field trips, seminars and related lectures

Assessment Active participation, approved assignments, assignments/reports on field trips

FREE CHOICE STUDIES, 12 op KH12VVO (study entity)

Objectives and contents: Students will complement their knowledge of various subjects, e.g. languages, handicraft skills, etc. They may choose topics from other schools within the Seinäjoki university of Applied Sciences or other university of applied sciences. Students have the opportunity to deepen their knowledge of building conservation in the following courses:

- Wallpaper Making (4 cr)
- Gilding (2 cr)
- Decorative Painting (2 cr)
- Machines and Safety (2 cr)
- Plaster Work (2 cr)
- Masonry Ovens (3 cr)

Machines and safety, 2 op KH12BV10007 (study unit)

Lecturers Conservator Matti Laine

Objectives Students will learn how to use woodworking machines safely.

Content

- · Principals and technology of machines
- Safety at work and personal protection

Literature / Study Material

Lecturer's material, instruction manuals for various machines, Occupational Safety Act

Learning Methods

Familiarisation with various machines and their safety devices, practice using the machines

Assessment

Active partisipation in the lectures (100 % attendance required) and assignments

Languages of Instruction Finnish

Preparation of a profile handplane, 2 op KH12BV10008 (study unit)

Lecturers Conservator Matti Laine

Objectives Students will possess competency in making their own tools for wood working.

Content

- Handplanes and how they work
- Materials and shaping them into finished profile planes

Literature / Study Material Lecturer's material

Learning Methods Practical work preparing raw material into a finished product

Assessment Active participation (min. 80 % attendance required) and a finished handplane

Languages of Instruction Finnish

Gilding, 2 op KH12BV10003 (study unit)

Lecturers Conservator Liisukka Oksa

Objectives

Students will complement their knowledge of various gilding techniques and acquire a feel for how various materials behave.

Content

• Gilding techniques such as brilliant gilding, oil gilding and bronzing

Literature / Study Material Lecturer's material and lecture notes

Learning Methods Lecutures and practical exercises

Assessment Active participation and approved exercises

Languages of Instruction Finnish

Decorative painting, 2 op KH12BV10004 (study unit)

Lecturers Conservator Liisukka Oksa

Objectives Students will complement their knowledge of decorative painting.

Content

- Popular decorative painting
- Decorative painting of building ornaments by hand

Literature / Study Material Lecturer's materialand lecture notes

Learning Methods Lectures and practical exercises

Assessment Active participation and exercises

Languages of Instruction Finnish

Plaster work, 2 op KH12BV10005 (study unit)

Lecturers Conservator Liisukka Oksa

Objectives Students will complement their knowledge of casting building gypsum and making gypsum mass.

Content

- Various moulds and making gypsum mass
- Casting and surface treatment of gypsum

Literature / Study Material Lecturer's material and lecture notes

Learning Methods Lectures and practical exercises

Assessment Active participation and exercises

Languages of Instruction Finnish

Wallpaper preparation, 4 op KH12BV10011 (study unit)

Lecturers Conservator Liisukka Oksa

Objectives

Students will be familiar with the techniques and tools for silk screen printing and will know how to make wallpaper from an existing model.

Content

- Positioning a wallpaper report
- Making a silk printing screen
- Printing wallpaper

Literature / Study Material Manufacturer's instructions for materials, lecturer's material and lecture notes Learning Methods Lectures and practical exercises

Assessment Approved exercises

Bricklaying of oven, 3 op KH12BV10010 (study unit)

Lecturers Aimo Laitila

Objectives

Students will be familiar with the technical and structural properties and differences of various ovens.

Content

- Dismounting and assembling various types of ovens
- Choosing conservation and restoration techniques in various problematic situations

Literature / Study Material

- Lecturer's material
- G.E. Asp. 1948. Uuninmuuraaja
- Heikkinen, Heinämies, Jaatinen, Kaila, Pietarila. 1989. Talo kautta aikojen Kiinteän sisustuksen historia
- National Board of Antiquities: Repair index Tulisijat, 1994

Learning Methods Lectures and practical exercises

Assessment Active participation in lectures and assignments, and reports

Languages of Instruction Finnish

Thesis, 15 op KH12FK80 (study entity)

Course objectives and content:

- Students learn to apply the knowledge they have gained during their studies to a conservation project
- Theoretical and practical project in conservation carried out independently
- Written report about the project
- Presentation of the work and results at the final seminar

Literature/Study material:

- All possible field–related material
- Degree programme-specific instructions
- Seinäjoki University of Applied Sciences Instructions for Writing a Thesis and Instructions for Writing a Report

Learning methods and assessment:

- Degree programme's separate guidebook for writing a thesis
- Written report, presentation of results in a seminar and Maturity Test

Practical training, 30 op KH12EH (study entity)

Course objectives and content:

- Opportunity for students to strengthen their knowledge in their field of specialization and of the work itself and to apply theory to practice
- Field—related work

Literature/Study material:

- All possible field–related material Degree programme's guidebook for training

Learning methods and assessment:

- Practical work during summer holidays and one semester.References from employers and reports

Degree Programme in Construction Engineering (In Finnish)

Head of degree programme: Mr Heikki Ylihärsilä, Tel. +358 40 830 4153, E-mail: heikki.yliharsila@seamk.fi Student counsellor: Mr Ilkka Loukola, Tel. +358 40 830 5386, E-mail: ilkka.loukola@seamk.fi International coordinator: Mr Tapio Pihlajaniemi Tel. +358 40 830 3966, E-mail: tapio.pihlajaniemi@seamk.fi

Degree and qualification awarded

Bachelor of Engineering

Access requirements

Please see the Applicant's Guide or the website www.seamk.fi.

General description of the degree programme

The objective of Construction Engineering is to educate bachelors of science in construction engineering. Construction Engineering aim is prepare the students for building construction design and production, entrepreneurship and management. Central themes in the degree programme are wood and steel construction. The aim is to equip the students with skills for diverse tasks in construction, including design, manufacture, management, export and marketing and working as an independent entrepreneur and to prepare the students for independent working using modern communication skills, computer technology and team work also in international surroundings in the fields of design, production, management, export and entrepreneurship. Wide international connections give the students various choices for studying and practical training abroad. Construction Engineering study programme benefits from modern laboratories with practical applications. Construction laboratory, construction studio and well functioning business contacts contribute to project work with practical emphasis.

Subject specific competences

Competence in environmental responsibility and life cycle analysis in construction

- environmental impact management of building materials and job site production
- life cycle technology management
- product service time design
- real estate and facility management

Competence in structural design

- structural building and environmental materials design
- static control of structures
- ability to use laws of building physics in design
- safety of structures and materials
- comprehension of heating, ventilating, air conditioning and electrical automation design in building design

Competence in construction production

- building and environmental construction management and contracting
- production management
- rakentamisen laadun ja turvallisuuden hallinta
- comprehension of heating, ventilating, air conditioning and electrical automation design in production

Competence in construction economics

- understanding of principles construction economics
- control of production economics
- understanding of construction company economics

Competence in renovation

- understanding the values of buildings in use, historical values and the beauty of buildings of different periods
- understanding of building preservation possibilities
- knowledge of materials, structures and construction techniques of different periods
- understanding of condition reports and building use and their effect on building materials and structures and their methods of renovation

Degree Programme in Construction Engineering (In Finnish), 240 cr (1.9.2008) RAK 2008

Code	Name	Study Year CR		CR		
		1.	2.	3.	4.	
KC14AR10	BASIC STUDIES		1	1		50
KC14AR10017	Introduction to engineering studies	Х				2
KC14AR10020	Communication and negotiation 1	Х				3
KC14AR10030	Communication and negotiation 2		х			3
KC14AR10041	Swedish	X				3
KC14AR10050	English 1	х				3
KC14AR10061	English 2		х			3
KC14AR10071	English 3			x		3
KC14AR10082	Algebra and trigonometry	Х				4
KC14AR10083	Vectors and matrices	X				3
KC14AR10084	Differential and integral calculus	Х				3
KC14AR10085	Differential equations and business mathematics		х			3
KC14AR10086	Statistics		х			3
KC14AR10088	Basics of physics	Х				4
KC14AR10089	Wave and modern physics		х			3
KC14AR10091	Physics laboratory works		x			3
KC14AR10192	Basics of chemistry	x				2
KC14AR10203	Office applications	Х				2
KC14BRAOP	BASICS OF PROFESSIONAL STUDIES					55
KC14BR33021	Construction economics		х			4
KC14AR10211	Construction CAD		х			4
KC14BR20130	Building materials	Х				3
KC14BR20141	Statics	X				4
KC14BR20161	Strength of materials		х			4
KC14BR20151	Statically indeterminate frame structures		х			4
KC14BR10011	Elementtimenetelmän perusteet (pakollinen vain suunnittelun valinneille)			x		3
KC14BR20045	Sustainable development	Х				3
KC14BR20093	Basics of construction	Х				3
KC14BR20051	Chemistry of building materials	Х				2
KC14BR20101	Concrete technology	Х				3
KC14BR20113	Framework systems and basics of structural design		х			4
KC14BR20173	Geotechnics and foundation engineering		x			4
KC14BR20181	Measuring techniques	x				3
KC14BR20191	Urban planning	х				2

KC14BR20201	HVAC technology		x			3	
KC14BR20212	Electrical and automation engineering		x			2	
KC14BR20214	Talotekniset asennukset (pakollinen vain tuotantotekniikan valinneille)			х		3	
KC14BRAOM	PROFESSIONAL STUDIES MODULES						
KC14BR10	Entrepreneurship module						
KC14BR20031	Human resources management			x		4	
KC14BR33051	Project management			x		4	
KC14BR33011	Business economics				x	4	
KC14CR43051	Cost planning				x	3	
KC14BR45	Building construction module						
KC14BR31012	Building construction	x				4	
KC14BR31021	Renovation			x		4	
KC14BR31031	Construction physics		x			5	
KC14BR31041	Structural design	х				2	
KC14BR50	Structural engineering module						
KC14BR32012	Concrete structures and masonry structures 1			x		5	
KC14BR32022	Timber structures 1		x			5	
KC14BR32032	Steel structures 1			х		5	
KC14CR53	Building construction, production module						
KC14CR43011	Site engineering			х		3	
KC14CR43021	Prefabrication production				x	2	
KC14CR43062	Workshop technology				x	3	
KC14CR43041	Log construction			x		2	
KC14BR33031	Construction quality				x	2	
KC14CR43032	Työlainsäädäntö ja työsuojelu			x		3	
KC14CR43034	Tender calculation				x	5	
KC14CR63	Module of project studies, production						
KC14CR73	Building construction, design module					20	
KC14CR41011	Concrete structures 2				x	3	
KC14CR41031	Steel structures 2				x	3	
KC14CR41021	Timber structures 2			х		3	
KC14CR41041	Composite structures				x	3	
KC14CR41051	Computer aided constructional design			х		3	
KC14CR41052	Kantavan rungon suunnittelu				x	5	
KC14CR83	Module of project studies, design						
KC14DR100	FREE CHOICE STUDIES					10	
KC14ER100	PRACTICAL TRAINING					30	
KC14FR70 FINAL THESIS						15	

Study Descriptions

BASIC STUDIES, 50 op KC14AR10 (study entity) The aim of the Basic Studies is to provide students with a theoretical and methodological foundation for a scientific approach to thinking, and to prepare students for their professional studies and expertise in the field.

Introduction to engineering studies, 2 op KC14AR10017 (study unit)

Lecturers

- Heikki Ylihärsilä, LSc (Tech.)
- Information Specialist Pasi Selin

Objectives

Students will become familiar with various study techniques and the fundamentals of information retrieval and research methods. They will be introduced to the foeld of technology. Upon completion of the course, students will be aware of their own learning styles, understand the significance of their chosen professional field, be competent in using various tools for obtaining information, understand the principles behind scientific study and know how to write a research report. They will also be aware of engineering protocol.

Content

- Studying, learning, significance of the field in the national economy, field-related labour unions
- Library and information services, databases, seeking information from databases and the Internet, scientific research and research methods

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, exercises and independent study

Assessment Approved exercises

Communication and negotiation 1, 3 op KC14AR10020 (study unit)

Objectives

Students will be competent in communicating logically and clearly, in producing the more common texts needed in the academic and working communities, and understand the proper procedures of a meeting. They will understand the significance of communication in the working world. Students will also be capable of evaluating their skills in Finnish and communication and want to improve these skills as part of their professional development.

Content

- Basic concepts of communication
- Language maintenance
- Document standards and layout of texts
- Business correspondence
- Bulletins
- Everyday communication in the working world
- Applying for jobs and the types of texts needed for it
- Procedures of meetings documents associated with meetings

Literature / Study Material

• Kauppinen, A., Nummi, J. & Savola, T. 2005. Tekniikan viestintä. Kirjoittamisen ja puhumisen käsikirja. 4th–5th edition. Edita.

Learning Methods

Work in pairs and small groups, oral presentations, written assignments

Assessment

Active participation in class and assignments, written assignments, portfolio and exam

Communication and negotiation 2, 3 op KC14AR10030 (study unit)

Objectives

Students will be competent in acting appropriately in various communicative and social situations in the working world and in expressing themselves convincingly and clearly. They will also possess the readiness needed in writing academic texts.

Content

- Instructional texts
- Proposals
- Reports
- Academic writing: instructions for writing a thesis, evaluating sources, citation, literature
- Argumentation
- Goal–oriented discussions
- Oral and presentation skills for the working world
- Seminars

Literature / Study Material

- Kauppinen A., Nummi J. & Savola T. 2005. Tekniikan viestintä. Kirjoittamisen ja puhumisen käsikirja. 4th–5th editions. Edita.
- Instructions for Writing a Thesis: Seinäjoki University of Applied Sciences

Learning Methods

Pair and group work, oral presentations and written assignments

Assessment

Active participation in class and assignments, written and oral assignments, literary assignment and the presentation of it

Swedish, 3 op KC14AR10041 (study unit)

Lecturers Riikka Ala–Sankila, MA

Objectives

Upon completion of the course, students will be competent in working in their own field using the Swedish language. They will have command of interactive communication, and they will be adeot in finding and utilising field-related information in Swedish.

Content

- Education
- Job applications and the work environment
- Society
- Customer contacts
- General texts
- Field-related texts: common vocabulary in construction engineering

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, listening comprehension and oral exercises, written assignments independently, in groups or in pairs

Assessment Active participation in lectures, mid-term and final exams

Languages of Instruction Finnish and Swedish

English 1, 3 op KC14AR10050 (study unit)

Lecturers Riikka Ala–Sankila, MA

Objectives

The course will develop the oral and written language skills of the students. Upon completion of the course, students will

be able to describe their own education and the work application process and their future work tasks in English and are able to write application documents in English based on the basics of the business correspondence. Additionally, the students will be familiar with and capable of understanding the basic vocabulary of in construction engineering texts and using the vocabulary both in writing and speaking.

Content

- Effective communication
- Sources for acquiring information
- Internet
- Compilation of a CV and job application
- Basic, field-related vocabulary
- Informal oral presentation
- Texts in the course book

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers. Edita. (latest edition).
- Field-related texts and other material

Learning Methods Oral and written exercises in pairs, groups and independently

Assessment

- Active participation in lectures and exercises
- Oral presentation
- Written exam
- Other tasks required during the course

English 2, 3 op KC14AR10061 (study unit)

Lecturers Diikko Alo Sonk

Riikka Ala-Sankila, MA

Objectives

The course will deepen the oral and written language skills of the students as well as the written communication and the business correspondence. Additionally, the students become acquainted with and understand the more profound professional vocabulary of construction engineering texts and be competent in using the vocabulary both in writing and speaking.

Content

- Business correspondence
- Some business terminology
- Obtaining information from field-related texts and processing it
- Oral and written summaries
- Field-related oral presentation
- Texts from the course book
- Business fairs
- Processes

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers, Edita. (latest edition).
- Field-related texts and other material

Learning Methods

Oral and written exercises in pairs, groups and independently

Assessment

- Active participation in lectures and exercises
- Oral presentation
- Written exam
- Other tasks required during the course

Languages of Instruction Finnish and English

English 3, 3 op KC14AR10071 (study unit)

Lecturers Riikka Ala–Sankila, MA

Objectives

The course will reinforce and maintain the oral and written language skills the students acquired earlier. The abstract writing exercises and the meeting and negotiation procedures and vocabulary are the central themes of the course, in addition to the comprehensive professional construction engineering texts and the use of professional vocabulary both in writing and speaking.

Content

- Technical literacy and writing
- Compilation of a thesis abstract
- Presentations
- Meetings,
- Interviews
- Field-related texts
- Texts from the course book

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers. Edita. (latest edition).
- Field-related texts and other material

Learning Methods

Oral and written exercises in pairs, groups and independently

Assessment

- Active participation in lectures and exercises
- Oral presentation
- Written exam
- Other tasks required during the course

Languages of Instruction Finnish and English

Algebra and trigonometry, 4 op KC14AR10082 (study unit)

Lecturers

Juhani Paananen, MSc (Eng.), MA

Objectives

Students will acquire sufficient mathematical knowledge for their studies in technology, and achieve a level of advanced mathematics in upper secondary school.

Content

• Literal calculations, simplification of algebraic expressions, solving equations and trigonometry

Literature / Study Material

- Antti Majaniemi: ALGEBRA I
- Antti Majaniemi: GEOMETRIA geometriaa, trigonometriaa ja vektorilaskentaa

Learning Methods

Lectures, calculations and independent study. NB! 80 % attendance in lectures required.

Assessment

Two mid-term exams or final exam and points from calculaitons. Students who have completed advanced mathematics in upper secondary school may complete the course by taking an exam at the beginning of the academic year.

Languages of Instruction Finnish

Vectors and matrices, 3 op KC14AR10083 (study unit)

Lecturers

Juhani Paananen, MSc (Eng.), MA

Objectives

Students will acquire basic knowledge in vector calculations, analytical geometry and know how to apply this knowledge in technology. Students will also use this knowledge in their Professional Studies with which they will gain competence in technical–mathematical matters.

Content

- Vector calculations
- Matrix algebra
- Applications to technology
- Analytic geometry

Literature / Study Material

- Antti Majaniemi: ALGEBRA I
- Antti Majaniemi: GEOMETRIA: geometriaa, trigonometriaa ja vektorilaskentaa

Learning Methods Lectures, calculations and independent study

Assessment Two mid-term exams or a final exam and points from calculations

Prerequisites

- Algebra
- Trigonometry

Languages of Instruction Finnish

Differential and integral calculus, 3 op KC14AR10084 (study unit)

Lecturers Juhani Paananen, M.Sc.

Objectives

The student must accomplish the basic know-how of the course contents as stated below. This knowledge is needed in vocational subjects and mastering of which enables the command of demanding technical-mathematical knowledge.

Content

One variable differential and integral calculus.

Literature / Study Material

Antti Majaniemi: MATEMATIIKKA I – Differentiaali– ja integraalilaskentaa insinööriopiskelijoille. Antti Majaniemi: MATEMATIIKKA II � Differentiaali– ja integraalilaskentaa sekä differentiaaliyhtälöitä.

Learning Methods Lectures, exercises and independent study.

Assessment Two mid-term exams or final exam and exercise points.

Prerequisites Algebra and trigonometry.

Languages of Instruction Finnish

Study Descriptions

Differential equations and business mathematics, 3 op KC14AR10085 (study unit)

Lecturers

Juhani Paananen, MSc (Eng.), MA

Objectives

Students will acquire basic knowledge in differential equations and commercial mathematics. Students will also use this knowledge in their Professional Studies with which they will gain competence in technical–mathematical matters.

Content

Differential equations and commercial mathematics

Literature / Study Material

- Antti Majaniemi: MATEMATIIKKA II: Differentiaali- ja integraalilaskentaa sekä differentiaaliyhtälöitä.
- Leila Karjalainen: OPTIMI: Matematiikkaa talouselämän ammattilaisille.

Learning Methods

Lectures, calculations and independent study.

Assessment Two mid-term exams or final exam and points from exercises

Prerequisites

- Algebra and Trigonometry
- Differential and Integral Calculus

Languages of Instruction Finnish

Statistics, 3 op KC14AR10086 (study unit)

Lecturers Juhani Paananen, MSc (Eng.), MA

Objectives

Students will acquire basic knowledge in statistics and the other areas associated with it. Students will also use this knowledge in their Professional Studies with which they will gain competence in technical-mathematical matters.

Content

- Basics of statistics, with emphasis on statistical methods
- Mathematical software
- Descriptive geometry

Literature / Study Material Antti Majaniemi: MATEMATIIKKA IV: Tilastot ja todennäköisyys

Learning Methods Lectures, calculations and independent study

Assessment Two mid-term exams or a final exam and points from calculations

Prerequisites

- Algebra
- Trigonometry

Languages of Instruction Finnish

Basics of physics, 4 op KC14AR10088 (study unit)

Lecturers

Katja Miettinen, MSc (Eng.)

Objectives

Students will acquire basic knowledge of physics for engineering. The course introduces a foundation for the comprehension of demanding technical information required in the Professional Studies and prepares the students for technical expertise in their profession.

Content

- Kinematics
- Newton's Law
- Work, power, energy, impulses
- Linear momentum
- Ritary movement
- Mechanics of states
- Basics of thermal physics
- Electrostatics
- Direct-current
- Basics in alternating current

Literature / Study Material

- Hautala, Peltonen: Insinöörin (AMK) Fysiikka osat I ja II. Lahden Teho-Opetus Oy.
- Lecture notes

Learning Methods Lectures and homework, calculations. 80 % attendance required.

Assessment Written course–end examination

Languages of Instruction Finnish

Wave and modern physics, 3 op KC14AR10089 (study unit)

Lecturers Miettinen Katja, MSc (Eng.)

Objectives

Students will acquire basic knowledge of the areas indicated in the Contents section, which will provide them with the skills they need in the working world.

Content

- Oscillatory motion
- Wave motion
- Acoustics
- Pptics
- Quantising radiation
- X–ray
- Lasers
- Nuclear physics

Literature / Study Material

- Hautala, Peltonen: Insinöörin (AMK) Fysiikka osa II. Lahden Teho-Opetus Oy.
- Lecture notes

Learning Methods Lectures, homework and calculations Assessment Written course–end examination

Prerequisites Basics of Physics

Languages of Instruction Finnish

Physics laboratory works, 3 op KC14AR10091 (study unit)

Lecturers Katja Miettinen, MSc (Eng.)

Objectives

The course provides students with basic knowledge of experimental measurements, processing and reporting results. Applications of experimental physics for various fields of engineering will be introduced.

Content

Laboratory experiments in different areas of physics

Literature / Study Material Instructions for physics assignments (Seinäjoki University of Applied Sciences, School of Engineering)

Learning Methods Laboratory exercises (minimum 90 % attendance required) and written reports

Assessment Reports and written examination based on exercises

Prerequisites Basics of Physics

Languages of Instruction Finnish

Basics of chemistry, 2 op KC14AR10192 (study unit)

Lecturers Latvala Jaana

Objectives The aim of the course is to provide students with basic knowledge of general and inorganic chemistry.

Content

- Atoms and chemical bonding
- Mass
- States of matter
- Chemical reaction equations
- Burning
- Acids and alkalines
- Electrochemistry
- Safety issues in chemistry

Literature / Study Material Lecturer's own material

Learning Methods Lectures, calculations, and assignment

Assessment Exam and assignment

Prerequisites Completed chemistry at the upper secondary school or vocational school level
Languages of Instruction Finnish

Office applications, 2 op KC14AR10203 (study unit)

Lecturers Seppo Salo

Objectives

Students will become familiar with the institution's more important computer programmes and systems intended for students, and they will be adept in using these programmes and systems. Upon completion of the course, students will understand IT terminology, the role IT plays in society and how they can apply IT to their own professional field.

Content

- Computer technology at the Seinäjoki University of Applied Sciences (Intranet, Study Register, online learning environment, and equipment used in the institution)
- Network services (e-mail and websites)
- Common applications (word processing, spreadsheets, graphics and mathematics software, and creating a webpage, etc.)

Literature / Study Material Lecturer's material

Learning Methods Lectures, exercises and independent study

Assessment Written examination and approved assignments

Languages of Instruction Finnish

Construction economics, 4 op KC14BR33021 (study unit)

Lecturers Ilkka Loukola, MSc (Eng.)

Objectives

Students will understand the principles of making offers and planning a building site. Upon completion of the course, students will know how to make a simple offer, plan a building site and make schedules.

Content

- Systems of nomenclature
- Bill of quantities and pricing
- Construction service costs
- Calculating offers
- Production planning
- Schedules
- General plans for a construction site
- Material procurement methods
- Economic planning
- Follow–up and control

Literature / Study Material Lecturer's material

Learning Methods Lectures and assignments

Assessment Approved assignments and final examination

Languages of Instruction Finnish and English, if necessary

Construction CAD, 4 op KC14AR10211 (study unit)

Lecturers

Marita Viljanmaa, MSc (Eng.)

Objectives

Students will acquire basic knowledge of computer-aided design in technical drawing for the field of construction, and they will be competent in creating building and structural drawings using the CAD system. Students will be familiar with the properties and differences between drawings and product models, and they will understand the norms involved in product modelling.

Content

- User interfaces and functions of CAD software
- Making master plans, blueprints and structural drawings
- Basics of modelling

Literature / Study Material

- CAD manuals and handouts
- Instructions for designing a product model

Learning Methods

Lectures, computer work, CAD assignments, and other exercises

Assessment Tests on the use of the software and approved assignments

Prerequisites

- Basics of Construction
- Building Construction

Languages of Instruction Finnish

Building materials, 3 op KC14BR20130 (study unit)

Lecturers Arto Saariaho, BSc (Eng.)

Objectives

Students will be familiar with construction materials, their properties, manufacturing methods, function and use.

Content

• Different building materials: wood, stone, bricks, ceramic tiles, mortars, light concrete, metals, plastics, insulation, damp proofing materials, fillers, paints, wall paper, and flooring.

Literature / Study Material

- RT files where applicable
- Lecturer's material

Learning Methods Lectures and seminars

Assessment Seminars and final examination

Languages of Instruction Finnish

Statics, 4 op KC14BR20141 (study unit)

Lecturers

Martti Perälä, LSc (Tech.)

Objectives

Students will be competent in handling force systems, solving force magnitudes using equilibrium equations, and determining stress patterns for common structures such as bars, beams, frames, and trusses.

Content

- Force resultant and components
- Torque
- Face centre
- Force moment in relation to the point and axel
- Free component pattern
- Support reactions of a structure
- Terms of balance for a structure
- Rope transmission
- Internal force magnitudes and strain patterns for bars, beams and frames.
- Statically determined bar forces for trusses
- Identifying a statically determined structure

Literature / Study Material

- Tapio Salmi: Statiikka. Pressus Oy: Tampere.
- Lecture's material

Learning Methods Lectures, calculations and homework

Assessment

Two interim examinations or final examination and approved homework

Prerequisites

- Vectors and Matrices
- Basics of Physics

Languages of Instruction Finnish

Strength of materials, 4 op KC14BR20161 (study unit)

Lecturers Martti Perälä, LSc (Tech.)

Objectives

Students will learn the fundamental concepts of strength of materials and of measuring simple structures such as bars and straight beams in situations of pulling, compressing, bending, twisting and buckling. They will know how to calculate tension and deformation in the structures in question.

Content

- Laws of material
- Axial, bending, shearing and torsional stresses
- Strain and displacement
- Elastic curve of a beam
- Buckling
- Principal tensions
- Comparative tensions
- Damage hypotheses
- Basics of elasticity and plasticity theories

Literature / Study Material

- Outinen et al.: Lujuusopin perusteet. Pressus Oy: Tampere
- Karhunen et al.: Lujuusoppi. Otatieto.
- Lecturer's material

Learning Methods Lectures, calculations and homework

Assessment Two interim examinations or final examination and approved homework

Prerequisites Statics

Languages of Instruction Finnish

Statically indeterminate frame structures, 4 op KC14BR20151 (study unit)

Lecturers Martti Perälä, LSc (Tech.)

Objectives

Students will be familiar with the statically indeterminate bar structures important in structural design and will be able to determinate their internal forces and deformations.

Content

- Internal forces and deformations of statically indeterminate bar structures
- Work and energy principles
- Unit load method
- General force method
- Moment and slope-deflection methods
- Calculation software

Literature / Study Material

- Loikkanen: Rakenteiden statiikka II
- Lecturer's material.

Learning Methods Lectures, calculations and homework

Assessment

Two interim examinations or final examination and approved homework

Prerequisites Statics

Languages of Instruction Finnish

Elementtimenetelmän perusteet (pakollinen vain suunnittelun valinneille), 3 op KC14BR10011 (study unit)

Lecturers Martti Perälä, LSc (Tech.)

Objectives

Students will understand the basics of the finite element method and will be able to use it in determining internal forces and displacements of bar structures.

Content

- Principles of the finite element method
- Beam, truss and frame elements
- Degrees of freedom
- Stiffness and load vectors.

- Nodal displacements and nodal forces
- Equilibrium equations for nodal forces
- Calculation of strain on bar structures
- Calculation software

Literature / Study Material Lecturer's material

Learning Methods Lectures, calculations and homework

Assessment

Two interim examinations or course-end examination and approved homework

Prerequisites

• Strength of Materials

Statically Indeterminate Bar Structures

Languages of Instruction Finnish

Sustainable development, 3 op KC14BR20045 (study unit)

Lecturers Jorma Tuomisto, MSc (Eng.)

Objectives

Students will gain comprehensive insight into environmental protection and the opportunities afforded by technology. They will understand the prerequisites for sustainable development and have a positive and responsible attitude toward environmental protection.

Content

- Climate, air quality, inland surface and ground water, soil, Baltic Sea and its environs
- Impact of humans on the environment, preventing negative impacts on the environment, purifying contaminated soil
- Sustainable development, clean technology, Act on Waste, sorting, handling and recycling waste and final disposal
- Environmental systems, environmental licenses, environmental administration, directive on chemicals and the European Chemical Agency

Literature / Study Material Lecturer's material

Learning Methods Lectures and assignment

Assessment Exam and assignment

Languages of Instruction Finnish or English, if necessary

Further Information jorma.tuomisto@seamk.fi

Basics of construction, 3 op KC14BR20093 (study unit)

Lecturers Jorma Tuomisto, MSc (Eng.)

Objectives

Students will acquire knowledge of building projects and implementation, construction–related terminology, and they will be competent in finding information from various sources. Students will be familiar with the markings on various drawings, the principles of materials technology for concrete and the areas where concrete can be used. They will also be

familiar with the machines used on construction sites and how they work.

Content

- Parties and phases in a construction agreement
- Applying for a building permit and building inspections
- Area and volume of a building
- Technical aspects of a building and terminology for the building elements
- Sources of information for the field of construction
- Drawing practices, markings, master plans, blueprints, and detail drawings
- Ways of presenting construction and structural drawings, types of drawings, text, measurements
- Raw materials for concrete, composition of concrete and basic properties of the material when it is fresh and hardened, areas where concrete can be used, general qualifications
- Hoisting and transfer machines, earth construction machines, scaffolding and hoist frames, general construction equipment pumps and conveyors,
- Finding information about machines
- Safety issues

Literature / Study Material

- RT files in part
- National Building Code of Finland A2: Construction plans
- RT files, RT-15: Construction drawings and explanations
- Suomalainen sementti -opas
- RT-konetietokortisto
- RIL 88: Construction machines
- Lecturer's material

Learning Methods Lectures, homework and assignments

Assessment Approved assignments and final examination

Languages of Instruction Finnish

Chemistry of building materials, 2 op KC14BR20051 (study unit)

Lecturers Jaana Latvala

Objectives

Students will become familiar with the chemical structures and bahaviour of various types of metals and polymers.

Content

- Metals and their chemical behaviour, e.g. hardening and corrosion
- Chemical structure of polymers, e.g. wood and plastic
- Practical applications of polymers, i.e. gluing
- Common solvent substances

Literature / Study Material Lecturer's material

Learning Methods Lectures, exercises

Assessment Approved exercises and final examination

Prerequisites Basics of Chemistry

Languages of Instruction Finnish

Concrete technology, 3 op KC14BR20101 (study unit)

Lecturers

Jorma Tuomisto, MSc (Eng.)

Objectives

Students will learn how to prepare concrete and know the basics of concrete elements and additives, mixing, transportation and laying of concrete. They will possess basic skills in supervising work and in quality control. They will also be familiar with various production techniques.

Content

- Proportioning techniques and recipes
- Command of the properties of mass
- Production and transportation tecniques
- Moulds and reinforcements
- Techniques for laying concrete and after-treatment
- Managing the conditions on the building site during different seasons of the year
- Monitoring the development of strength
- Methods of quality control and their properties
- Categorizing environmental conditions
- Qualifications of materials and workers

Literature / Study Material

- Betonitekniikan oppikirja by201–2004 or later edition
- Betoninormit by50–2004 or later edition
- Excel
- Lecturer's material

Learning Methods Lectures, calculations and laboratory work

Assessment Mid-term exams or final exam and assignments

Prerequisites Basics of Construction

Languages of Instruction Finnish

Framework systems and basics of structural design, 4 op KC14BR20113 (study unit)

Lecturers Marita Viljanmaa, MSc (Eng.)

Objectives

Students will acquire knowledge about framework systems in housing construction, their functional principles and selection criteria. They will also be familiar with the duties of structural designers and know how to determine the application of loads on structures.

Content

- Framework systems
- Requirements for construction frameworks
- Load shifting, stiffening of a frame, and selection criteria.
- Burden on structures
- Calculations for structures

Literature / Study Material

- RIL 229–1–2006 ja 229–2–2006: Rakennesuunnittelun asiakirjaohje sekä mallipiirustukset ja –laskelmat
- Eurocodes
- Lecturer's material

Learning Methods Lectures and exercises

Assessment Final examination and approved exercises

Prerequisites Basics of Construction Engineering

Languages of Instruction Finnish

Geotechnics and foundation engineering, 4 op KC14BR20173 (study unit)

Lecturers Martti Kaunismäki

Objectives

Students will be familiar with the properties and behaviour of soil and bedrock and their suitability as foundation for building. They will also be familiar with foundation construction as part of the overall construction project, basics of foundation planning and the most common foundation construction methods.

Content

- Formation of subsoil and bedrock, construction geology and geotechnics, recognition of different types of earth
- Geotechnical properties of soil types, load-bearing capacity of the ground, strength and compression capacity
- Earth pressure and ground surveys
- Foundation design, methods of creating foundations and making foundations, drying, frost protection, strenthening the ground

Literature / Study Material

- Rantamäki, Jääskeläinen, Tammirinne: Geotekniikka ja Pohjarakennus
- RIL 121: Pohjarakennusohjeet
- RIL 132: Talonrakennuksen maarakenteet
- RIL 207: Geotekninen suunnittelu, Euronormi
- LPO-87: Lyöntipaalutusohjeet
- Lecturer's material

Learning Methods Lectures, laboratory work and exercises

Assessment Approved laboratory work and calculations, interim examinations or final examination

Prerequisites Building Construction Technology

Languages of Instruction Finnish

Measuring techniques, 3 op KC14BR20181 (study unit)

Lecturers Jouni Mäenpää, BSc (Eng.)

Objectives

Students will be familiar with geodetic surveying equipment, planning and realisation of site surveying. Student knows basics of surveying and real estate techniques and basic geodetic calculation exercises. Upon completion fo the course, students will be competent in making necessary measurements on building sites and in doing related calculations.

Content

- Measurement of distances, angles and elevation differences
- Surveying
- Control point surveying

• Stationary measurements

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, measurement exercises and calculation exercises

Assessment Approved measurements and calculations and exam

Languages of Instruction Finnish

Urban planning, 2 op KC14BR20191 (study unit)

Lecturers Ilkka Loukola, MSc (Eng.)

Objectives

Students will be familiar with the zoning system and zones. Upon completion of the course, students will be aware of the various phases involved in zoning and know how to read zoning documents.

Content

- Regional plans
- Master plans
- City plans
- Building codes
- Markings on various plans
- Plot subdivision
- Street engineering plans

Literature / Study Material Land Use and Building Act and Decree, regulations for and markings on plans

Learning Methods Lectures and exercises

Assessment Exercise and final examination

Languages of Instruction Finnish

HVAC technology, 3 op KC14BR20201 (study unit)

Lecturers Arto Martikkala, BSc (Eng.)

Objectives

Students will be familiar with the HVAC systems and how they function. Upon completion of the course, students will be familiar with the regulations and norms associated with HVAC systems, and HVAC work in different phases of planning and construction.

Content

- Heating, water, drainage and air conditioning systems and how they function
- Field–related regulations and standards
- HVAC work in different phases of planning and construction

Literature / Study Material

- Miettinen, J.: Rakennusten LVIS-automaatio
- RakMK D1–D7
- Lecturer's material

Learning Methods Lectures and exercises

Assessment Approved exercises and final examination

Languages of Instruction Finnish

Electrical and automation engineering, 2 op KC14BR20212 (study unit)

Lecturers Veli–Jukka Uitto, MSc (Eng.)

Objectives

Students will gain basic knowledge of electrical and automation installations and their functions in buildings. Upon completion of the course, students will have command of planning electrical work in the various phases of construction. They will also have basic knowledge of building automation systems.

Content

- Electrical systems in buildings and how they work
- Regulations and norms
- Electrical installations in a building and building automation systems

Literature / Study Material To be announced.

Learning Methods Lectures and exercises

Assessment Approved exercises and final examination

Languages of Instruction Finnish

Talotekniset asennukset (pakollinen vain tuotantotekniikan valinneille), 3 op KC14BR20214 (study unit)

Objectives

Students will be competent in interpreting technical drawings for buildings. They will be knowledgeable of costs and be conscious of the requirements of technical installations on building sites.

Content

- Markings in technical
- Costs of technical installations in buildings
- Consideration of technical installations on the building site

Literature / Study Material Lecture's material

Learning Methods Lectures and excercises

Assessment Excercises and final examination

Prerequisites

- HEPAC Technology
- Electrical and Automation Engineering

Languages of Instruction Finnish

Entrepreneurship module, 15 op KC14BR10 (study entity)

The objective of the Entrepreneurship Module is to provide students with knowledge of personnel and project management, labour legislation and entrepreneurship.

Human resources management, 4 op KC14BR20031 (study unit)

Lecturers Loukola Ilkka, MSc (Eng.)

Objectives

Students will be familiar with the principles for managing people and issues. Upon completion of the course, students will understand various organisation models, management styles, and various methods of creativity.

Content

- Organisations
- Management skills and different types of management styles
- Basics of occupational psychology and personnel management
- Assessment of students' manager profile and creativity

Literature / Study Material To be announced.

Learning Methods Lectures and assignments

Assessment Participation in lectures and exam

Languages of Instruction Finnish

Project management, 4 op KC14BR33051 (study unit)

Lecturers Ilkka Loukola, MSc (Eng.)

Objectives

Students will gain insight into how construction projects progress and issues associated with construction contracts. Upon completion of the course, students will have command of project planning, know how to compile a contract and construction–related documents.

Content

- Participating parties in a construction project
- Project planning, initial plans, construction planning, preparation, phases, agreements for the various construction phases
- General terms of agreement (YSE 1998)
- Meetings and associated documents
- Duties of the chief planner
- Basics of real-estate transactions
- General terms of purchase and delivery for construction products (RYHT 2000)

Literature / Study Material

- Kankainen et al: Rakennuttaminen
- Lecturer's handouts

Learning Methods Lectures and exercises

Assessment Approved final examination and assignments Languages of Instruction Finnish

Business economics, 4 op KC14BR33011 (study unit)

Lecturers

Marita Viljanmaa, MSc (Eng.)

Objectives

Students will be familiar with the principles of business operations. Upon completion of the course, students will be able to establish their own company, understand the operations therein, know how to compile a budget for a novice company, make investment calculations, understand items and interpret financial statements.

Content

- Selection of form of business
- Establishing an enterprise
- Business operations: production, financial administration and marketing
- Internal accounting, taxation and financing
- Items and financial statements

Literature / Study Material Lecturer's material

Learning Methods Lectures and exercises

Assessment Approved assignment and final examination

Languages of Instruction Finnish

Cost planning, 3 op KC14CR43051 (study unit)

Lecturers Ilkka Loukola, MSc (Eng.)

Objectives

Students will understand the significance of cost control in carrying out a construction project. Upon completion of the course, students will be competent in calculating the target costs and scope of a project and estimate the building elements. They will also know how to manage the cost control of a project.

Content

- Calculating target costs
- Calculating the scope of a project
- Estimating building elements
- TAKU computer program
- Cost control

Literature / Study Material

- Information about the cost of building a house
- Lecturer's material

Learning Methods Lectures and exercises

Assessment Approved assignments and final examination

Languages of Instruction Finnish

Building construction module, 15 op KC14BR45 (study entity)

The objective of the Building Construction Module is to provide students with knowledge of building construction, new construction, structural physics and the designing of buildings.

Building construction, 4 op KC14BR31012 (study unit)

Lecturers Ilkka Loukola, MSc (Eng.)

Objectives

Students will be familiar with the various structural-technical components of a building, the structure and material alternatives used for them, how they work and their technical properties.

Content

- Foundations: filling, drainage and frost insulation of foundations and the site, and surface structures
- Foundation and base floor structures
- Framework structures: wood, concrete, masonry and steel frameworks
- Complementary structures: non-load bearing structures, windows, doors, fittings, roof and facade structures
- Special buildings, e.g. air-raid shelters, etc.

Literature / Study Material

- RT files
- National Building Code of Finland, RakMk
- Lecturer's material

Learning Methods Lectures and exercises

Assessment Approved exercises and final examination

Prerequisites Basics of Construction Engineering

Languages of Instruction Finnish

Renovation, 4 op KC14BR31021 (study unit)

Lecturers Marita Viljanmaa, MSc (Eng.)

Objectives

Students will be familiar with the different stages and organisation of a renovation project, damage phenomena of the more common building materials, and renovation methods for fixing damages.

Content

- Reasons for renovation, development of structures
- Initiation and planning of a renovation project.
- Stress and damage of different building materials
- Demolition
- Typical damage to foundations, frames and cladding structures, causes and renovation methods
- Renovation of various types of facilities

Literature / Study Material

- Kaivonen: Rakennusten korjaustekniikka ja talous
- Lecturer's material

Learning Methods Lectures and exercises Assessment Approved exercises and final examination

Prerequisites Building Construction Technology

Languages of Instruction Finnish

Construction physics, 5 op KC14BR31031 (study unit)

Lecturers Marita Viljanmaa, MSc (Eng.)

Objectives

Students will be familiar with the structural physics of various structures, and they will acquire the basic knowledge and skills needed in designing structures, building components, new constructions and conservation sites that function correctly as regards their structural physics. Upon completion of the course, students will possess the qualifications in structural physics required for structural engineers as stated in the RakMK A2, once they have acquired two years of designing experience.

Content

- Fundamentals of structural physics
- Air pressure and ventilation on buildings
- Transfer of heat and moisture
- Drying of building elements
- Sound insulation
- Indoor air and atmosphere in a building
- Desiging heating, moisture and sound insulation and associated structural solutions
- Structural-physical measurements

Literature / Study Material

- Rafnet learning material
- RakMK C1-C5
- RT files in part
- Software and associated manuals

Learning Methods

Lectures, exercises and structural-physical measurements

Assessment

Two interim tests or final examination and assignments

Prerequisites

- Main parts of Physics completed
- Basics in Construction

Languages of Instruction Finnish

Structural design, 2 op KC14BR31041 (study unit)

Lecturers Architect Juhani Lahti

Objectives

Students will be introduced to the basics of construction planning and related instructions.

Content

- Regulations and instructions related to planning
- Comparison of different plans and their function and implementation
- Building permission authorities, building rights, significance of urban planning

• Initial plans and space utilisation and planning on a house

Literature / Study Material

- RT files in part
- Lecturer's material

Learning Methods Lectures and exercises

Assessment Approved exercises and final examination

Prerequisites Urban Planning

Languages of Instruction Finnish

Structural engineering module, 15 op KC14BR50 (study entity)

The objective of the Structural Engineering Module is to provide students with basic readiness for the structural design of steel, wood, concrete and masonry structures with focus on the requirements of production and manufacturing technology. It should be noted that these studies are conducted according to the practices for designing as stated in the Eurocodes.

Concrete structures and masonry structures 1, 5 op KC14BR32012 (study unit)

Lecturers Martti Perälä, LSc (Tech.)

Objectives

Students will be competent in measuring plain and reinforced concrete and mansonary structures and understand how they react in various situations burden. Students learn to use information technology in concrete structure design.

Content

- Classification and documentation of concrete structures
- Basics of planning: strength of materials, strain categories, burden and force quantities
- Measurement of failure limit for beams, tiles, columns, walls, and footings
- Anchoring of reinforced structures and extensions, local pressure
- Service limit state report
- Structural instructions: reinforcement and structural parts
- Reinforcement drawings
- Principles of measuring masonry structures
- Designing software

Literature / Study Material

- Eurocodes on concrete and masonry structures and planning
- National application documents in part
- Lecturer's material

Learning Methods

Lectures, calculations and designing assignments, structural tests in the laboratory

Assessment

Approved designs, calculations and structural tests, interim examinations or final examination

Prerequisites

- Concrete Technology
- Statics
- Strength of Materials
- Framework Systems
- Basics of Structural Design

Languages of Instruction Finnish

Timber structures 1, 5 op KC14BR32022 (study unit)

Lecturers Heikki Ylihärsilä, LSc (Tech.)

Objectives

Students will be capable of independently planning and measuring common reinforcing wood structures. They will be able to determine the static model of a structure and its associated strains. They will also be competent in forming loading combinations, ultimate limit states and service limit states according to Euronorms. Students will understand the special properties of wood and consider them when measuring load–bearing wood structures. The course is a part of the theoretical training required of structural engineers in the A competence classification for wood structures.

Content

- Material properties
- Principles of structural engineering for load-bearing wood structures
- Model for static structures and strains
- Massive beams and columns, glued thin-web beams, ridge beams, lean-to girders, wood tresses
- Measurements at the ultimate limit state for bending, shearing and normal force, as well as for combined strains
 Fire design
- Service limit states for bending and vibration
- Utilising software in designing and measuring wood structures

Literature / Study Material

- Euronorms for wood structures and national application documents in part
- Lecturer's material
 Manuals for design
 - Manuals for designing and measuring programmes

Learning Methods

Lectures, design assignments, and structural strain testing

Assessment

- Two mid-term exams, design assignments and strain testing
- Grading: exam (50 %), design assignments and strain testing (50 %), both parts must receive a passing grade to complete the course

Prerequisites

- Framed Systems
- Basics of Structural Engineering
- Basics of Materials
- Statics
- Strength of Materials

Steel structures 1, 5 op KC14BR32032 (study unit)

Lecturers

Martti Perälä, LSc (Tech.)

Objectives

Students will be competent in independently planning and measuring ordinary load-bearing steel structures. They will know how to determine the static model of a structure, including strains, and to form load combinations, ultimate limit states and service limit states according to the Eurocodes. The course is a part of the training required of structural designers for the A classification category of steel structures. Essential areas of expertise:

- Steel as a building material: the more significant properties in construction
- Cross section categories and what they mean
- Measuring a bent structure: bending capacity of a cross section
- Measuring a pressed and bent structure
- Designing a tubular girder truss
- Measuring a single frame

• Designing a hall

Content

- Steel and a building material
- Basics of structural design
- Measuring structural components: pulled structures and bent structures (beams), pressed and bent structures (columns)
- Tubular girder trusses
- Frames
- Stiffening of structures
- Principles of fire design
- Fire protection
- Protection against corrosion
- Production and installation
- Quality assurance
- Utilising software in designing and measuring steel structures

Literature / Study Material

- Eurocodes and national documents concerning steel structures
- Manuals for design and measurement programmes
- TRY: Teräsrakenne Oppimisympäristö (CD-ROM)
- Hitsatut profiilit käsikirja (online publication)
- ESDEP material (online publication)
- Suositeltavat runkorakennedetaljit (online publication
- Teräsrakennetuotteet ja suositeltavat teräslajit (online publication
- SSEDTA Teräs-ja liittorakenteiden suunnittelun koulutuspaketti (online publication)
- Teräs pohja- ja maarakentamisessa (online publication)
- Käsikirja-Ruostumattomien terästen käyttö kantavissa rakenteissa
- Stainless SteelCal (online material)
- Measurement programmes for steel and composite construction
- Teräskirja/Metallinjalostajat ry
- Rautaruukin putkipalkkikäsikirja/Rautaruukki

Learning Methods

Lectures, designing, and test loads for structures

Assessment

- Two mid-term exams, designs and tests loads
- Grading: exam (50 %), designs and testing (50 %), both parts must receive a passing grade to complete the course

Prerequisites

- Structural Systems
- Basics of Structural Design
- Materials Studies
- Statics
- Strength of Materials

Languages of Instruction Finnish

Building construction, production module, 20 op KC14CR53 (study entity)

The objective of the Housing Construction Technology and Production Module is to advance students' knowledge of the production of wood and concrete structural elements, log structures, steel structures and other prefabricated elements. Students will also expand their knowledge of planning and managing construction sites. The module forms a foundation for working in a construction company or as a builder.

Site engineering, 3 op KC14CR43011 (study unit)

Lecturers Ilkka Loukola, MSc (Eng.)

Objectives

Students will be familiar with the issues pertaining to the running of a building site. Upon completion of the course, students will be competent in compiling schedules, and planning resources using a computer. They will also know how to calculate the costs of the technology needed on a building site.

Content

- Costs of technology on a building site
- Building site plan
- Job–specific planning
- Planning procedures
- Heating, plumbing, ventilation and electric work
- Time management and planning costs
- Project management software

Literature / Study Material

- Hannu Järvinen: Vastaavan työnjohtajan tarkastusluettelo
- Juha-Antti Kaivonen: Rakennusten korjaustekniikka ja talous (parts)
- Lecturer's material

Learning Methods Lectures and exercises

Assessment Approved exercises and final examination

Prerequisites Construction Economics

Languages of Instruction Finnish

Prefabrication production, 2 op KC14CR43021 (study unit)

Lecturers Arto Saariaho, BSc (Eng.)

Objectives

Students will be familiar with the principles of the production of recast concrete. Upon completion of the course, students will be aware of the factors involved in the production and installation of precast concrete. They will also be familiar with the principles of producing concrete and wood elements.

Content

- Factory production of wood and precast concrete houses
- Issues to consider in the design and production of precast concrete

Literature / Study Material

- Eero Laitinen: Teollinen betonirakentaminen
- Lecturer's material

Learning Methods Lectures and exercises

Assessment Approved exercises and final examination

Languages of Instruction Finnish

Workshop technology, 3 op KC14CR43062 (study unit)

Lecturers Kari Saaranen and Timo Rinnasto

Objectives

Students will be familiar with workshop production and related drawings. Upon completion of the course, students will be competent in making and interpreting production drawings for steel construction. They will have knowledge of the principles of workshop production and quality control.

Content

- Blueprints
- Production drawings and documents
- Manufacture of steel structures
- Welding methods
- Quality control
- Surface treatment techniques and transportation

Literature / Study Material To be announced during lectures.

Learning Methods Lectures, exercises

Assessment Approved assignments and final examination

Languages of Instruction Finnish

Log construction, 2 op KC14CR43041 (study unit)

Lecturers Juhani Saukko, BSc (Eng.)

Objectives

Students will be familiar with the principles of building with logs. Upon completion of the course, students will be competent in designing log buildings. They will be familiar with the principles of log production. Students will be conscious of the changes in shape of log structures when designing and building.

Content

- Common log production and working methods
- Other structures associated with logs
- Basic principles of log building design
- Structural functions and erection

Literature / Study Material To be announced during lectures.

Learning Methods Lectures and exercises

Assessment Approved assignments and final examination

Languages of Instruction

- Finnish
- English, if necessary

Construction quality, 2 op KC14BR33031 (study unit)

Lecturers Ilkka Loukola, MSc (Eng.)

Objectives

Students will be familiar with quality control systems and know how to apply them to construction projects. Upon completion of the course, students will understand the content of a construction company's quality control system, know how to compile a quality control plan for a building site and for a particular task.

Content

- ISO 9000 quality control standards
- Quality control methods in industry and construction companies
- Task-based and contruction site-based quality control plans

Literature / Study Material

- Jouko Kankainen, Juho-Matti Junnonen: Laatuajattelu ja rakennustyömaan laatutoiminnot
- Lecturer's material

Learning Methods Lectures and exercises, seminars

Assessment Seminars, assignments and examination

Prerequisites Construction Economics

Languages of Instruction Finnish

Työlainsäädäntö ja työsuojelu, 3 op KC14CR43032 (study unit)

Lecturers Ilkka Loukola, MSc (Eng.)

Objectives

Students will become familiar with labour legislation and the principles of collective labour agreements. Upon completion of the course, students will have command of the labour legislation necessary in the working world. They will be competent in interpreting employee contracts in the field of construction and have knowledge of the requirements on building sites set forth by occupational safety laws.

Content

- Employment Contracts Act
- Working Hours Act
- Annual Holidays Act
- Field-related collective labour agreements
- Occupational safety

Literature / Study Material

- Collective agreement in the construction field
- Lecturer's material

Learning Methods Lectures and exercises

Assessment Final examination, occupational safety card

Languages of Instruction Finnish

Tender calculation, 5 op KC14CR43034 (study unit)

Lecturers Ilkka Loukola, MSc (Eng.)

Objectives Students will be competent in making offers and invitations to tender.

Content

- Tenders based on a system of nomenclature
- Bill of quantity and pricing
- Management and running costs of a site
- Schedules
- General plans for a site
- Tender calculation

Literature / Study Material Lecturer's material

Learning Methods Practical work

Assessment Practical work

Prerequisites Construction Economics

Languages of Instruction Finnish

Module of project studies, production, 15 op KC14CR63 (study entity)

The objective of the project studies in Housing Construction and Production Technology is to provide students with the knowledge and skills needed to work in various project and work management duties and in duties pertaining to offer calculations and cost estimates. The project studies also develop students' creative problem–solving and data gathering skills and their ability to apply their knowledge. Students will also learn social and communicative skills. Students complete their project studies independently in building companies or corporations. Often students are employed by the organisation while working on the project. Projects on building sites are recommended. Additionally, students may participate in other projects (elective) in the construction of a new building or building renovation, such as:

- Construction site
- Tender calculation project
- Steel building site
- Log building site
- Precast concrete plant
- Workshop
- Cost planning
- Contracting
- Research and product development

The credits acquired depend on the extent of the project and are approved on a case-by-case basis.

Building construction, design module, 20 op KC14CR73 (study entity)

The Housing Construction Design Module involves advancing students' skills in structural design according to the norms set forth in the Eurocodes. Students will utilise software in their structural designing tasks. The Structural Engineering Module and the Housing Construction Design Module provide students with knowledge and skills to make measurements of building structures either independently or as a member of a team.

Concrete structures 2, 3 op KC14CR41011 (study unit)

Lecturers Perälä Martti, LSc (Tech.)

Objectives Students will gain advanced knowledge of the structural design of concrete structures.

Content

- Measuring column footings, cross-bearing slabs, flat-slab floors, fundaments, and ground slabs
- Flow line theory of slabs
- Design and functions of strained concrete structures
- Concrete element structures

Literature / Study Material

- Eurocodes on designing concrete structures
- National documents of application in part
- Lecturer's material

Learning Methods Lectures, calculations and design exercises

Assessment Approved designs and calculations, examination.

Prerequisites Concrete and Mansonry Structures I

Languages of Instruction Finnish

Steel structures 2, 3 op KC14CR41031 (study unit)

Lecturers Martti Perälä, LSc (Tech.)

Objectives

Upon completion of the course, students will be competent in measuring screw joints and weld joints independently. They will be familiar with the principles of plasticity and know how to apply that knowledge to calculating cross-sectional capacity and determining the strain of simple structures. The course is part of the theoretical training required of structural engineers for the A classification category of steel structures. Areas of emphasis include strain on joints, cutting durability of screws, edge pressure durability, fracturing durability, durability of weld joints, and the principles of plasticity.

Content

- Screws, nuts, washers
- Statically burdened joints
- Categorisation of joints based on stiffness and strength
- Durability of screw joints
- Durability of a fillet weld based on stress components and simplified method
- Influence of the length of a joint on durability
- Welding marks
- Welding categories
- Durability of weld joints
- Degree of utilisation of a weld
- Joint applications
- Beam-column joints
- Beam extensions and joints on crossing beams
- Column extensions
- Joining columns to foundation
- Extension of a truss to a flange
- Joining a truss to a column
- Joining bindings
- Principles of plasticity
- Use of software in measuring joints

Literature / Study Material See the Steel Structures I course.

Learning Methods Lectures, design exercises and test loading of joints

Assessment Approved designs and testing

Prerequisites Steel Structures I Languages of Instruction Finnish

Timber structures 2, 3 op KC14CR41021 (study unit)

Lecturers Arto Saariaho, BSc (Eng.)

Objectives

Upon completion of the course, students will be competent in independently measuring the joints of wood structures with mechanical couplings, and they will be familiar with the principles of measuring heavy–duty wood structures. The course is part of the training required of structural engineers for the A classification category of wood structures.

Content

- Joints of wood structures
- Joints assembled with mechanic couplings: nailed, screwed, bolted and pegged couplings
- Measuring nail board joints
- Heavy-duty wood structures
- Use of software in measuring joints

Literature / Study Material

- Eurocodes and national documents pertaining to wood structures in part
- Lecturer's material
- Manuals for design and measurement software

Learning Methods

Lectures, calculations and design exercises, test loading of structures

Assessment Approved designs, calculations, and testing

Prerequisites Wood Structures I

Languages of Instruction Finnish

Composite structures, 3 op KC14CR41041 (study unit)

Lecturers Martti Perälä, LSc (Tech.)

Objectives Students will be competent in measuring common steel–concrete composite structures.

Content

- Areas where composite structures (columns, beams, slabs) can be used
- How composite structures work and measurment
- Familiarisation with measurement programmes

Literature / Study Material

- Eurocodes pertaining to composite structures
- Lecturer's material.

Learning Methods Lectures, calculations and design exercises

Assessment Approved designs and calculations, final examination

Prerequisites

- Concrete Structures I
- Steel Structures I

Languages of Instruction Finnish

Computer aided constructional design, 3 op KC14CR41051 (study unit)

Lecturers

Martti Perälä and Timo Rinnasto

Objectives

Students will be competent in using the Tekla Structures and Robot Millenium design programs to analyse and measure structures and structural components.

Content

• Introduction and use of software for structural design

Literature / Study Material Programmes and manuals

Learning Methods Hands–on computer exercises

Assessment Approved test and assignments

Prerequisites Basic courses in structural design

Languages of Instruction Finnish

Kantavan rungon suunnittelu, 5 op KC14CR41052 (study unit)

Lecturers Heikki Ylihärsilä, LSc (Tech.)

Objectives

Students will be introduced to the structural design process of the load-bearing frames in a building.

Content

- Using drawings of an architect, students will select building material and design a load-bearing frame for a building
- Loads on the frame and the static model of the frame, special emphasis on the stiffness of the frame
- Making structural calculations of the frame's components
- Structure types and their structural physics (moisture, heat, sound)
- Structural drawings

Literature / Study Material Previous study material and additional material

Learning Methods Learning by doing independently and in a group

Assessment Based on the design assignment

Prerequisites

- Basis of Structural Design
- Frame Structures
- StaticsStrength of Materials

- Building Physics
- · Courses in measuring various materials

Languages of Instruction Finnish

Module of project studies, design, 15 op KC14CR83 (study entity)

The objective of the Project Studies in Structural Design Module is to provide students with the knowledge and skills they need to plan structural design projects as a member of a team. The project studies also develop students' creative problem–solving and data gathering skills and to apply their knowledge. Students will also learn social and communicative skills. Students complete their project studies independently in building companies or corporations. The project may be related to new construction or building renovation, such as:

- Residential buildings
- Industrial buildings
- Public buildings
- Office/business buildings
- R&D project

The credits acquired from the project vary according to its exent and they are approved on a case-by-case basis. It is advisable to take part in two projects, one which is more extensive and one less extensive. Structural Engineering Project Lecturer: Heikki Ylihärsilä, LSc (Tech.) Objectives: Development of students' skills in structural design, team work, creativity, problem solving, and obtaining information, communication and working with others, and to prepare students for the working world. Content: Practical structural design of new buildings or buildings being renovated and/or research and product development Learning methods and assessment: Project Studies are completed with independently or as part of a team in a company or other organisation. Assessment: Seminar on the project and its presentation and achievement of the project objectives. Literature: Information gathered as required by the project. Prerequisites: Structural Engineering Module, Housing Construction Design Module

FREE CHOICE STUDIES, 10 op KC14DR100 (study entity)

Students who choose the Construction Engineering Planning Module are also advised to take courses in the Production Technology in Construction Engineering Module, and students who choose the Construction Technology Module are advised to take courses in planning. Students may select course from those offered at Seinäjoki University of Applied Sciences or other educational institutions of the same or higher level.

FINAL THESIS, 15 op KC14FR70 (study entity)

Language: Finnish, English or as agreed. Course objectives and content: The aim of the final thesis is to prepare students for their future career by having them prepare a written study on a topic agreed upon with their advisor. Students are expected to be able to combine the theory acquired while studying with new information to produce a consistent scientific study with practical emphasis, and solve any problems that may arise in the study. Learning methods and assessment: According to the guidelines at the Seinäjoki University of Applied Sciences, a written study, seminars and the Maturity Test. Literature: All available material in any form

Degree Programme in Cultural Management (In Finnish)

Head of degree programme: Mr Jussi Kareinen, 040 830 4193, jussi.kareinen@seamk.fi Guidance counsellor: Ms Tuija Huusko, 040 830 4227, tuija.huusko@seamk.fi ECTS/International affairs co-ordinator: Ms Eija Pennanen, 040 830 4272, eija.pennanen@seamk.fi

Degree, degree title, and acquired qualifications

Bachelor of Arts, Cultural Manager (UAS)

Entrance requirements

See the Applicant's Guide

General description of the degree programme

Cultural managers work in the public, private and third sectors in various administrative duties. These duties call for skills in project management, excellent skills in communication, and an understanding of the earnings principles. The programme provides students with an overall understanding of the fields of culture and media and with the professional readiness needed to work in demanding duties requiring expertise, e.g. in large events or film production.

For the most part, the programme is carried out in Frami: Seinäjoki Centre for Technology, but some courses take place in Rytmikorjaamo, a local centre of expertise for rhythm music where the Cultural Management department has learning facilities. In addition to the physical learning environments, the department has its own web–TV learning environment called "Kulttuubi" where students may do their compulsory practical training, for example.

Track alternatives

The Music-based Socio-cultural Work Track (next admission in spring 2009) demands close co-operation with other actors involved. The track provides students with qualifications to work in the youth, cultural, social and recreational sectors as counsellors or project managers. Students will also acquire readiness to work in responsible positions in organising music events.

The Media Production Track is similar to studies in communications in other universities of applied sciences. Students who graduate from Seinäjoki UAS's Media Production Track will possess qualifications to work in production companies, as entrepreneurs, the public service media or as production managers.

Learning objectives

Studies in the Music-based Socio-cultural Work Track train students to become modern experts in culture and collaboration. Focus is the programme is placed on finding various ways to create music, which promote community and empowerment. The track provides students with the readiness they need to work as directors of development projects for residencies, e.g. development projects in villages. Students also learn how to organise music events and working as producers of such events.

Studies in the Media Production Track train students to analyse, plan, develop, and initiate media productions in which electronic media is utilised. Upon completion of the track, students will be familiar with the possibilities and limitations of various media elements. They will possess the knowledge and skills needed to create profitable productions from those elements.

Competences acquired in the programme

Degree Programme in Cultural Production, Cultural Manager

Familiarisation with the cultural environment

- Current trends in culture and the arts and their historical background
- Cultural phenomena and one's relationship to them
- Field of culture as a profession, and keeping up with its development through the media, research and current discussion
- Structures of cultural administration and politics and working in those areas
- Forms of activity in the public, third, business and entrepreneurial sectors and the paths of development for the future
- Analysing and developing one's professional identity as a producer

Business skills in cultural production

- Financial planning, budgeting and monitoring financial activities and related legislation
- Planning and initiating the funding of a cultural product
- Marketing and advertising from the perspective of cultural production
- Commercially profitable process of productization in the field of the arts

Management of the production process

- Creation of various networks of partners and organising and managing production processes in the arts
- Stages in project planning and final execution of projects in the field of the arts
- Legislation pertaining to cultural production and application of them in production activities
- Skills in communications and media
- Presentation, production and media technology and application to production activities
- Various stages in the research and development of the production process

Teaching methods and learning

Learning in the Cultural Management programme is based on project learning in which teaching is integrated into working–world situations as early as the first year of studies. Single courses are made a part of larger productions. The teachers function as mentors to their students as they plan their career path throughout the entire time they study.

Teaching involves the use of a diverse range of teaching methods, which support students' professional development, readiness for the working world and professional expertise. Studying involves work in small groups, lectures by experts in the field, visits to various companies, assignments, projects, and practice in real working environments.

Qualifications for post-graduate studies

Students may apply to complete their master's degree in the field of Cultural Management (See act 351/2003 pertaining to universities of applied sciences).

Structure of the programme

The programme's Basic Studies focus on the foundations of production, languages and developing communicative skills. This part of the programme is compulsory for all students regardless of the track they have chosen to study.

The Professional Studies in Media Production focus on media technology, project management, skills in production and content.

The Professional Studies in Music-based Socio-cultural Work focus on the theoretical framework of socio-cultural work, methods of creative expression and organisation of music events.

Students are required to complete practical training (45 credits), elective studies (15 cr) and a final thesis (15 cr). The programme has excellent international networks, which offers students splendid opportunities to study or work abroad.

Regulations pertaining to performance and assessment

Regulations pertaining to the operations in universities of applied sciences

Degree Programme in Cultural Management (In Finnish), 240 cr (1.9.2008) KUTU 2008METU

Code	ame	St	udy	y Year		CR
		1.	2.	3.	4.	
KH13APE	GENERAL STUDIES					42
KH13APE1550	Information technology					4
KH13APE1551	Information technology 1	Х				2
KH13APE1552	Information technology 2				х	2
KH13APE1342	Professional growth	Х				5
KH13APE1410	Native language and communication	х				5
KH13SMV2550	Introduction to group work	X				3
KH13PHP1050	Customer service		х			3
KH13PHT0300	Cultural policy			х		3
KH13PHP0200	Introduction to project management	х				3
KH13PHT0050	Introduction to information and publicity	x				3
KH13PHP1150	Introduction to marketing		x			4
KH13MLK1130	Entrepreneurship				x	3
КН1ЗАРЕКО	Language studies					6
KH13APE0541	English	x				3
KH13APE0542	Swedish			x		3
KH13AMOP	PROFESSIONAL STUDIES					88
KH13NKE	Media technology					47
KH13NKE0010	Introduction to new media		x			6
KH13NKE0011	Multi camera production		x			6
KH13NKE0100	Programming languages and their properties in electronic media			x		3
KH13NKE0110	Introduction to AV production	х				8
KH13NKE0050	Digital image processing	х				5
KH13NKE0060	DVD workshop	х				3
KH13NKE0070	Online animation workshop		x			3
KH13NKE0150	Introduction to 3–D animation		x			3
KH13NKE0160	Sound	х				6
KH13NKE0170	Introduction to media technology		x			4
KH13PT	Producer's qualifications or project managementtd>	ications or project managementtd>				24
KH13PHP2050	Introduction to accounting			x		3
KH13PHT0401	Tools for a producer I	х				5
KH13PHT0402	Tools for a producer II		х			4
KH13PHT0410	Legislation and copyright law in AV productions	х				4
KH13PHT0411	Mediatuotantojen rahoitusmekanismit	х				3
KH13PHT0420	New media project management			x		5
KH13MSK	Content production gualifications				17	
KH13MSK0150	Introduction to screenwriting 1	х				5
KH13MSK0151	Introduction to screenwriting 2			x		3

KH13SMK0160	History of film	Х				3	
KH13MSK0060	Film analysis			х		3	
KH13MSK0170	Introduction to non-linear plannig		x			3	
KH13BSY	ADVANCED STUDIES						
KH13MLK1160	Production I	x				5	
KH13MLK1170	Production II		x			6	
KH13MLK1180	Production III			x		8	
KH13MLK1190	Production IV			x		5	
KH13MLK1200	Production V				x	5	
KH13TJK0054	Projekti– ja tutkimussuunnittelu	x				2	
KH13TJK0055	Research methods				x	4	
KH13A4	FREE CHOICE STUDIES						
KH13STK0650	PRACTICAL TRAINING						
KH13STK0551	Practical training I		x			20	
KH13STK0651	Practical training II				x	25	
KH13TJK0450	Final thesis						

Study Descriptions

GENERAL STUDIES, 42 op KH13APE (study entity)

Basic Studies introduce students to the university of applied sciences as a learning environment, and provide them with an overview of their future profession. Students acquire basic professional skills, improve their skills in their native language and foreign languages, as well as in information technology. Basic Studies also include elective courses, such as music for those students specializing in music.

Information technology, 4 op KH13APE1550 (study unit)

Lecturers

- Esa Leikkari, MA (IT)
- Leena Elenius, MA (information acquisition)

Objectives

- Information acquisition: Upon completion of the course, students will understand the information acquisition process as a whole such that they are competent in analysing their need for information and selecting appropriate sources. They will have command of the basic techniques for finding information and know how to evaluate, use and apply the information they find.
- Information technology: Students will be competent in using a computer as a tool, and they will have command of the basics in information technology and word processing.

Content

- Library and information services at Seinäjoki UAS
- Information in Cultural Production and producers of that information
- Databases and how to use them
- Online information acquisition
- Evaluating, using and applying acquired information

Some of the studies in the first year have been integrated into the Project and Research Planning course. The fourth-year portion of the course takes place in the beginning phase of the thesis process and concentrates on acquiring information

needed for the theory and analysis of the thesis. Information technology:

• IT devices, e-mail programme, presentation graphics programme

Literature / Study Material Material distributed by the lecturers

Learning Methods Lectures, discussion, group/pair work and assignments

Assessment

- Assignments and active participation
- Pass/fail

Further Information Teaching is divided into two parts.

Professional growth, 5 op KH13APE1342 (study unit)

Lecturers

- Jussi Kareinen, MA
- Tuija Huusko, MA (Edu.)

Objectives

The aim of the course is to develop the students' own professional identity, to enable them to express concerns about their studies and to pose questions about their studies and refine their study plan. The purpose is also to strengthen the students' ability to complete their studies on time, to develop means to control stress, and to compile a portfolio throughout the course.

Content

The following themes are evident throughout the course and do not follow a rigid structure. They will be dealt with as they arise. In this way, the course becomes a process. THE SKILLS OF LEARNING, LEARNING TO LEARN: Students outline their learning styles and strategies, learn more effective styles of learning, and identify their own learning difficulties. SCHOOL AND STRESS CONTROL IN STUDIES: Students learn to deal with stress, create common means to manage the daily chaos, and develop community. PROFESSIONAL IDENTITY, PROFESSIONAL GROWTH: Students develop their own professional identity and evaluate their progress in their studies from the perspective of professional growth. COMPLETING STUDIES: Students make a plan to assist them in completing their studies, identify their motivation, resources and energy for studying. FUTURE, WORKING LIFE: Students make a plan for the future, consider placement in the working world, create opportunities to express their own abilities to employers.

Literature / Study Material To be announced at a later date.

Learning Methods

Discussions, interactive working methods: sociodrama, psychodrama, story theater, etc. Students will also compile a portfolio throughout the course.

Assessment Pass/Fail

Further Information jussi.kareinen@seamk.fi

Native language and communication, 5 op KH13APE1410 (study unit)

Lecturers Riikka Järvelä, MA

Objectives

Students will be competent in writing various types of texts and understand in which context they can be used (written communication). They will also renew their view of themselves as communicators via constructive feedback and self–evaluation. Students will also acquire competence in interacting and analyzing various contexts of communication, and understand central theories (oral communication). They will be able to identify the means of communication and their own role within a group. Students will take part in small–group communication, develop the ability to give

feedback, become familiar with small–group communication theories, and possess the ability to use these in their studies and future careers (small–group communication).

Content

- Written communication: Command of linguistic norms and the correct usage of the Finnish language, familiarisation with scientific and professional language and texts, process writing and the standards of scientific communication language
- Oral communication: Practical course concentrating on individual ways of communicating while renewing and analyzing the view of themselves as a communicator in public speaking situations. Central communication theories and models will be introduced during lectures.
- Small-group communication: Considers the behaviour of groups from a communicative perspective. Central theories will be discussed, as well as the practice and analysis of various group communication situations.

Literature / Study Material

Handouts provided, including field-specific articles

Learning Methods

Lectures, discussion, assignments to be completed in class and at home, and group work

Assessment

Scale 1–5: 80 % attendance required. Assessment discussed during the first lesson. Sixty per cent of the grade is based on participation and assignments and 40 % is based on the exam.

Introduction to group work, 3 op KH13SMV2550 (study unit)

Lecturers

Kimmo Kovanen, MA (Edu.)

Objectives

The aim of the course is to explore the concept of group as a phenomenon, group functions and orientate students into their studies.

Content

- Orientaton into studies
- Getting to know other people in the gorup
- Group organisation
- Principles for functioning in a group

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, independent and group assignments

Assessment Pass/Fail. Completion of the course requires active attendance in all lectures and acceptable completion of assignments.

Languages of Instruction Finnish

Further Information kimmo.kovanen@skooppi.fi

Customer service, 3 op KH13PHP1050 (study unit)

Objectives

Students will be familiar with the characteristics of services when designing marketing programs. They will be competent in marketing services while considering the customer as part of the production and consumption process, as well as the development process of the quality of the service. Students will understand the role of marketing from the viewpoint of relational marketing.

Content

• Characteristics of service

- Customer as part of the production and consumption process
- Development of service quality
- Service situations and managing them
- Role of marketing services as a way to maintain customer relations
- Personal behavior in customer service

Literature / Study Material Pesonen, H–L., Lehtonen, J. & Toskala, A. 2002. Asiakaspalvelu vuorovaikutuksena.

Learning Methods Lectures, exercises, assignments, attendance and test

Assessment 1–5

Languages of Instruction Finnish and English

Further Information The course involves some online studying.

Cultural policy, 3 op KH13PHT0300 (study unit)

Lecturers Arto Juurakko, MA

Objectives Students will gain an overview of the structure and mechanisms of cultural policy.

Content

- Cultural policy and the structure of cultural administration in Finland
- Forms of governmental support
- Role of arts councils, civil organizations, foundations and funds
- Nordic cultural policy and decision-making
- Nordic cultural organizations and institutions
- Role of the Nordic Council for Ministers in the cultural field
- Cultural policy in the EU
- Structure of the EU and decision-making in the field of media
- Organs and funds in the fields of culture and media

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, assignments

Assessment 1–5

Introduction to project management, 3 op KH13PHP0200 (study unit)

Lecturers Kari Salo, PhD, MSSc, MA (Edu.)

Objectives

Students will understand the fundamentals of project work and and how to use project work as a pedagogical tool in the production of cultural services.

Content

The course involves the basic concepts of project work and creating a project plan.

Literature / Study Material

Silfverberg, Paul. 2001. Ideasta projektiksi. Projektisuunnittelun käsikirja. Hallinnon kehittämiskeskus. Edita. 5th edition or newer.

Learning Methods Lectures and independent study

Assessment 1–5

Languages of Instruction

• Finnish

English

Further Information kari.salo@seamk.fi

Introduction to information and publicity, 3 op KH13PHT0050 (study unit)

Lecturers Terttu Karhumaa, MSSc

Objectives

The aim of the course is to explore the operation and significance of the mass media, and to provide students with an understanding of the special features involved in online communication and project publicity.

Content

- Foundations of mass media
- Internal/external communication
- Compiling publicity plans
- Arranging press conferences
- Writing press releases

Literature / Study Material Material will be distributed during the first lesson.

Learning Methods Lectures, group work, field trips and book examination

Assessment 1–5 (active participation and assignment)

Introduction to marketing, 4 op KH13PHP1150 (study unit)

Lecturers Merja Juppo

Objectives

- To understand the significance of marketing on business operations or other planned area
- To identify and utilise the competitive tools in marketing
- To be able to apply marketing-oriented ideas in planning

Content

The course includes an introduction to marketing, negotiation skills, communication, advertising, product development and production for different media, auxiliary products, advertising based on images, brands, marketing a creative product, and sponsoring.

Literature / Study Material

- Kotler, P. 2000 (or later edition). Marketing Management: analysis, planning, implementation and control. (APPLICABLE SECTIONS TO BE ANNOUNCED)
- Anttila, M. & Kaarina Iltanen (1994 OR 2001). Markkinointi. (APPLICABLE SECTIONS TO BE ANNOUNCED)

Learning Methods Lectures, assignments, examination Assessment 1–5: lectures 40 %, assingments 40 % and active participation 20 %

Languages of Instruction Finnish

Entrepreneurship, 3 op KH13MLK1130 (study unit)

Lecturers Heikki Luumi , MA (Edu.)

Objectives

Students will acquire basic knowledge of entrepreneurship and the ability to establish a business.

Content

- Business ideas, entrepreneurship, innovations
- Profit generation model, business models
- Establishing a business
- Business development and financing
- Business growth and capital investors
- Finding and utilizing risk financing
- Business strategies, value chains and networks

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, assignments, examination

Assessment 1–5

Languages of Instruction Finnish

Language studies, 6 op KH13APEKO (study entity)

Objectives:

• To achieve the level of proficiency in English and Swedish oral and written language skills necessary for working in the cultural professional and for professional development.

English, 3 op KH13APE0541 (study unit)

Lecturers Mari Heinonen, MA

Objectives

The aim of the course is to activate the necessary oral communication skills needed in the workplace, develop the courage to speak and to integrate professional terms into the students' active vocabulary. Eighty per cent attendance is required to complete the course.

Content

Students practise using English in their professional field through the following tasks:

- Compilation of field-specific vocabulary
- Reading field-specific texts
- Short oran presentation
- Competence in telling about oneself, one's education and the Finnish school system
- Job hunting and the associated documents
- Typical field-related letters and texts needed in the working world
- Procedures for meeting and negotiations and appropriate English for such situations

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, work in groups and independently, written assignments

Assessment

Grading is based on a scale of 1 to 5 and comprises the following parts:

- Command of professional language skills: vocabulary, reading assignment and presentation
- Independently written assignments
- Negotiation situation/Conference recording and evaluation of it
- Active participation

Languages of Instruction English

Further Information mari.heinonen@seamk.fi

Swedish, 3 op KH13APE0542 (study unit)

Lecturers Jaana Store, MA

Objectives

The aim of the course is to activate the necessary oral communication skills needed in the workplace, develop the courage to speak, and to integrate professional terms into the students' active vocabulary.

Content

- Everyday phrases needed in the workplace as well as special vocabulary (ex. telephone language)
- Professional vocabulary development via various media and independent work
- Students' own CV
- Oral skills test carried out in pair and group discussions, as well as a written test

Literature / Study Material Material provided during the first lesson.

Learning Methods Lectures, work in groups and independently

Assessment 1–5

Languages of Instruction Finnish and Swedish

Media technology, 47 op KH13NKE (study entity)

Objectives: Upon completion of the course, students will possess basic knowledge of various elements of media. They will understand the type of expertise each tool needs from the point of view of the producer.

Introduction to new media, 6 op KH13NKE0010 (study unit)

Lecturers Esa Leikkari, MA

Objectives

Students will learn about the history of the Internet, the production of web-pages, HTML language, backgrounds, frames, forms, linking pictures, publishing pages and advanced Internet tools.

Content

• Basics of the Dreamweaver programme

• Creation of web-pages

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, assignment

Assessment 1–5 (based on assignments and exam)

Multi camera production, 6 op KH13NKE0011 (study unit)

Lecturers

- Jari Kivimäki
- Jukka Saarela

Objectives

Students will be introduced to the work in a TV studio. They will learn about the various phases and roles involved in that work. At the end of the course, students will create a small–scale studio production.

Content

Learning will take place in a multi–camera/recording studio. Students will be familiarised with the work processes for directors, lighting cameraman, TV recording engineer, video engineer and the entire multi–camera group.

Literature / Study Material To be announced during the first lesson.

Learning Methods Assignments and small-group work

Assessment 1–5

Prerequisites Basic in Audiovisual Productions

Further Information jukka.saarela@seamk.fi

Programming languages and their properties in electronic media, 3 op KH13NKE0100 (study unit)

Lecturers Esa Leikkari, MA

Objectives

Students will be introduced to online programming and the characteristics of various programming languages. They will practise making basic programming structures, become familiar with the basics of descriptive language and finished creations.

Content

- Revision of the HTML descriptive language
- JavaScript
- Java applets
- CGI, PĤP

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, assignments and exam

Assessment 1–5 (based on assignments and exam)

Study Descriptions
Introduction to AV production, 8 op KH13NKE0110 (study unit)

Lecturers

- Heikki Ortamo
- Jukka Saarela

Objectives

Students will be introduced to the central tools and phases involved in audiovisual production. They will plan and implement a small-scale video production in groups.

Content

- Basics of video production
- Tools for producing videos
- Phases in producing a video
- Small–scale video production in groups
- Written exam

Literature / Study Material

- Pekka Korvenoja: TV-kameratyön perusteet
- Other material to be announced during the first lesson

Learning Methods Lectures, exercises, small-scale project

Assessment 1–5

Further Information jukka.saarela@seamk.fi

Digital image processing, 5 op KH13NKE0050 (study unit)

Lecturers Artesan Anniina Imppola

Objectives

Students will understand the possibilities involved in image processing for digital productions, and they will be capable of applying them to various formats.

Content

- WWW image processing and recommended image formats
- Picture editing and picture manipulation

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, independent work

Assessment 1–5

DVD workshop, 3 op KH13NKE0060 (study unit)

Lecturers Esa Leikkari, MA

Objectives

Students will become familiar with the stages of DVD productions and contribute to the production of a DVD. They will gain understanding of the properties of a DVD and the possibilities as a format of distribution.

Content

- DVD format
- Stages of DVD production
- Familiarisation with a DVD production programme
- Making a DVD

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, exercises and assignment

Assessment 1–5 (based on exercises and assignments)

Further Information esa.leikkari@seamk.fi

Online animation workshop, 3 op KH13NKE0070 (study unit)

Objectives

Students will learn about the possibilities animation and graphics offer in the creation of web-pages. They will be introduced to animation techniques and practice the creation of interactive animation and multimedia links.

Content

• Basics of Macromedia Flash

Literature / Study Material Material provided at the first lesson.

Learning Methods Lectures, exercises

Assessment 1–5 (based on assignments and exercises)

Introduction to 3–D animation, 3 op KH13NKE0150 (study unit)

Objectives

The aim of the course is to familiarize students with 3D animation. They will acquire knowledge required modelling and making animations.

Content

- Concepts in 3D modelling
- File formats and their conversion, illumination, rending, animation, character animation, landscape modelling
- Hardware potential, 3D programs, special programmes, digital set design, plug-in programmes, motion capture, 3D scanning,
- Areas of application for 3D modelling, post-production, planning 3D production, and the construction of spatial virtual environments

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, exercises

Assessment 1–5

Sound, 6 op KH13NKE0160 (study unit)

Objectives

Students will understand the concept of sound as an narrative element in audiovisual productions.

Content

- Basics in field sound
- Basics in sound design
- Basics in the post-processing of sound

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, exercises

Assessment 1–5

Introduction to media technology, 4 op KH13NKE0170 (study unit)

Objectives

Students will understand the various properties of different audiovisual formats as well as the limits of these formats. Students shall aslo be able to apply their knowledge during various productions.

Content

During the course students, shall explore the demands of various audiovisual formats. The course focuses on the technological basis of digital audio and digital video systems and their diverse delivery formats.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, exercices, active participation and exam

Assessment 1–5

Producer's qualifications or project management24 op KH13PT (study entity)

Objectives: Students will have command of the various parts of project work and upon completion of the module, they will possess the skills needed in successfully carrying out a project. They will be competent in utilising their skills in project work during their studies and during their practical training especially. Students will also acquire basic skills in digitally producing a video and carrying out a new-media project.

Introduction to accounting, 3 op KH13PHP2050 (study unit)

Objectives

The course introduces students to the foundations of accounting and financial statements and teaches students how to compile a balance sheet book.

Content

- Accounting
- Reporting
- Financial statements

Literature / Study Material Material provided during the first lesson.

Learning Methods Lectures, exercises and exam

Assessment 1–5

Tools for a producer I, 5 op KH13PHT0401 (study unit)

Lecturers Petri Männistö, BVM

Objectives

Upon completion of the course, students will be competent in compiling and presenting a production plan.

Content

- Job description of a producer
- Pre-planning and developing a production, scheduling, budgeting, and post-production
- Programme placement, target groups and viewer surveys
- Broadcasting companies, independent production companies in Finland and abroad
- Sales and marketing
- Digital distribution network and regional programme windows
- Practices in TV production
- Breaking down a script into production costs
- Practising selling a topic and plan to a sponsor

Literature / Study Material Material will be distributed during the first lesson.

Learning Methods Lectures, assognments and exam

Assessment 1–5: 50 % comprises the exam and 50 % the presentation of the production plan

Further Information jussi.kareinen@seamk.fi

Tools for a producer II, 4 op KH13PHT0402 (study unit)

Objectives

Upon completion of the course, students will be competent in creating a production plan, which will enable them to carry out a media production based on the working world.

Content

- A more advanced approach to the issues learned in Tools of the Producer I course.
- Special emphasis on competence in financial administration (budgeting)

Literature / Study Material To be announced.

Learning Methods Lectures, assignments, independent work and work in small groups

Assessment 1–5

Prerequisites Tools of the Producer I

Further Information jussi.kareinen@seamk.fi

Legislation and copyright law in AV productions, 4 op KH13PHT0410 (study unit)

Lecturers Jaakko Eskola

Objectives Students will understand the significance of making contracts and know how to create a contract template.

Content

- Basic knowledge of labour legislation, contract law, communications legislation and copyrights, related rights and industrial rights
- Typical contracts in the audio-visual field, common contractual clauses, distribution contracts and financing contracts
- Legislation in Finland and the Nordic countries and contractual jurisprudence
- EU and other international legislation and contractual jurispridence

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, practical exercises, exam

Assessment 1–5

Mediatuotantojen rahoitusmekanismit, 3 op KH13PHT0411 (study unit)

Lecturers To be announced.

Objectives

Students will be familiar with the channels for financing media productions and know how to compile an initial cost calculation for them.

Content

- · Familiarisation with various sources of financing
- Production support (incl. script support and targeted funding for media arts)
- Risk management
- Project life span and financing
- Planning financing and creating a financing palette
- Application procedures

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, assignments and work in small groups

Assessment 1–5

Further Information Some of the teaching will take place online.

New media project management, 5 op KH13PHT0420 (study unit)

Objectives Students will be competent in creating a new-media project.

Content

- Planning a new-media project
- Needs analysis
- Phases in implementation and documentation
- Various job descriptions
- Co-operation between various levels of the project
- Scheduling
- Risk management
- Characteristics of a new-media project
- Team work

Literature / Study Material Material will be distributed during the first lesson.

Learning Methods Lectures, assignments and compiling a project plan

Assessment 1–5

Content production qualifications, 17 op KH13MSK (study entity)

Objectives: Students will acquire basic knowledge of dramaturgy and visual design. They will understand the special requirements of producing content for various media. The History of Film and Film Analysis courses provide students with a framework in which to produce media content.

Introduction to screenwriting 1, 5 op KH13MSK0150 (study unit)

Lecturers Teemu Ojala, MA

Objectives

The course introduces students to screenwriting in which they will acquire skills in analyzing the strengths and weaknesses of scripts.

Content

- Introduction to classical drama
- Narrative conventions and traditions
- Characters, time, place, and conflicts
- Diagnosis of the strengths and weaknesses of a script

Literature / Study Material

To be announced at a later date.

Learning Methods Lectures, assignments (writing a script), exam

Assessment 1–5

Introduction to screenwriting 2, 3 op KH13MSK0151 (study unit)

Objectives

The course introduces students to screenwriting in which they will acquire skills in analyzing the strengths and weaknesses of scripts.

Content

- Revision of the classical drama studied in Course I
- Narrative conventions and traditions
- Characters, time, place, and conflicts
- Diagnosis of the strengths and weaknesses of a script
- Breaking a script down into production costs
- Familiarisation with the tools a screenwriter uses
- · Conjuring up new formats
- · Practising synopses and production plans

Literature / Study Material

To be announced at a later date.

Learning Methods Lectures, assignments (writing a script), exam

Assessment 1–5 Study Descriptions Prerequisites Screenwriting 1

History of film, 3 op KH13SMK0160 (study unit)

Lecturers Jukka Saarela, MA

Objectives

Students will become familiar with the history of film both from the ethical and commercial points of view. They will understand how the practices in film as a form of media have changed or become commonplace in different parts of the world throughout time. Students will also gain insight into how the various parts of technology for making a film have changed and how financial situations in production have shaped the making of films and film aesthetics.

Content

- Familiarisation with the history or film in the Western world
- Command of the various styles of film, periods, genres and their historical development
- Concept of genre and the shaping of film into its current form in a economical and technological framework

Literature / Study Material To be announced.

Learning Methods Lectures, independent study, group work, watching films and an exam

Assessment

- Exercise(40 %) and exam (60 %)
- Based on a scale of 1 to 5

Film analysis, 3 op KH13MSK0060 (study unit)

Lecturers Jukka Saarela, MA

Objectives

Students will learn the basic concepts associated with film analysis and study the art of cinema. The course also includes the analysis and close reading of films.

Content

- Basic concepts and methods associated with film analysis
- Film as an art
- Close reading

Literature / Study Material To be distributed during the first lesson.

Learning Methods Lectures, independent study

Assessment 1–5

Prerequisites History of Film

Introduction to non–linear plannig, 3 op KH13MSK0170 (study unit)

Objectives

Upon completion of the course, students will possess skills in screenwriting for new media.

Content

The course discusses the features of non-linear narrative and the structures of interactive and non-linear narratives. Study Descriptions *Literature / Study Material* To be distributed during the first lesson.

Learning Methods Lectures, exercises, exam

Assessment 1–5

Prerequisites Introduction to Screenwriting

Production I, 5 op KH13MLK1160 (study unit)

Lecturers

- Heikki Ortamo
- Jukka Saarela

Objectives

Students will acquire skills needed in working on a video production team, and become familiar with the entire concept of production.

Content

• Digital video production

Literature / Study Material To be announced at a later date.

Learning Methods Lectures, exercises, presentation

Assessment 1–5

Prerequisites Introduction to AV Production

Further Information jukka.saarela@seamk.fi

Production II, 6 op KH13MLK1170 (study unit)

Objectives Students will become familiar with new media production as the member of a small group.

Content

www-production

Literature / Study Material Material will be distributed during the first lesson.

Learning Methods Supervised assignments

Assessment 1–5

Production III, 8 op KH13MLK1180 (study unit)

Objectives

Studets will become familiar with the production of documentaries as the member of a team.

Content

• Production of documentaries

Literature / Study Material Material will be distributed at the beginning of the course.

Learning Methods Exercises supervised by the lecturer.

Assessment 1–5

Production IV, 5 op KH13MLK1190 (study unit)

Objectives

Students will become familiar with Internet television and create a programme for the degree programme's own web-TV.

Content

• Internet television production

Literature / Study Material Material will be distributed at the beginning of the course.

Learning Methods Exercises supervised by the lecturer.

Assessment 1–5

Production V, 5 op KH13MLK1200 (study unit)

Objectives Students will produce a media production with an external client.

Content

• Assignement chosen by the student and commissioned by an external client

Literature / Study Material To be announced at a later date.

Learning Methods Supervised assignments

Assessment 1–5

Projekti– ja tutkimussuunnittelu, 2 op KH13TJK0054 (study unit)

Lecturers Kari Salo, PhD, MSSc, MA (Edu.)

Objectives

Students will be capable of compiling various cultural management projects, research proposals and plans according to their own ideas, as well as for clients.

Content

• Project proposals and project and research plans in the students' own field of study on the basis of information acquisition, networking and innovation

Learning Methods Lectures, supervised assignments

Assessment 1–5

Further Information kari.salo@seamk.fi

Research methods, 4 op KH13TJK0055 (study unit)

Lecturers Kari Salo PhD, MSSc, MA (Edu.)

Objectives

Students will learn the essential differences between various research methods and apply them in their final thesis.

Content

• Quantitative, qualitative and action research

Learning Methods Supervised and independent work

Assessment 1–5

FREE CHOICE STUDIES, 15 op KH13A4 (study entity)

Students are entitled to choose elective courses from the UAS's entire range of courses. The courses are on the Intranet. In the Cultural Production Module, 2–5 credits worth of advanced elective courses in an area of a given degree programme may also be possible to complete. The courses in question are first and foremost intended for the degree programme's own students. The courses will be announced during the academic semesters. Projects related to the professional field may also be counted as elective courses, but they must be approved by the lecturer in advance.

PRACTICAL TRAINING, 45 op KH13STK0650 (study entity)

- Course objectives and contents: Students will develop their personal qualifications in the various sub-sectors of the professional field, and plan, implement and report on a personal socio-cultural project independently.
- Learning methods: Independent work

Practical training I, 20 op KH13STK0551 (study unit)

Lecturers

- Esa Leikkari, MA
- Jukka Saarela, MA

Objectives Students will become familiar with field of media through practical training.

Content

• Supervised practical training in an approved workplace

Learning Methods Supervised training and online assignments

Assessment Pass/Fail

Further Information

Study Descriptions

- esa.leikkari@seamk.fi
- jukka.saarela@seamk.fi

Practical training II, 25 op KH13STK0651 (study unit)

Lecturers

- Jukka Saarela, MA
- Esa Leikkari, MA

Objectives

Students will apply the theory they have learned during their studies into practice, and carry out a project independently. The practical training can be integrated into the final thesis.

Content

• Supervised practical training in an approved workplace

Learning Methods

• Supervised practical training

Assessment Pass/Fail

Final thesis, 15 op KH13TJK0450 (study entity)

- Lecturer(s): Kari salo, PhD, MSSc, MA (Edu.)
- Objectives: To develop students' ability to express the knowledge they have ascuired
 Content: Written study or comprehensive project work
 Learning methods: Supervised training

- Assessment: Pass/fail

Degree Programme in Design (In Finnish)

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Study Descriptions

Orientoivat opinnot ja urasuunnittelu, 4 op KH14AAOR01 (study entity)

Lecturer(s): Designer Tuija Huusko MA (Edu.), Esa Savola MA, and experts from the working world Objectives: Students will become familiar with the degree programme and what it offers as well as the educational environment (workshops and computer programmes). Students will get to know each other through various types of group work. The aim is also to get to know students from previous classes and those from other units in the field of culture. Students will learn to identify their own learning styles and how to reflect upon their own learning. They will understand the principles associated with group and team work and learn to work with others on multi-professional and international teams. During the course, students will think about their own career and choose relevant optional courses and practical training. Opportunities for international exchanges and practical training will also be discussed in the course. Discussions pertaining to students' learning goals and career planning will be held one a year. Preparation for practical training: Before their practical training, students will take field trips to familiarise them with various companies in the field of design; they will also read literature and work online (written reports). Students will learn customer service skills also. Experts from the working world will visit to tell about their profession, career development, and students will be able to interview professionals in their chosen profession. Students will discuss their career plans with their supervisor after which they will choose a place to do their practical training, which supports the development of their own caeer. Upon completion of the course, students will understand the phases of learning and know how to reflect on the knowledge and skills they have learned. They will be competent in sharing their knowledge and skills with others in a work community. They will also be able to evaluate their own expertise (SWOT analysis) and determine the areas that need improvement. Students will update their career and study plan on a yearly basis. Sisältö:

- Customer service in the field of design
- General knowledge of the working world and being an entrepreneur
- Opportunities to study aborad in the field of design
- Research and development (R&D) in the field of design
- Common professional practices and issues concerning employment relations: employee rights, responsibilities, legislation, collective labour agreements, employment contracts, wages and taxation, pension coverage, labour unions, freelance work
- SWOT analysis and current know-how
- SWOT analysis and the profession
- Job application assignment (marketing oneself and one's expertise)
- Job applications and portfolios

Literature: To be announced at the beginning of the course. Learning methods: Project learning similar to that of an entrepreneur Assessment: pass/fail

Communication studies, 10 op KH14AAKI (study entity)

Objectives: Students will possess diverse skills in communicating in their professional field. They will know how to produce written material in different languages for different situations. They will also be competent in situations of oral communication using field–related vocabulary. Students will be familiar with project reports and be able to write such reports. They will understand what process writing is and utilise it when writing their own texts.

English, 3 op KH14AAKI01 (study unit)

Objectives

Students will strengthen and improve their language skills. They will be competent in using vocabulary common to their professional field both in writing and in speaking. Students will achieve a level of English needed in the design labour market. Upon completion of the course, students will be able to describe the type of education and work experience they have and they types of products they are selling. They will also be able to apply for jobs in English, know how to describe their place of employment, the services it offers and what precisely the business does. Students will also possess both written and oral skills needed in communication at the workplace.

Content

- Describing oneself and one's education
- Presentation of one's product both in writing and orally

- Applying for a job, compiling a CV
- Describing one's workplace and the duties there both in writing and orally
- Writing notices, memos, reports and/or summaries and electronic communication

Literature / Study Material Lecturer's material

Learning Methods

- Oral exercises such as dialogues, group discussions and presentations
- Written assignments

Assessment

- Active use of oral skills (incl. oral presentations and dialogue exercises)
- Completion of written assignments, portfolio
- All parts of the course must be approved to complete the course
- Grading based on a scale of 1 to 5

Prerequisites

Command of the central structures of English

Swedish, 3 op KH14AAKI02 (study unit)

Objectives

Students will be competent in using Swedish in the designing labour market. They will be able to communicate with customers orally and in writing, as well as to acquire and utilise field–related information in Swedish. Students will have a positive attitude toward learning Swedish and a realistic understanding of their own skills. Upon completion of the course, students will know how to tell about themselves, their education and work experience. They will be competent in applying for a job in Swedish, present their own products, and use field–related vocabulary.

Content

- Telling about oneself and one's education
- Applying for a job: interviews and CVs
- Describing one's job and presenting products
- Small-talk, phone conversations, meetins, expressing opinions and arguments to back those opinions
- Written communication: e-mails, summaries (eg. synopses, reports, notices)

Literature / Study Material Lecturer's material

Lecturer's material

Learning Methods

Oral exercises such as dialogues, group discussions and presentations, as well as written assignments

Assessment

- Active use of oral skills (oral presentations and dialogue exercises)
- Completion of written assignments and exercises
- All parts of the course must be passed to complete the course
- Grading based on a scale of 1 to 5

Prerequisites Command of the central structures of Swedish

Communication, 4 op KH14AAKI03 (study unit)

Lecturers Communications lecturer

Objectives

The course is divided into two parts: Communications I (2 cr): Students will develop their communications skills with special emphasis on oral communication. Upon completion of the course, students will identify their own needs for improvement as regards future professional practices. Students will also differentiate between and identify the features of the texts they need in their, and they will become familiar with Seinäjoki UAS's guidelines for writing various texts. Communications II (2 cr): Students will practise writing reports about their product–making/designing processes. They

will understand the principles of academic writing and know how to apply those principles to their own work. They will also become familiar with process writing and revise their language skills.

Content Communications I:

- Principles of oral presentation
- Various types of text
- Guidelines for writing texts

Communications II:

- Reporting
- Process writing
- Principles of academic texts
- Language maintenance

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, small–group work and meetings, independent assignments

Assessment Pass/fail

Entrepreneurship, 13 op KH14AAYT (study entity)

Objectives: In the Business Operations Module, students will become familiar with the principles of business operations, cost calculation, marketing and contract jurisprudence.

Basics of economics, 2 op KH14AAYT01 (study unit)

Lecturers Desinger Merja Juppo, BCD

Objectives

Students will be familiar with the principles of pricing products and services, and they will acquire a realistic picture of cost accounting in a design company. Students will be competent in making offers and invoicing customers, and they will be familiar with the factors affecting pricing such as VAT, wages and associated expenses, material expenses, fixed costs, and write–offs from investments. They will also know how to calculate the need for financing when establishing a business and understand the significance of profit. Additionally, students will be competent in evaluating a company's economic situation using the more common parametres and analyses.

Content

- Calculating contribution margins
- VAT
- Wages
- Investments and write-offs
- Need for financing
- Common parametres
- Sensitivity analysis
- Offers
- Invoicing

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments, tests, online study and independent study

Assessment Grading based on a scale of 1 to 5

Marketing, 5 op KH14AAYT02 (study unit)

Lecturers

Designer Merja Juppo, BCD

Objectives

Students will understand the connection between a company's marketing operations and product design, innovation and design as well as other areas of business. Students will be familiar with the process of making a product/service idea into a product from the point of view of marketing. They will be familiar with the principles behind consumer and purchasing behaviour and understand the significance of strategically planning marketing and know how to apply appropriate tools in the planning. Students will also be familiar with competitive tools and know how to use them. They will make a marketing plan for a design company.

Content

- Calculating contribution margins
- VAT
- Wages
- Investments and write-offs
- Need for financing
- Common parametres
- Sensitivity analyses
- Offers
- Invoicing

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments, tests, online study and independent study

Assessment Grading based on a scale of 1 to 5.

Introduction to entrepreneurship, 6 op KH14AAYT03 (study unit)

Lecturers Designer Merja Juppo

Objectives

Students will understand the connection between a company's marketing operations and product design, innovation and design as well as other areas of business. Students will be familiar with the process of making a product/service idea into a product from the point of view of marketing. They will be familiar with the principles behind consumer and purchasing behaviour and understand the significance of strategically planning marketing and know how to apply appropriate tools in the planning. Students will also be familiar with competitive tools and know how to use them. They will make a marketing plan for a design company.

Content

- Basic concepts of marketing
- Marketing process of a company's products/services from strategical planning to an operative business
- Demand and competition environments and analysing one's own organisation
- Positioning
- Segmentation
- Product portfolio
- Business concepts
- Brands
- Crucial competitive tools in marketing
- Marketing plan for a designing company

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, assignments, independent study, exam, and online study

Assessment Grading based on a scale of 1 to 5.

Information retrieval, 2 op KH14AATU01 (study unit)

Lecturers Leena Elenius, MA

Objectives

Upon completion of the course, students will understand the information acquisition process such that they will be competent in analysing their information needs and choosing the most appropriate sources to satisfy those needs. They will have command of the basic techniques for finding information and know how to evaluate, use and apply the information they find.

Content

- Library and information services at Seinäjoki UAS
- Information and producers of information in the field of design
- Databases and how to use them
- Searching for information online
- Evaluating, using and applying information

Part of the second-year studies are integrated into the designing project courses. Fourth-year studies in this course take place at the beginning of thesis process and they concentrate on acquiring the theory and research information needed for writing the thesis.

Literature / Study Material Material distributed by the lecturer.

Learning Methods Lectures, discussion, group/pair work and assignments

Assessment

- Active participation
- Assignments
- Pass/fail

Further Information Teaching in information acquisition is divided into two parts.

Research methods, 2 op KH14AATU02 (study unit)

Lecturers Communications lecturer

Objectives

Students will be familiar with basic research methods and know how to apply those methods when gathering their own information and data.

Content

- Principles of scientific study
- Principles of research methods
- Ways to gather data and applying them to one's own work

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments

Assessment Grading based on a scale of 1–5.

Scientific writing, 4 op KH14AATU03 (study unit)

Lecturers

Communications lecturer

Objectives

Students will practise seminar work, both orally and in writing, They will be competent in writing reports about their work, presenting their work and performing peer evaluations of the work of others.

Content

- Reporting on one's own planning projects and thesis work
- Seminar practices and participation in seminars
- Peer evaluation

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lecture, assignments

Assessment Pass/fail

Väri ja sommittelu, 3 op KH14BYTA01 (study unit)

Lecturers

- Jaana Liukkonen, MA
- Artist Mikael Paajanen

Objectives

Students will become familiar with the fundamentals of colour and layout. They will be introduced to the physiology of sight, the psychological impact of colour, the history of colour and their cultural bonds, as well as colour systems. Students will study colour using various methods. As regards layout, students will become familiar with figurative expression and outlaying through drawing and painting. Students will compile a portfolio of the work they have completed during the course. Upon completion of the course, students will be competent in analysing colour and using them systematically in their own work. They will understand various tastes in colour and the basic factors in figurative layout work and know how to apply them in their work. Students will also know how to present a figurative entity, the visual elements of which work in unison.

Content Colour

Colour

- Physiology of seeing and perceiving
- Culturally bound aspects of colour
- Tastes in colour
- Colour symbolism
- Colour systems
- Terminology of colour
- Exercises with colour paper and painting

Outlaying

- Basic factors in outlaying
- Structure of a picture
- Lines, shades (contrast), patterning

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, work in the colour and art workshops

Assessment

- Grading based on a scale of 1–5
- Portfolio
- Process evaluation

Life drawing, 2 op KH14BYTA02 (study unit)

Lecturers Artist Mikael Paajanen

Objectives

Students will learn to transfer a three-dimensional image onto a teo-dimensional surface and practise hand and eye coordination. Students will also practise drawing people by hand, quick croquis sketches, form and value drawings with coal and chalk, and to perceive shapes and dimensions.

Content

- Dimensions of the human body and anatomy
- Influence of lighting on form

Learning Methods Exercises

Assessment

- Grading based on a scale of 1 to 5
- Self-evaluation
- Portfolio
- Sketch book
- Process evaluation

Languages of Instruction English

Drawing 1, 3 op KH14BYTA03 (study unit)

Lecturers Artist Mikael Paajanen

Objectives

Students will develop their own style of artistic expressiona and their perception of comprehensive entities. They will be adept in analysing the structures of layouts and in describing various atmospheric and colour entities.

Content

- Watercolour painting
- Pastel drawing
- Oil and acrylic painting
- Drawing with coal

Learning Methods Exercises

Assessment Grading based on a scale of 1–5.

Plastic composition, 4 op KH14BYTA04 (study unit)

Lecturers Artist Mikael Paajanen

Objectives

Students will develop their own three-dimensional style of expression. They will learn to perceive three-dimensional shapes and combinations of shapes. Students will also acquire a feeling for internal energies and tensions.

Content Study Descriptions

- Sculpting
- Drawing
- Painting

Learning Methods Lectures, exercises, independent work

Assessment Grading based on a scale of 1–5.

Drawing 2, 2 op KH14BYTA05 (study unit)

Lecturers Artist Mikael Paajanen

Objectives

Students will further their knowledge of artistic expression through painting. Using creative, free expression, they will create a piece of art from spontaneous chaos. They will approach colours, shapes, and feeling in their own unique way.

Content

- Analytic perception of colours and shapes
- Psychological and symbolic impacts of shapes, colours and lines
- Oil and acrylic colours and watercolours

Learning Methods Exercises

Assessment Grading based on a scale of 1–5.

Alakohtaisen esitystekniikat ja portfolio, 7 op KH14BYET01 (study unit)

Lecturers

Sirkku Ylinen, Janne Pekkala, Jaana Liukkonen, Merja Juppo, Anna-Miia Suihkonen, Juhani Haarala, Esa Savola

Objectives

Graphic Design: Students will learn about image processing and image information. They will practise making various electronic presentations. Furniture Design: Students will learn to make their own drawings of their own products to be used in industrial manufacturing Lifestyle Design: Students will learn to present their ideas using typical field–related image techniques They will become familiar with various sketching techniques and tools. Students will develop their own unique style of expression. During their fourth–year studies, students will create their own portfolio in electronic form, which is a representation of their professional expertise. Upon completion of the course, students will be competent in using tools and materials for making presentations in their professional field and to express their ideas clearly to others. They will be able to present their product in a professional manner.

Content

- Tools and materials for making field-related presentations
- Practice with typical field-related visualization tasks
- Development of and diversifying one's own mode of expression
- Designing and creating an electronic protfolio

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Assignments

Assessment

- Grading based on a scale of 1 to 5
- Assignments
- Portfolio
- Process evaluation

Perspektiivipiirustus, 2 op KH14BYET02 (study unit)

Lecturers Nina Kari

Objectives

Students will acquire basic knowledge of and skills in manual perspective drawing and the relationship between plane figures and the surrounding reality.

Content

- Projection theory
- Perspective drawing
- Common visualization techniques

Literature / Study Material

To be announced at the beginning of the course.

Assessment

- Grading based on a scale of 1–5
- Assignments
- Portfolio
- Process evaluation

Digitaalinen esitystekniikka ja presentaatiot, 4 op KH14BYET03 (study unit)

Lecturers Designer Juhani Haarala

Objectives

Students will acquire basic knowledge of digital image processing. They will have command of the Adobe Photoshop, Illustrator and InDesign programmes and practise their skills in their own projects.

Content

- More significant image processing and layout programmes and their features
- Basic graphics tools and menus
- · Saving work on a computer, types of files and transferring files
- Adobe Phtoshop, Adobe Illustrator, Adobe InDesign
- Scanning and using a digital camera

Literature / Study Material

- Petteri Paananen: InDesign CS3
- Juha Kaukoniemi, Petteri Paananen: Photoshop CS3
- Sampo Korkeila: Illustrator CS3

Learning Methods

Lectures, assignments, independent study and online learning (Moodle)

Assessment Pass/fail

Product Photography, 2 op KH14BYET04 (study unit)

Objectives

Students will be familiar with the fundamentals of outdoor and studio photography, photographing products, and producing pictorial material for exhibitions and fairs. Upon completion of the course, students will be competent in using a digital camera to take pictures and using common editing functions with image processing software, and they will know how to use various techniques and principles for photographing products in their own projects.

Content

• Using a digital camera

- Lighting techniques
- Using colours
- Shine and reflections on the surface to be photographed
- Photography and layout
- Processing and editing images

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments, and independent work

Assessment

- Pass/fail
- Portfolio

Design 1, 6 op KH14BYMU01 (study unit)

Lecturers

- Sirkku Ylinen, MA
- Jaana Liukkonen, MA
- Vuokko Takala–Schreib, PhD
- Anna-Miia Suihkonen, BA

Objectives

Students will be introduced to the designing profession and the principles of product design and product communication. They will acquire an understanding of how modern designing in the Western World has develop from the time of industrialization to today and how various phenomena have influenced and are influencing the language of design for objects and products. Students will be capable of sensing the tastes of various consumers groups and know how to utilise those tastes in the designing process. Upon competion of the course, students will understand 1) the various phases of the designing process, 2) the different approaches to designing (ecological, ethical, aesthetic, and commercial approached), and 3) the underlying cultural factors in designing. Students will be competent in 1) obtaining and applying information in their design process, 2) using various innovation techniques, 3) scheduling their own work, and 4) presenting their ideas interactively.

Content

- Functions of designing
- Phases of the design process
- Innovation techniques
- Development of modern designing
- Tastes and consumer cultures

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments, and independent study

Assessment Grading based on a scale of 1–5.

Design 2, 6 op KH14BYMU02 (study unit)

Lecturers

- Jaana Liukkonen, MA
- Sirkku Ylinen, MA
- Vuokko Takala-Schreib, PhD
- Anna-Miia Suihkonen, BA
- Esa Savola, MA

Objectives

Students will be introduced to user-oriented designing and the notions and practices behind product concepts, as well as

issues concerning the responsibilities of the designer in product development. Student will be familiar with various types of contracts in the designing profession as well as the principles of copyrights and industrial property rights. The opportunities for designers to ethically and ecologically influence their design work are also deiscussed. Students will be competent in obtaining information about future trends and applying those trends to their own designing. Upon completion of the course, students will understand 1) the significance of being able to predict changes in designing in the future operating environment, and 2) the significance of the persepctives of the customer and the user as a basis for designing. Students will be competent in 1) applying the factors for a designer's ethical responsibility needed in designing, 2) applying good, professional contractual usage in their own projects, 3) interpreting cultural factors and current phenomena and values using methods of designing, and 4) working in projects. Students will have command of 1) methods for user–oriented designing, 2) product concepts as a part of the designing process, and 3.) the principles behind copyrights and industrial property rights.

Content

- User-oriented designing and various methods for acquiring user information
- Immaterial and contract laws, copyrights, industrial property rights, and contract models.
- Trends and surveying directions in designing (PEST analysis, political, economical, social, technological and and ecological factors)
- Forms of concepta and business roles
- Sustainable development in designing
- Managing a design project

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments, independent study and exam

Assessment Grading based on a scale of 1–5.

Design 3, 5 op KH14BYMU03 (study unit)

Lecturers

- Jaana Liukkonen, MA
- Sirkku Ylinen, MA
- Vuokko Takala-Schreib, PhD
- Anna-Miia Suihkonen, BA

Objectives

Students will learn to outline, plan and manage the rpoduct design and designing process and gain advanced knowledge of the typical duties associated with the designing profession. They will become familiar with the various areas of leadership as a part of the designing business, methods of predicting trends and the phases involved in designing projects. Students will become aware of quality control systems and their significance in business and their influence on the designer. As regards product design, students will gain knowledge of the ways to prepare products for industrial manufacture, the significance of designing in the development of production, the principles of production design and control, as well as the significance of various production models in the pricing of products. Upon completion of the course, students will understand 1) the significance of quality as part of designing and the basic ideas behind quality control systems, 2) the significance of the designing process as part of marketing and business, and 3) the essential manufacturing processes in their professional field. Students will be capable of 1) adapting the signs of the product to the business image, and 2) predicting future trneds and ensuring the operations environment can adapt to change. Students will have command of 1) the designing process, 2) design techniques and the use of tools and, 3) procedures for working in a project.

Content

- Methods for predicting future trends (e.g. environmental scanning, scenarios)
- Quality control systems (ISO9000, EFQM)
- Production planning
- Channels for obtaining project funding
- Managing design projects (planning, defining goals, obtaining information and selecting designing methods, scheduling, preparation, organisation, resources, monitoring, reporting and subsequent management)
- The designer as an entrepreneur (from design to product, making offers, pricing and principles of prices, typical contract models in designing)

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments, and independent study

Assessment Grading based on a scale of 1–5.

Graafisen muotoilun workshop, 5 op KH14BATG (study unit)

Lecturers Artesan Juhani Haarala

Objectives

What is graphic design, the history and current trends in graphic design? Students will learn to analyse graphic symbols and the functions of various communicational and cultural signs. They will also become familiar with various finishing tools and portfolio techniques in the graphics field. Students will learn about printing techniques, drafting and the use of colour, and other coomon concepts.

Content

- Basics in graphic design
- Graphic design techniques

Literature / Study Material

- Lasse Sumiloff: Graafisen suunnittelijan teknologia
- Soili Pesonen, Juha Tarvainen: Julkaisun tekeminen
- Loiri–Juholin: Visuaalisen viestinnän käsikirja
- Hand–outs

Learning Methods

Lectures and work in groups and independently

Assessment

- Grading based on a scale of 1 to 5
- Self-evaluation
- Portfolio
- Exams

Teollisen kalustemuotoilun workshop, 5 op KH14BATK (study unit)

Lecturers

- Sirkku Ylinen, MA
- Jaakko Purtanen, MA

Objectives

Through the construction of a character model and/or a miniature model, students will become familiar with spatial planning. They will also learn about occupational and industrial safety when working with machines. Students will acquire an understanding of the design process through practical activities. Based on a given theme, they will design a space and implement their design independently. Students will construct a miniature model of the space and its elements to which they will apply various techniques and materials. Students will be competent in sketching out their ideas and in making character and miniature models. They will know how to make drawings and presentation graphics of their final plan.

Content Materials and their purpose

• wood, metal, plastic

Basics in spatial planning

• Perceiving the use of the space with the aid of a miniature model

- Designing elements of the space and placing them in the given space according to scale
- Innovation, sketches, character models of a space, technical drawings of the plan, finished miniature model

Procedures

- Working with miniature models
- Wood working machines

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

Assignments, lectures, independent and group work

Assessment

- Grading based on a scale of 1–5
- Self–evaluation
- Process evaluation

Lifestylemuotoilun workshop, 5 op KH14BATL (study unit)

Lecturers

- Jaana Liukkonen MA
- Designer Merja Juppo

Objectives

Students will acquire basic knowledge and skills in serigraphy and textile materials. As a techniques serigraphy offers a diverse range of opportunities for patterning various products and materials. Students will also learn how to work in a printing workshop and understand the significance of occupational safety in their own work. Upon completion of the course, students will be competent in utilising PhotoShop in pattern design and making a recurrent surface and colour separation. Students will also know how to independently design patterned surfaces for various materials. They will be familiar with direct emulsion stenciling and know how to maintenance tools. Students will be aware of the dangers of working with chemicals and know how to take appropriate measures in case of an accident. They will understand the the important of occupational safety and abide by general safety instructions. Students will be familiar with the properties of various textile materials and know how to select appropriate textiles based on how it will be used. They will also be able to identify basic fibres.

Content

PhotoShop as a Tool for Pattern Design: 1 cr

- Tools
- Using filters
- Types of files
- Resolution
- Editing a report
- Reducing colour and colour separation

Pattern Design: 1.5 cr

- Single patterns, recurrent patterns
- Various reporting systems and their influence on the outer appearance of a patterned surface
- Designing one's own pattern/patterned surface

Basics in Printing: 2 cr

- Positive exposure techniques
- Direct emulsion stenciling
- Tools for printing, maintenance and use
- Pigment colours, mixing colours and special colours
- Printing textiles, paper, wood and plastic surfaces
- Targeting
- Occupational safety

Textile Materials: 0.5 cr

- Natural and synthetic fibres
- Areas of use, properties and maintenance
- Identification
- Structures of textile materials and their influence on properties
- Surfacing and surface treatment techniques

Learning Methods

Lectures and working in the workshop, Moodle

Assessment

- Grading based on a scale of 1–5
- Portfolio
- Process evaluation
- Exam

Picture information, 6 op KH14BAGR100 (study unit)

Lecturers Esa Savola, MA

Objectives

The course concentrates on the historical an practical foundations of graphic symbols and signs, as well as information graphics. Learning takes place in the form of exercises given in lectures and workshops where students acquire knowledge of graphic signs, designing information graphics, and design in general. Students will have command of image information, character sets and symbols and know how to apply the principles of designing signs and symbols to various graphic design tasks and to various media.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments

Assessment Grading based on a scale of 1–5.

Typografian perusteet, 3 op KH14BAGR110 (study unit)

Lecturers

- Designer Juhani Haarala
- Teija Olkkola

Objectives

The course concentrates on the historical and designing aspects of type design, and it comprises lectures and workshops where students learn to use alphabet character sets and symbols and to apply the principles of typography in various areas of graphic design and media.

Learning Methods Lectures, assignments

Assessment Pass/fail

Typographical project, 3 op KH14BAGR120 (study unit)

Lecturers

- Esa Antero Savola, MA
- Juhani Haarala, BA

Objectives

What are the dimensions that determine professional expertise in designing? How are the needs of the user considered in graphic design? What is the realm of the graphic design profession like? Students will learn to define, design, schedule

and implement a project of designing a typographical set of symbols or system of codes based on user-oriented design.

Content

- Defining user-oriented design
- Designing the system level
- Conceptual foundations and management of a designing project from the commission to the presentation
- Usability
- User information
- User scenarios
- Own project
- Optional focus

Literature / Study Material

- Keinonen: Miten käytettävyys muotoillaan
- Kettunen: Muodon palapeli
- Norman: Miten avata mahdottomia ovia?
- Hand-outs

Learning Methods Lectures, group work and independent study

Assessment

- Grading based on a scale of 1–5
- Self-evaluation
- Portfolio
- Process evaluation

Prerequisites Graphic Symbols and Codes

Tuotesuunnittelu ja valmistus: puu, 6 op KH14BAKA101 (study unit)

Lecturers

- Sirkku Ylinen, MA
- Jaakko Purtanen, MA

Objectives

Concept Design I: 2 cr Students will have command of various drafting techniques and technical drawing, and they will know how to make miniature models. They will be familiar with product ergonomics, dimensioning, the functionality of various shapes, and with the concept of balance. The will experiment with ergonomics and develop shapes based on an idea, and they will document the phases of the designing process. Upon completion of the course, students will be capable of perceiving and understanding the designing process, know how to compile a portfolio and various designing documents. Product Design I: 4 cr Students will be competent in designing and producing an object based on a brief. Upon completion of the course, students will be literate in dimensional drawings, know how to produce a prototype based on a design and to document and present their design, understand the fundamentals of designing various objects and the concept of ergonomics as regards designing, and they will be competent in working with and shaping various materials.

Content Concept Design I

- Experiments
- Drafts
- Making miniature models
- Technical drawing
- Making a presentation image
- Presentation of one's work

Product Design I

- Independently making a prototype based on drawings
- Documentation, portfolio
- Presentation of one's finished work

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments, and independent work

Assessment Grading based on a scale of 1–5.

Tuotesuunnittelu ja valmistus: metalli– ja muovi, 6 op KH14BAKA111 (study unit)

Lecturers

• Sirkku Ylinen, MA

• Jaakko Purtanen, MA

Objectives

Concept Design II: 2 cr Students will be competent in acquiring information. They will experiment and develop structures and shapes based on an idea and document the phases of the designing process. Students will make a schedule and working plan for the production process of a prototype. Upon completion of the course, students will have command of time management, know how to compile a portfolio based on documentation, and understand the importance of experimenting with different materials. Product Design II: 2 cr Students will be familiar with the basic issues involved in working with metal and plastic. Students will be adept in using machines for working with metal and plastic, know how to select appropriate raw materials, have command of various techniques for joining pieces, know how to combine various materials and to surface treat and finish a product. Students will design and produce an object based on a brief. Upon completion of the course, students will be competent in documenting and presenting a design, understand the fundamentals of design, and know how to work with and shape various materials.

Content

Concept Design II

- Finding an idea, experiments, drafts
- Miniature models, technical drawings
- Presentation of one's work

Product Design 2

- Finding an idea, experiments, drafts
- Miniature models, technical drawings
- Presentation of one's work

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments, and independent work

Assessment Grading based on a scale of 1–5

Pintastruktuurien kokeileva työpaja, 6 op KH14BALS100 (study unit)

Lecturers Merja Juppo, Anna–Miia Suihkonen, and Jaana Liukkonen

Objectives

Various surface structures and materials, and combinaitons of them, provide the designer with extensive opportunties to express himself or herself. Using techniques in weaving and knitting, students will become familiar with various types of surfaces and their structures, as well as quick techniques for textile printing. The aim is to provide students with a wide view of the opportunities offered by various yarn and fibre techniques in designing products. Students will practise using and combining colour and material. Students will experiment with textile surfaces and design and implement their own piece of work. Upon completion of the course, students will be adept in weaving and knitting and understand knit structures and the significance of material type in the quality of a textile. They will know how to shape textile materials using various techniques and to innovatively apply surface structures to various products and as a basis for design.

Content

- Designing surface structures
- Weaving, knitting
- Weave structures and knit structures
- Behaviour of colour, yard materials
- Physical shaping of material (felting, fulling, pleating)
- Chemical shaping of material (dying, värjäys, wool etching, creping)

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Exercises

Assessment

- Grading based on a scale of 1–5
- Assignments
- Portfolio
- Process evaluation
- Exam

Muodon ja rakenteiden kokeileva työpaja, 6 op KH14BALS110 (study unit)

Lecturers

Anna-Miia Suihkonen and Tuija Huusko

Objectives

Students will design different types of surfaces that they will innovatively create by sewing. Students will be competent in perceiving the dimensions of the humand body. They will become familiar with the shapes and structures of clothing using ready-made products. Students will learn about the principles of design and practise various designs on mannequins. Upon completion of the course, students will be competent in finding information about patterning and various structures of clothing through literature. Students will also know how to use various sewing machines and ironing instruments.

Content

- Designing various types of surfaces and carrying out experiments using sewing techniques
- Design and perception of shape, several experiments, one of which will be a completed piece of clothing

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Investigative and experimental learning

Assessment

- Grading based on a scale of 1–5
- Experiments
- Portfolio

Kuvittaminen, 5 op KH14BAGR200 (study unit)

Lecturers

- Designer Juhani Haarala, BCD
- Designer Olli Kiviluoto, BCD

Objectives

The course concentrates on the foundations of areas of application for manual and computer-aided illustration. Learning takes place in the form of exercises given in lectures and workshops and, based on what they have learned, students will learn both manual and computer-aided illustration techniques. Students will also design and implement illustrations for various purposes and media.

Content

- Basics in article illustrations, manual techniques
- Advancing skills in using Adobe Photoshop
- Drawing tables
- Computer-aided and manual illustration

Literature / Study Material

- Bruun, Erik. Sulka ja kynä: Erik Bruunin julisteita ja käyttögrafiikkaa / Text: Ulla Aartomaa
- Captions: Erik Bruun

Learning Methods

Lectures, exercises, independent work, online learning environment (Moodle), workshops

Assessment Grading is based on a scale of 1–5.

Painotuotteen taitto ja julkaisu, 5 op KH14BAGR210 (study unit)

Lecturers Teija Olkkola

Objectives

Students will acquire knowledge of the foundations of layout for printed products and the areas of application. The course takes the form of lectures and workshops where students learn how to use layout programmes and publication systems in various publication tasks and media.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and assignments

Assessment Grading based on a scale of 1–5.

Basics of Web-design, 6 op KH14BAGR220 (study unit)

Lecturers Calle Grönlund, BA

Objectives

The course concentrates on the technical and communicative aspects of publishing on the Internet. The course comprises lectures and workshops where students will learn to use Internet publishing programmes and systems for various publishing tasks and areas of use.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and assignments

Assessment Grading based on a scale of 1–5.

Käyttöliittymien perusteet, 5 op KH14BAGR230 (study unit)

Lecturers Calle Grönlund, BA

Objectives

The course concentrates on the ergonomic and technical foundations of user interface design and its areas of application. Learning takes place in the form of exercises given in lectures and workshops with which students learn the principles of user–oriented design of user interfaces. Students will learn how to design and implement user interfaces for various uses.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments

Assessment Grading based on a scale of 1–5.

Innovation project, 8 op KH14BAKA200 (study unit)

Lecturers

Sirkku Ylinen, MA Jaakko Purtanen, MA

Objectives

Students will develop their views on design philosophy. Students will engage in a project that concentrates on form, selecting material, structures, production techniques and various areas of utilisation. Upon completion of the course, students will be competent in acquiring information about various materials and know how to use them creatively. They will write a journal and make a digital protfolio.

Content

- Manual sketching, presentation pictures
- 3D modelling and visualization
- Miniatures, pattern models, detail models
- Several material demonstrations and a material map based on them
- Designing a prototype and production based on the acquired information
- Documentation, portfolio, presentation of a completed project

Literature / Study Material

- Keinonen, T. & Jääskö, V. (eds.). 2004. Tuotekonseptointi. Teknologiateollisuus ry.
- Lecture hand-outs

Learning Methods Lectures, excercises

Assessment

- Grading based on a scale of 1 to 5
- Evaluation of product(s) and the associated designing documents based on the objectives of the project
- Process evaluation: requires attendance and participation in the mid-term and final evaluation discussions

Prerequisites First-year studies

Languages of Instruction Finnish

User centered project, 8 op KH14BAKA210 (study unit)

Lecturers

- Sirkku Ylinen, MA
- Jaakko Purtanen, MA

Objectives

Students will design a piece of furniture or a furniture product range for industrial manufacture, as well as take responsibility for the virtual and real goals of a company. Upon completion of the course, students will understand industrial manufacturing and the production process, know how to use illustrative research tools to solve user–oriented problems in design.

Content

- Manual sketching, digital pictures
- Product concepts in miniature, detail and pattern models

• Reporting about the design process

Literature / Study Material

• Keinonen, T. (ed.). 2000. Miten käytettävyys muotoillaan? Fang Hai. 2001. Yrjö Kukkapuro. Furniture Designer. Southeast University Press

Learning Methods Lectures, excercises, field trips

Assessment

- Grading based on a scale of 1–5
- Product and associated designing documents are evaluated according to the objectives of the project
- Process evaluation requires attendance and participation in mid-term and final progress discussions

Prerequisites Empirical innovation project

Languages of Instruction Finnish

Tilasuunnittelun perusteet, 3 op KH14BAKA220 (study unit)

Lecturers Sirkku Ylinen, MA

Objectives

How are the customers needs taken into consideration in interior decorating? How do light and colour shape a room? How do various everyday activities structure the space? The purpose of interior decorating is to guarantee and improve the spatial and material quality of people's living environment. Students will learn to work with comprehensive entities in interior decorating.

Content

- Space
- Lighting
- Living
- Furnishing
- Interior decorating materials
- User-oriented decorating
- Professional drawing
- Interaction of colours
- · Compatibility of various shades of colour
- Proportions of coloured surfaces
- Brightness
- Decorating the space

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments and independent work

Assessment Grading based on a scale of 1–5.

Mallinnuksen perusteet, 2 op KH14BAKA230 (study unit)

Lecturers Juhani Haarala, BA

Objectives

Students will practise their skills in using CAD and 3D programmes. Students will work independently in the project. They will create a virtual model of a piece of furniture using their own design.

Content

Modelling a product in the virtual environment

- Basic elements
- Surfaces
- Volume
- Projections
- Lighting
- Material properties
- Surface patterns
- Transparency, shadows, fuzziness
- File formats for models

Tilasuunnittelun ja mallinnuksen perusteet, 5 op KH14BALS200 (study unit)

Lecturers

- Interior Designer Nina Kari
- Juhani Haarala, BA

Objectives

Students will become familiar with the principles of spatial planning and learn to use modelling programmes. Upon completion of the course, students will be competent in reading architectural drawings and understand the principles of spatial planning. They will also know how to use modelling programmes to present their own ideas.

Content

Spatial planning

- dimensions and drawing symbols
- Functions of the space
- Materials and lighting

Modeling

- Intericad/Archicad
- Poser5

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Assignments and lectures

Assessment

- Grading based on a scale of 1–5
- Assignments
- Portfolio
- Process evaluation

Lifestylemallisto 1, 10 op KH14BALS210 (study unit)

Lecturers

Anna-Miia Suihkonen, Jaana Liukkonen, and Merja Juppo

Objectives

The project involves the designing of an entire range of models based on a hobby or other activity. The target groups and partner companies vary each year. The aim is to concentrate on the needs of the user as a basis for design and to acquire a diverse amount of information about the needs of the consumer segments. Students will have command of model range concepts, and they will consider functionality and usability, as well as trends, in the design of products. The range of models will be designed in teams to practise working together with others. The range will be made into prototypes with appropriate technology. Upon completion of the course, students will understand the principles of creating a range of models and know how to utilise user information as a basis for their own designing. Students will know how to acquire user information and analyse it, as well as to visually present their own ideas to customers. Students will be competent in working on a team and in co-operation with external commissioners.

Content

- Concepts (determining the user group and acquiring user information, experimenting, design based on needs, presentation techniques, functionality and usability)
- Working with prototypes/manufacture (from concept to prototype with appropriate technology, theory of manufacture)

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Assignments

Assessment

- Grading based on a scale of 1–5
- Task evaluation
- Portfolio
- Process evaluation
- Exam

Theme Lectures, 6 op KH14BALS220 (study unit)

Lecturers

Anna-Miia Suihkonen, Jaana Liukkonen, and Merja Juppo

Objectives

The course concentrates on the principles of visually planning various events. Students will carry out the visualization of an event for an external commissioner. The events vary each year and they may be expos, exhibitions, demonstrations, concerts, festivals, etc. Upon completion of the course, students will be competent in producing the appropriate visual and experiential aspects of an event. They will know how to organise the various elements of the project and contact the necessary bodies. Students will also know how to make schedules and budgets and work according to them. They will monitor their own work and report on it.

Content

- Planning expos and exhibitions (structures, lighting, organisation, budgeting)
- Modelling (small-scale modelling/modelling from still-life)
- Adventure marketing (managing the customer's experience: senses, intelligence, social behaviour, feelings)

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Exercises

Assessment

- Grading based on a scale of 1-5
- Product development report
- Production and process evaluation

Muotoilujohtaminen, 4 op KH14BAGR300 (study unit)

Lecturers Esa Savola, MA

Objectives

Students will acquire knowledge of the theoretical foundations of creating a business image from the historical and practical points of view. The course takes the form of lectures and workshops where students learn about the practices associated with leadership in designing from the point of view of the business image. They will be competent in applying the leadership practices in various communicative situations and with customers.

Literature / Study Material To be announced at the beginning of the course. *Learning Methods* Lectures and assignments

Assessment Grading based on a scale of 1–5.

Pakkauskonseptointi, 5 op KH14BAGR310 (study unit)

Lecturers Esa Savola, MA

Objectives

Students will acquire knowledge of the foundations of strategically designed packaging from the historical and practical points of view. They will create a packaging concept based on a commercial, ideological or political commission. The course takes the form of lectures and workshops where students learn how to design and implement a packaging concept for the future. Students will learn to define, design, schedule and implement a small–scale packaging concept.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and assignments

Assessment Grading based on a scale of 1–5.

Brändiseminaari, 5 op KH14BAGR320 (study unit)

Lecturers Esa Savola, MA

Objectives

Studies concentrate on the strategic foundations of product image design from the historical and practical points of view. Students will create a future–oriented brand concept based on a commercial, ideological or political commission. Learning will take place in the form of lectures and workshops, which will aid students in understanding the design and implementation of brand concepts in the field of graphic design. Students will learn to define, plan, schedule and implement a small–scale brand concept.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments

Assessment Grading based on a scale of 1 to 5.

Yrityskuvaohjelmat, 5 op KH14BAGR330 (study unit)

Lecturers Esa Savola, MA

Objectives

Students will be introduced to the strategic areas of designing a corporate image from a historical and practical point of view. Students will produce a communicative entity of business emblems, typography and recommendations for creating a corporate image based on a commercial, ideological or political commission. The course comprises lectures and workshops where students will learn to plan and implement a customer–oriented project in graphic design within the framework of corporate image design. Students will have command of various planning activities in designing and of recommending corporate image programmes.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and assignments

Study Descriptions

Assessment Grading based on a scale of 1–5.

Käyttäjälähtöinen teollinen mallistoprojekti 2, 8 op KH14BAKA301 (study unit)

Lecturers Jaakko Purtanen, MA

Objectives

The project will be carried out as team work together with several companies. The outcome of the project will be a piece of furniture, a furniture product range, fixture or other interior cladding element suitable for the production of an industrial company. Upon completion of the course, students will understand the production process of a company and its design and marketing strategies. Students will know how to create a concept for a product and visualize the preferred styles and shapes of the end–user.

Content

- Familiarisation with the user context according to a company's briefing, usability studies
- Creating a style and shape palette, visualizing the concept of a product
- Miniature, detail, pattern, and test models, as well as prototypes, designing a product for production
- Product design report

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments and independent work

Assessment Grading based on a scale of 1–5

Käyttäjälähtöinen teollinen mallistoprojekti 3, 11 op KH14BAKA310 (study unit)

Lecturers Sirkku Ylinen, MA

Objectives

How are the customer's needs taken into consideration in interior decorating? How do colour and light shape a room? How do various everyday activities shape the space in which we live? The purpose of interior decorating is to guarantee and improve the quality of the spacial and material living environment of people. Students will learn to work with interior decorating entities.

Content

- Space
- Lighting
- Living
- Furnishing
- Interior decorating materials
- User-oriented interior decorating
- Professional drawing
- Interaction of colours
- Compatibility of different shades of colour
- Proportions of surfaces with colour
- Brightness
- Designing a room

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments and independent study

Assessment Grading based on a scale of 1–5.

Lifestylemallisto 2, 6 op KH14BALS300 (study unit)

Lecturers

Anna-Miia Suihkonen, Jaana Liukkonen, and Merja Juppo

Objectives

Students will produce a model range of the future and a visual concept. Scenarios of the future and new materials form the basis of innovation. Upon completion of the course, students will have command of various methods for predicting future trends. They will be competent in utilising the latest information about materials and techniques.

Content

- Concepts (emotional design, segmenting, sociology, consumer behaviour, sustainable development, researching the future
- Working with prototypes/production (material innovations, digital representations/modelling of a product)

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Assignments

Assessment

- _
 - Grading based on a scale of 1–5
 - Portfolio
 - Product and process evaluation
 - Exam

Lfestylemallisto 3, 7 op KH14BALS310 (study unit)

Lecturers

Anna-Miia Suihkonen, Jaana Liukkonen, and Merja Juppo

Objectives

The basis of a range of models is one's own cultural heritage. Students will design an innovative range of products for industrial manufacture and create a marketing plan for it. Upon completion of the course, students will be competent in utilising their own cultural heritage in their designing. They will understand the principles of industrial product design and compile an plan for introducing a new product into the market.

Content

- Concepts and productization
- Cultural history (collections, literature)
- Manufacture (with appropriate technology)
- Marketing a new product (planning an advertising campaign, introducing the product into the market)

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Assignments

Assessment

- Grading based on a scale of 1–5
- Portfolio
- Product and process evaluation

Lifestyle yrityksen konseptointi, 6 op KH14BALS320 (study unit)

Lecturers Anna–Miia Suihkonen, Jaana Liukkonen, Merja Juppo, Haarala/Savola
Objectives

Students will further their own business idea or the business idea of an external commissioner, which they developed in the business module. The aim is to create an innovative business concept of the future in a certain lifestyle segment. Students will design a comprehensive concept for a shop and its entire operations. Students will also acquire knowledge of the principles of shop design. Upon completion of the course, students will understand the principles of creating a business idea and designing a shop. They will acquire skills in spatial modelling and graphic design. Students will also have command of large, visual concept entities and their contents.

Content

- Shop concepts (lighting, materials, furnishings, guiding customers, designing the product range, expos, purchasing activities)
- Graphic design and modelling (designing and producing marketing material)
- Service and relations marketing (networks, customer service, internal marketing)

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Assignments

Assessment

- Grading based on a scale of 1-5
- Report
- Portfolio
- Product and process evaluation

Campaign design, 5 op KH14BAGR400 (study unit)

Lecturers Esa Savola, MA

Objectives

The course concentrates on the strategic foundations of advertising and campaign design and the areas to which it can be applied from the historical and practical points of view. Learning takes place in the form of exercises given in lectures and workshops and, based on what they have learned, students will design and produce an advertising campaign or advertising campaign concept based on a commercial, ideological or political concept, or a concept of their own. Students will learn to define, design, schedule and implement a small–scale marketing campaign.

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments

Assessment Grading based on a scale of 1 to 5.

Käyttöliittymäsuunnittelu, 4 op KH14BAGR410 (study unit)

Lecturers Calle Grönlund, BA

Objectives

The course concentrates on the strategic foundations of user interface design and its areas of application from the historical and practical points of view. Learning takes place in the form of exercises given in lectures and workshops with which students will acquire knowledge of design concepts. Students will learn to define, design, schedule and implement a design concept for a graphic user interface.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments Assessment Grading based on a scale of 1–5.

Innovatiivinen graafinen tuotemuotoilu, 10 op KH14BAGR420 (study unit)

Lecturers Esa Savola, MA

Objectives

The course concentrates on the strategic foundations of innovative concept design and the areas to which it can be applied from the historical and practical points of view. Learning takes place in the form of exercises given in lectures and workshops and, based on what they have learned, students will design and produce an innovative product design project based on a commercial or ideological concept. Students will learn to define, design, schedule and implement a product design project.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

Lectures, assignments

Assessment Grading based on a scale of 1 to 5.

Concept Design, 6 op KH14BAKA400 (study unit)

Lecturers Vuokko Takala–Schreib, PhD

Objectives

Emphasis in the course is placed on acquiring understanding of previous knowledge about design, e.g. a previous product or project. Students will become familiar with the opportunities technology offers for creating new solutions and satisfying the consumer needs that have become evident in research.

Content

- An enticing idea or ambiguously identified opportunity as the basis
- Symbols (metaphor), reference to a product's physical properties
- Scenarios, (story) describing a product's use and dimensions of interaction
- Design engine, a product's essential property

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments and independent study

Assessment Grading based on a scale of 1–5.

Tulevaisuuden tutkimus, 6 op KH14BAKA410 (study unit)

Lecturers Vuokko Takala–Schreib, PhD

Objectives To create a product concept of the future.

Content

- Trends
- Megatrends
- Scenarios
- For ex. a project: updating a company's range of models according to the culture of the export country and consumer tastes

- For ex. taking the lifestyle of the elderly into consideration when designing space for them
- Impact of climate change?
- Ecological materials, sustainable development

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments and independent work

Assessment Grading based on a scale of 1–5.

Co-operation project, 7 op KH14BAKA420 (study unit)

Lecturers Jaakko Purtanen, MA

Objectives

Students will create a new or further develop an existing concept, prototype or product for marketing and productization. They will engage in a product design project either on a team or independently. The outcome of the project will be a professionally documented product or model range. Upon completion of the course, students will be competent in professionally producing quality documents, have command of the development of concepts through product development, and understand the requirements of productizing a product or model range.

Content

- Refining documents in a professional manner according to the requirements of productization
- Analysing and defining the requirements for productization
- Independent management and scheduling of the process for creating a concept for industry and product design

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments and independent work

Assessment Grading based on a scale of 1–5.

Brändikonseptointi, 6 op KH14BALS400 (study unit)

Lecturers

Anna-Miia Suihkonen, Jaana Liukkonen, Merja Juppo

Objectives

Students will engage in a project to create a brand for a product, service or lifestyle group. They will create a comprehensive brand concept, which comprises the visual aspects of the brand as well as its story. Students will create a website for their brand. Upon completion of the course, students will apply the techniques of design in creating a brand for a service. They will understand how the service experience can be improved. They will also be competent in developing a visual image for a company.

Content

- Brand marketing
- Other media and creation of a website (content and visual image)
- Concepts (stories, environmental planning, packaging, name, logo, characters, communication)

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Assignments

Assessment

- Grading based on a scale of 1 to 5
- Assignments
- Portfolio
- Process evaluation
- Exam

Muotoilualan tutkimustoiminta, 6 op KH14BALS410 (study unit)

Lecturers

Anna-Miia Suihkonen, Jaana Liukkonen, and Merja Juppo

Objectives

Students will partake in R&D projects pertaining to their own professional field and/or they will create content for various articles to be published or programmes (the net, TV, radio). Upon completion of the course, students will be competent in producing material for various texts to be published. They will also know how to find, analyse and produce field–related information.

Content

- Communications (articles, essays, products to be published)
- Working in projects

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Assignments and lectures

Assessment

- Grading based on a scale of 1–5
- Production and process evaluation

Co-operation project, 7 op KH14BALS420 (study unit)

Lecturers

Anna-Miia Suihkonen, Jaana Liukkonen, and Merja Juppo

Objectives

Students will carry out a development project based on the commeission of and external body. Upon completion of the project, students will be competent in independently handling customer relations and consider the needs of the customer/company and the terms set forth by the customer/company in their own designing, as well as in keeping to a set schedule. Students will know how to make a partnership/commission contract, bill the customer for performed work, and abide by the issues that have been agreed upon. Students will also understand the main principles of international business and the practices involved in fairs.

Content

- Creating concepts
- Project management
- Business and internationalisation (import and export, international fairs)

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Assignments and lectures

Assessment

- Grading based on a scale of 1–5
- Product development report

Interiordesign project, 20 op KH14VOSIS (study unit)

Lecturers

Sirkku Ylinen, MA

Objectives

Module 1: 5 cr Students will become familiar with customer– and user–oriented processes of interior decorating based on spatial and user analyses. They will make professional drawings and presentation graphics in different dimensions for project plans. Students will understand the principles behind designing furniture and lighting, and they will be introduced to practices associated with project work. Students will learn about various surface materials used in interior decorating and their properties. Module 2: 5 cr Students will be introduced to project work in interior decorating and the practices associated with professional project presentations. They will become competent in comprehensively creating, producing and presenting a project plan (space, lighting, fixitures and furniture, decor elements) of a chosen place. Module 3: 10 cr Students will understand the underlying processes involved in customer relations, and they will become familiar with the productiveness of design work and productization as well as the co–ordination of interior decorating projects. Students will also be introduced to the work of freelancers, professional networking, and marketing a designing company or services.

Content

Module 1

- Individual learning needs and interests in interior decorating
- Living, designing for the end-user, functionality
- Furniture and furnishing in the home
- Architecture, lighting design, colour, space
- Interior decorating materials for various places in the home (kitchen, bath/sauna, rooms)
- Professional presentation techniques, symbols in drawings, visualization (professional drawings and presentation graphics in various dimensions for project plans)
- Trends, lifestyles, style periods
- Requirements: project plan, project presentation and project portfolio

Module 2

- Individual learning needs and interests in interior decorating
- Furniture, furnishing, fixtures and decor elements
- Architecture, lighting design, colour, space
- Decorating materials in public places, fire safety, durability
- Professional presentation techniques, symbols in drawings, visualization
- Boarders between public and private space
- Requirements: project plan, project presentation and project portfolio

Module 3

- · Individual learning needs and interests in interior decorating
- Living, designing for the end-user, functionality
- Furniture and furnishing
- Architecture, lighting design, colour, space
- Interior decorating materials
- Professional presentation techniques, symbols in drawings, visualization (professional drawings and presentation graphics in various dimensions for project plans)
- Trends, lifestyles, style periods
- Boarders between public and private space

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments and independent work

Assessment Grading based on a scale of 1–5.

Mallistosuunnittelu, 20 op KH14VOMAL (study unit)

Lecturers

- Jaana Liukkonen, MA
- Designer Merja Juppo
- Designer Anna–Mila Suihkonen

Objectives

Collection Design is divided into three optional parts: Designing and Producing Woven Textiles, Designing Printed Fabrics, and Fashion Designing. Students choose one of the areas in which to advance their knowledge. The modules in Collection Design are suitable for all fields. Designing and Producing Woven Textiles Module 1/Rugs: 5 cr

- Creating a collection of rugs
- Rug designs made primarily by hand (drawing)

Module 2/Jaqcuard Fabrics: 5 cr

- Designing patterns in woven fabrics using the Jacquard technique
- Possible co-operation with a customer
- Patterns designed pirmarily with an image processing programme

Module 3/Designing Textiles for Public Interior Decorating: 5 cr

- Designing woven textiles for public places
- Familiarisation with the designing of textiles for public places
- Patterns designed either by hand or image processing programmes
- Possible co-operation with customers

Designing Printed Fabrics Module 1/Designing Prints 1: 5 cr

- Creating a pattern collection for products to use in interior decorating (wallpapers, fabrics, tiles)
- Patterns designed primarily by hand

Module 2(Designing Pronts 2: 5 cr

- Designing patterns and prints for paper products (e.g. gift wrapping, disposable products)
- Possible co-operation with a customer
- Patterns and prints designed primarily with a image processing programme

Module 3/Designing Prints 3: 5 cr

- Designing prints and patterns for clothes and accessories
- Familiarisation with advertising products and spin-offs and the designing of their patterns
- Prints designed either by hand or with an image processing programme
- Possible co-operation with a customer

Fashion Designing Module 1/Fashion Designing 1: 5 cr

- Designing clothing and/or accessory collections for a chosen target group and specific use
- Emphasis on the diversity of innovation and development of speed
- Fashion styles designed primarily by hand

Module 2/Fashion Designing 2: 5 cr

- Designing clothing and/or accessory collections for a chosen target group and specific use
- Emphasis on ecology and ethical aspects in designing
- Possible co-operation with a customer
- Fashion styles designed primarily with an image processing programme

Module 3/Fashion Designing 3: 5 cr

- Designing clothing and/or accessory collections for a chosen target group
- Emphasis on the productization of one's own collection
- Possible co-operation with a customer
- Possibility to emphasise either the collection's visual presentation or creation of a prototype depending on one's interests

Module 4: 5 cr

- Designing one's own collection for an external customer
- Tutorial guidance in the spring of the fourth academic year

Content

Designing and Producing Woven Textiles Module 1

- Basics in designing woven fabrics, colouring
- Contracts associated with sales and necessary forms

Module 2

- Limitations in pattern design set by the ptoduct and technology
- Creating one's own collection, using image processing programmes as a tool in pattern design
- Experiments with materials and weaves with the TC-1 weaving device

Module 3

- Demands of public places, architecture and standards on textiles for public places
- Designing one's own element for decorating the interior of a public place

Designing Printed Fabrics Module 1

- Continuous pattern surfaces (reports), basics in designing patterned products, colouring
- Contracts associated with sales and necessary forms

Module 2

- Limitations in pattern design set by the product
- Creating one's own collection, using image processing programmes as a tool in pattern design

Module 3

• Aim (entrepreneur's/event's) of advertising products and considering it in one's own designing

Fashion Designing Module 1

- Basics in clothing and collection designing, industrial clothing design and production process, impact of the target group, needs for use and trends on designing
- Structure of clothing, materials and working with prototypes
- Contracts associated with freelance work and scheduling a designing project

Module 2

- Ecological consumers and materials and sustainable development in clothing production
- Criteria for sustainable development in the work of a designer
- Using image processing programmes as a tool in fashion designing

Module 3

• Introducing one's own fashion collection into the market, pricing products, producing marketing material, sub-contracting

Module 4: 5 cr

- Designing one's own collection for an external customer
- Tutorial guidance in the spring of the fourth academic year

Learning Methods

Lectures, assignments and working in workshops

Assessment

- Grading based on a scale of 1–5
- Process evaluation
- Portfolios

Kalustesuunnittelu, 20 op KH14VOKAL (study unit)

Lecturers Jaakko Purtanen, MA *Objectives* Module 1: 5 cr

- Modern, decorative woodwork
- Methods for working with different materials
- Lamp design

Module 2: 5 cr

- Utilising new technology
- Industrial production
- Advancing skills in fine woodworking

Module 3: 10 cr

- 3D and virtual environments
- Character and ministure models
- Virtual prototyping

Content Module 1

- Water cutters
- Working with prototypes
- Materials

Module 2

- Innovation on technology's terms
- Rapid prototyping
- Character models and miniature models
- Working with CAD

Module 3

- Own project in which knowledge of materials is used in the virtual environment
- Testing a prototype in the virtual environment
- Making a prototype

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments and independent study

Assessment Grading based on a scale of 1–5.

FREE CHOICE STUDIES, 8 op KH14DD (study entity)

- Objectives: Students will expand their professional knowledge. Elective courses may be integrated into projects within the profession. Each year, students choose elective courses amounting to a total of 15 credits.
- Requirements and assessment: Each course has its own requirements and methods of assessment. Courses are assessed either on a pass/fail basis or they are graded on a scale of 1–5.

PRACTICAL TRAINING, 30 op KH14TYHA (study entity)

Lecturers: Jaakko Purtanen, Merja Juppo, and Hannu Ruokonen Objectives: Students will be competent in working in a professional manner in various work communities. They will acquire skills needed in the working world, e.g. an entrepreneurial attitude, innovativeness, designing skills, networking, and efficiency. The practical training is divided into three years. Training in the spring of the first year (5 cr) concentrates on customer service in a designing company. Training in the second year involves choosing a company, community or project where students can carry out the visualization of an event. The last period of training (third year, autumn) provides students with advanced training in designing (15 cr) in a company according to the students' personal career plan either in Finland or abroad. Students also have practical training (5 cr) during the summer of their third year of studies. The aim is to deepen their knowledge of the working world and to apply that knowledge in their final thesis. Content:

- Carrying out one's own career plan
- Participation in coaching for practical training
- Familiarisation with the job opportunities and business activities in one's own field
- Part of the training may be completed in one's own company
- Goals of the training must be approved by the supervisor before choosing a place to do the training
- 3 copies of the practical training contract in writing
- Company presentation and report about the practical training

Literature/Study material: To be announced. Learning methds: Students learn the ways of the working world through real-life, practical situations in the work community. Assessment: Pass/fail

THESIS, 15 op KH14ONT (study entity)

Lecturers:

- Senior lecturers
- Teachers in the field
- Communications teacher

Objectives: The thesis is a process leading to a university of applied sciences degree, which is evidence of students' professional readiness and maturity. Students are required to use creative problem–solving skills and to familiarise themselves with the use of methodological and technological tools. There are separate instructions for writing the final thesis where the thesis requirements and other related issues are explained. Contents: Product development process, material productions, written report Previous studies: A minimum of 180 study points must be completed and the topic of the thesis must be approved by the thesis supervisor. Assessment: Grading based on a scale of 1–5 according to Seinäjoki UAS's general assessment criteria for theses.

Degree Programme in Food Processing and Biotechnology (In Finnish)

Head of degree programme: Mr Jarmo Alarinta , Tel +358 40 830 4250, E-mail: jarmo.alarinta@seamk.fi Student counsellor: Ms Merja Kyntäjä, Tel. +358 40 830 4184, E-mail: merja.kyntaja@seamk.fi ECTS/International coordinator: Mr Tapio Pihlajaniemi, Tel +358 40 830 3966, E-mail: tapio.pihlajaniemi@seamk.fi

Degree and qualification awarded

Bachelor of Engineering (BEng)

Access requirements

Please see the Applicant's Guide or the website www.seamk.fi.

Objectives of study

The objective of Food Processing and Biotechnology degree programme is to teach the students food processing and biotechnology, related to automation and process technology. The specialisation lines are Food Processing and Biotechnology or Process and Automation Technology. The aim is also to prepare the students for international cooperation. The study programme equips the students for production management, product development, quality control and management tasks in the field of the food processing and biotechnology, planning and consultation in engineering companies, management of laboratories and for independent entrepreneurship. Bachelor of science have good employment situation in food industry.

Structure of the Food Processing and Biotechnology degree programme

The degree programme consists of 240 ECTS and the studying time is approximately four years. The studies consist of basic studies, professional studies, free choice studies, modules of food technology, biotechnology, process technology and entrepreneurship. Practical work training and the final thesis are essential study parts of the food processing and biotechnology degree programme. The studies and lectures are organised as study units or courses, which are grouped into module structures relating to the subject area. Study units or courses are compulsory, alternative or free choice studies. The specialisation modules will be choice between Food Processing and Biotechnology or Process and Automation Technology.

Competence analysis of degree programme in Wood Technology

Competence in living and other biological materials

- recognizes the special characteristics of biological materials
- understands the function of living cells

Competence in bioprocesses

- is familiar with the unit operations employed in the field
- is proficient in bio and food technology processes and recognizes the special requirements imposed by the processed materials for the processes
- understands whole production systems
 - process engineering
 - bio and food processes
 - production systems

Safety and quality competence

- recognizes and manages the quality and hygienic risk factors associated with production processes
- understands the importance of quality work for production and products

- is familiar with the legislation of the field and is able to apply it in, for example, the controlling of his/her own products
 - ♦ hygiene
 - ♦ legislation
 - ♦ quality control

Technological and economical competence

- strives for market–based operation according to sustainable development principles
- understands the characteristics of production economy in the field, e.g. in the production of daily consumer goods
 - market orientation

Mathematical and scientific competence

- possesses the mathematical and physics skills required in the field
- possesses the knowledge and skills in chemistry and biochemistry required in the field
- mathematical and physics skills
- skills in chemistry and biochemistry
- adequate skills in information technologies

Managerial competence

• is able to perform managerial tasks

Degree Programme in Food Processing and Biotechnology (In Finnish), 240 cr (1.9.2008) BIOEL 2008

Code	Name	Study Year				CR
		1.	2.	3.	4.	
KC03AE10	BASIC STUDIES					52
KC03AE10015	Introduction to technical studies	x				3
KC03AE10027	Communication and negotiation skills 1	x				3
KC03AE10028	Communication and negotiation skills 2		x			3
KC03AE10031	Swedish	x				3
KC03AE10041	English 1	x				3
KC03AE10051	English 2		x			3
KC03AE10061	English 3				х	3
KC03AE10083	Algebra and trigonometry	x				4
KC03AE10084	Vectors and matrices	x				3
KC03AE10085	Differential and integral calculus	x				3
KC03AE10086	Differential equations and business mathematics		x			3
KC03AE10087	Statistics		x			3
KC03AE10088	Mechanics	x				3
KC03AE10089	Thermal and electrical physics	x				3
KC03AE10090	Wave and modern physics		x			3
KC03AE10093	Physics laboratory works		x			3
KC03AE10172	Office applications	х				3
KC03BEAOP	BASICS OF PROFESSIONAL STUDIES					53
KC03BE20021	Industrial economics		x			3
KC03BE20041	Statics and strength of materials		x			4
KC03BE20061	CAD engineering drawing	x				6
KC03BE40023	Basics of automation		x			3

Degree Programme in Food Processing and Biotechnology (In Finnish), 240 cr (1.9.2008) BIOEL 2008

KC03BE20071	Manufacturing methods and machine elements			х		3
KC03BE20089	Maintenance				x	3
KC03BE20091	Plant simulation			х		3
KC03BE20101	Inorganic and technical chemistry	x				6
KC03BE20112	Chemistry laboratory works	x				5
KC03BE20120	Organic chemistry		x			3
KC03BE20126	Basics of food technology	x				3
KC03BE20151	Microbiology 1	x				3
KC03BE20161	Process automation		х			3
KC03BE20170	Sustainable development				x	3
KC03BE20180	Food production project work		x			2
KC03BE00	PROFESSIONAL STUDIES MODULES					75
KC03BE30	Food technology basic module					15
KC03BE30051	Food chemistry		x			5
KC03BE30061	Food processes				x	5
KC03BE30031	Food hygiene and legislation	x				5
KC03BE40	Process technology basic module					15
KC03BE40012	Logistics, storage and packaging		x			4
KC03BE40024	Fluid technology and heat transfer technology		x			5
KC03BE40051	Plant design			x		3
KC03BE40036	Measuring techniques		x			3
KC03BE50	Biotechnology basic module					15
KC03BE50021	Microbiology 2		x			3
KC03BE50031	Biochemistry		x			6
KC03BE50041	Bioprocesstechnology			х		6
KC03BE60	Process and automation technology continuation module					
KC03BE50071	Food processes					7
KC03BE40032	Control engineering					3
KC03CE40112	Machine and equipment design					2
KC03CE40321	Process design					5
KC03CE40241	Robotics					3
KC03CE40172	Food process technology project					2
KC03BE70	Biotechnology and food technology continuation module					15
KC03BE60011	Product development					6
KC03CE60030	Food industry quality management					4
KC03CE60141	Meat technology 1					3
KC03CE60151	Meat technology 2					2
KC03CE60161	Dairy technology					3
KC03CE60191	Cereal technology 1					3
KC03CE60201	Cereal technology 2					2
KC03CE60171	Molecule biology					3
KC03CE60211	Environmental biotechnology					2

KC03CE60222	Food process technology project 2					2
KC03CY10	Entrepreneurship module					15
KC03CY10010	Human resources management				x	4
KC03CY20031	Project leadership			x		4
KC03CY10020	Business economics				x	4
KC03CY10040	Marketing				x	3
KC03DE90	FREE CHOICE STUDIES					15
KC03ER00	PRACTICAL TRAINING					30
KC03FE80	FINAL THESIS					15

Study Descriptions

BASIC STUDIES, 52 op KC03AE10 (study entity)

Basic Studies provides students with the fundamental knowledge and methods necessary in utilizing a scientific approach to thinking, which can be applied to their studies and future career.

Introduction to technical studies, 3 op KC03AE10015 (study unit)

Lecturers

- Jarmo Alarinta
- Pasi Selin

Objectives

Upon completion of the course, students will possess knowledge concerning study techniques, be familiar with their own field of engineering, understand the fundamentals of data acquisition and research methods. Also, students will be aware of their own personal learning style(s), the significance of their field of engineering, the history of the field of engineering, the principles of scientific reasearch. They will know how to write a research report and be familiar with the basic ethics of engineering.

Content

Studying, learning, data acquisition, significance of engineering

Literature / Study Material To be announced at the commencement of the lectures

Learning Methods Lectures and team work, active participation

Assessment Exam and approved assignments

Languages of Instruction Finnish

Communication and negotiation skills 1, 3 op KC03AE10027 (study unit)

Lecturers Helena Mikkilä

Objectives

Students will gain insight into the objectives of communication at work. They will be competent in producing legible material and know the proper conduct of meetings.

Content

• Basic concepts of communication

- Document linguistics and layouts
- Producing oral and written information
- Meeting and negotiation skills
- Minutes of a meeting

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, exercises in written and oral communication

Assessment Oral and written exercises and an examination

Communication and negotiation skills 2, 3 op KC03AE10028 (study unit)

Lecturers Helena Mikkilä

Objectives

Students will acquire knowledge in interactive communication, types of communication in various on-the-job situations, negotiation procedures, and in producing formal, written material.

Content

The topics discussed in the course include skills in holding presentations, interviews, discussions and negotiations. It also teaches students how to write documents pertaining to negotiations, reports and job applications.

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, oral and written exercises

Assessment Examination

Languages of Instruction Finnish

Swedish, 3 op KC03AE10031 (study unit)

Lecturers Hanna Mäki–Hallila

Objectives

Upon completion of the course, students will be competent in using Swedish in their professional field once they are in the working world. They will also be competent in interactive communication and in collecting and efficiently utilizing information specific to their field.

Content

The topics discussed in the course include education, job applications and work, the work environment and society, customer contacts, general texts, and field–specific texts associated with the food processing and biotechnology industries, as well as the terminology contained therein.

Literature / Study Material

To be announced at the commencement of the course.

Learning Methods

Lectures, listening comprehension, oral exercises, written assignments in pairs, small groups and independently

Assessment Active participation in the lectures, approved interim and final exams

Languages of Instruction Finnish and Swedish

English 1, 3 op KC03AE10041 (study unit)

Lecturers

Riikka Ala–Sankila, MA

Objectives

Students will develop oral and written language skills. Upon completion of the course, students will be able to explain in English the type of education they have and the tasks they will be carrying out in their future career. They will also be familiar with the job application process and know how to write a job application/curriculum vitae in English, in accordance with basic business correspondence. In addition, students will understand the basic vocabulary in texts associated with the fields of food processing and biotechnology texts. Moreover, they will be competent in using this vocabulary in writing and speaking.

Content

The course comprises exercises in effective interactive communication, data acquisition, the use of the Internet, basic vocabulary in texts associated with food processing and biotechnology, oral and written exercises (including a CV), oral presentations and texts in the course book.

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers, Edita, the latest edition
- Texts associated with the fields of food processing and biotechnology, and other study material

Learning Methods

Oral and written exercises in pairs, groups and individually

Assessment

Active participation in lectures and exercises and approved interim and final examinations

Languages of Instruction Finnish and English

English 2, 3 op KC03AE10051 (study unit)

Lecturers Riikka Ala–Sankila, MA

Objectives

The course will deepen the oral and written language skills of the students, including written communication and business correspondence. Additionally, students will acquaint themselves with and understand the more profound professional vocabulary in texts associated with the fields of food processing and biotechnology. They will also be competent in using this vocabulary in writing and speaking.

Content

The course comprises exercises in effective interactive communication through professional texts based on food processing and biotechnology industries. The course also includes oral and written exercises pertaining to business correspondence with some terminology from the mentioned fields, professionally–oriented oral presentations, and texts in the course book.

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers, Edita, the latest edition
- Texts associated with the food processing and biotechnology industries, and other study material

Learning Methods

Oral and written exercises in pairs, groups and individually

Assessment

Active participation in lectures and exercises and approved interim and final examinations

Languages of Instruction Finnish and English

English 3, 3 op KC03AE10061 (study unit)

Lecturers

Tapio Pihlajaniemi, MA

Objectives

The course will enforce and maintain the oral and written language skills students have acquired at an earlier time. The central themes of the course include exercises for writing abstract texts, procedures for holding meetings and negotiations, and vocabulary. Students will also be familiar with comprehensive, professional texts associated with the food processing and biotechnology industries, and they will be competent in using professional vocabulary both in writing and speaking.

Content

The course comprises exercises in effective interactive communication using professional texts associated with the food processing and biotechnology inductries. The course also includes oral and written exercises, as well as technical reading and writing, oral presentations that are strictly professional, and texts from the course book.

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers, Edita, the latest edition
- Texts associated with the food processing and biotechnology industries, and other study material

Learning Methods

Oral and written exercises in pairs, groups and individually

Assessment Active participation in lectures and exercises and approved interim and final examinations

Languages of Instruction Finnish and English

Algebra and trigonometry, 4 op KC03AE10083 (study unit)

Lecturers Heikki Kokkonen, LA

Objectives

Students will acquire basic knowledge in mathematics needed for their studies in technology.

Content

- Simplification of algebraic expressions
- Equations
- Trigonometry

Literature / Study Material

- Antti Majaniemi: ALGEBRA I
- Antti Majaniemi: GEOMETRIA

Learning Methods

- Lectures, exercises and indepedent study
- NB! 80 % participation required in the lectures

Assessment

Two mid-term exams or final exam and exercise points

Languages of Instruction Finnish

Vectors and matrices, 3 op KC03AE10084 (study unit)

Lecturers Heikki Kokkonen, LA

Study Descriptions

Objectives

Students will acquire knowledge in vectors and be competent in calculating matrix algebra and analytic geometry. They will need this knowledge in the Professional Studies which requires the command of complex technical–mathematical knowledge.

Content

- Vectors
- Matrix algebra
- Analytic geometry

Literature / Study Material

- Antti Majaniemi: ALGEBRA I
- Antti Majaniemi: GEOMETRIA

Learning Methods Lectures, exercises and independent study

Assessment

Two mid-term exams or final exam and exercise points

Prerequisites

- Algebra
- Trigonometry

Languages of Instruction Finnish

Differential and integral calculus, 3 op KC03AE10085 (study unit)

Lecturers Heikki Kokkonen, LA

Objectives

Students will acquire basic knowledge of one-variable differential calculus and integral calculus. This knowledge is needed in their Professional Studies, which require students to have a command of complex technical-mathematical knowledge.

Content One–variable differential and integral calculations

Literature / Study Material

- Antti Majaniemi: MATEMATIIKKA I
- Antti Majaniemi: MATEMATIIKKA II

Learning Methods Lectures, exercises, and independent study

Assessment Two mid-term exams or final exam and exercise points

Prerequisites

- Algebra
- Trigonometry

Languages of Instruction Finnish

Differential equations and business mathematics, 3 op KC03AE10086 (study unit)

Lecturers Juhani Paananen, MSc

Objectives

Students will acquire basic knowledge of differential equations and business mathematics. This knowledge is needed in their Professional Studies, which requires students to have a command of complex technical–mathematical knowledge.

Content

- Differential equations
- Business mathematics

Literature / Study Material

- Antti Majaniemi: MATEMATIIKKA II Differentiaali- ja integraalilaskentaa sekä differentiaaliyhtälöitä
- Leila Karjalainen: OPTIMI Matematiikkaa talouselämän ammattilaisille.

Learning Methods Lectures, exercises, and independent study

Assessment

Two mid-term exams or final exam and exercise points

Prerequisites

- Algebra
- Trigonometry
- Differential and integral calculus

Languages of Instruction Finnish

Statistics, 3 op KC03AE10087 (study unit)

Lecturers Juhani Paananen, MSc

Objectives

Students will gain basic knowledge of statistics, statistical methods, designing experiments, and mathematical software. They will need this knowledge in their Professional Studies which requires the command of complex technical–mathematical knowledge.

Content

- Basics of statistics
- Statistical methods
- Design of experiments
- Mathematical software

Literature / Study Material Antti Majaniemi: MATEMATIIKKA IV – Tilastot ja todennäköisyys (Statistics and probability)

Learning Methods Lectures, exercises and independent study

Assessment Two mid-term exams or final exam and exercise points

Prerequisites

- Algebra
- Trigonometry

Languages of Instruction Finnish

Mechanics, 3 op KC03AE10088 (study unit)

Lecturers Pasi Junell, PhD

Objectives

Students will acquire basic knowledge of physics for engineering. The course introduces a foundation for the comprehension of demanding technical information required in the Professional Studies and prepares the students for technical expertise in their profession.

Content

- Kinematics and dynamics of particles
- Work, power, energy
- Mechanics of rigid objects
- Mechanics of solids and fluids

Literature / Study Material

- Hautala, Peltonen: Insinöörin (AMK) Fysiikka osa I. Lahden Teho-Opetus Oy / Physics for engineers, part I
- Lecture notes

Learning Methods Active participation in lectures and exercises: minimum attendance is 80 %.

Assessment Written course–end examination

Languages of Instruction Finnish

Thermal and electrical physics, 3 op KC03AE10089 (study unit)

Lecturers Pasi Junell, PhD

Objectives

Students will acquire basic knowledge of physics for engineering. The course introduces a foundation for the comprehension of demanding technical information required in the Professional Studies and prepares the students for technical expertise in their profession.

Content

- Basics of thermal physics and electrostatics
- Direct-current and basics of alternating current

Literature / Study Material

- Hautala, Peltonen: Insinöörin (AMK) Fysiikka osat I ja II (Physics for engineers, parts I and II). Lahden Teho-Opetus Oy.
- Lecture notes

Learning Methods Active participation in lectures and exercises

Assessment Written course-end examination

Prerequisites Mechanics

Languages of Instruction Finnish

Wave and modern physics, 3 op KC03AE10090 (study unit)

Lecturers Pasi Junell, PhD

Objectives

Students will acquire basic knowledge of physics for engineering. The course introduces a foundation for the comprehension of demanding technical information required in the Professional Studies and prepares the students for technical expertise in their profession.

Content

- Oscillatory motion
- Wave motion
- Acoustics
- Optics
- Radiation and nuclear physics

Literature / Study Material

- Hautala, Peltonen: Insinöörin (AMK) Fysiikka osa II. Lahden Teho-Opetus Oy. / The engineer's physics
- Lecture notes.

Learning Methods Active participation in lectures and exercises

Assessment Written course–end examination

Prerequisites Mechanics

Languages of Instruction Finnish

Physics laboratory works, 3 op KC03AE10093 (study unit)

Lecturers Pasi Junell, PhD

Objectives

This course provides students with basic knowledge in experimental measurements, processing and reporting. Applications in experimental physics for various fields of engineering will also be introduced.

Content

Laboratory experiments from different areas of physics

Literature / Study Material Instructions for exercises in physics (Seinäjoki University of Applied Sciences, School of Engineering)

Learning Methods Laboratory exercises (minimum 90 % attendance required) and written reports

Assessment Approved completion of exercises, approved reports and written examination

Prerequisites Mechanics

Languages of Instruction Finnish

Office applications, 3 op KC03AE10172 (study unit)

Lecturers Katri Nyman

Objectives

Students will be familiar with the more significant types of software and IT systems used by students in the university, and they will know how to use these systems. Upon completion of the course, students will understand the basic IT terminology. They will be aware of the role of IT in society and understand how IT can be applied in their own

professional field.

Content

- SeAMK's IT systems (Intranet, Student Register, online learning environment, and devices in use)
- Online services (e-mail and websites)
- Application software (word processing, spreadsheets, graphics, mathematics programmes, and creation of a website, etc.)

Literature / Study Material

- Juha Paananen: Tietotekniikan peruskirja. Docendo (Basic IT handbook)
- Guidebooks for application software
- Lecture notes

Learning Methods Lectures, assignments, and independent study

Assessment

Written exam and approved assignments

Industrial economics, 3 op KC03BE20021 (study unit)

Lecturers Lasse Tarhala, MSc

Objectives

Students will gain insight into the national economy, the structure of industry, domestic competitive advantage, the main concepts of financial, marketing and production operations, quality management and environmental policies.

Content

- Industrial strategy and policies, labour parties, types of enterprises, establishing and managing an enterprise
 Financial requirements, growth, profitability, liquidity and financial solidity
- Basic concepts of marketing, human resources and quality management

Literature / Study Material

- Uusi-Rauva, Haverila, Kouri: Teollisuustalous (Industrial economics)
- Lecture handouts and other material

Learning Methods Lectures, exercises, seminars

Assessment Examination

Statics and strength of materials, 4 op KC03BE20041 (study unit)

Lecturers Markku Kärkkäinen

Objectives Students will gain an understanding of the force system, applications, and equilibrium conditions of a rigid body.

Content

- Calculation of stresses and transformations
- Equilibrium conditions of a rigid body
- Basic concepts of statics and strength of materials
- Basics of measurements of simple bar and beam structures

Literature / Study Material

To be announced during lectures.

Learning Methods Lectures and calculations

Assessment Interim tests or an examination and apprved calculation assignments

Prerequisites

- Mathematics 1–2
- Physics 1

Languages of Instruction Finnish

CAD engineering drawing, 6 op KC03BE20061 (study unit)

Lecturers Jukka Aarnio, DSc (Tech.)

Objectives

Students will become familiar with the most important standards for making drawings in engineering drawing as well as the significant of these drawings on design.

Content

• Fundamentals of the Auto-Cad program

Literature / Study Material

- Literature for the course will be announced at the beginning of the course
- Handouts

Learning Methods Lectures, exercises

Assessment Examination

Basics of automation, 3 op KC03BE40023 (study unit)

Lecturers Veli–Jukka Uitto, MSc

Objectives

Students will understand the prerequisites for the functions of automated systems, and learn to identify functional areas and their interdependency. They will also identify the common sensors and PLC's used in industry.

Content

The topics discussed in the course include control systems, programming, equipment, sensors, control and adjustment, feedback, control engineering components.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and programming exercises

Assessment Exercises, examination

Languages of Instruction Finnish

Manufacturing methods and machine elements, 3 op KC03BE20071 (study unit)

Lecturers Jarmo Alarinta, MSc

Objectives

Students will acquire knowledge of materials used in machine construction, the fundamentals of machine elements, and production methods.

Content

- Metals, materials selection and methods of processing
- General working methods in machine manufacture
- Standardised and listed machine elements, their structure and selection
- Fixed, detachable, flexible joints, components in rotation, methods of power transmission with related components and selections
- Basics of hydraulics

Literature / Study Material To be announced by the lecturer.

Learning Methods Lectures and exercises, interim tests

Assessment Examination

Languages of Instruction Finnish

Maintenance, 3 op KC03BE20089 (study unit)

Lecturers Jarmo Alarinta, MSc

Objectives

Students will learn the fundamentals of computer-aided maintenance, including planning, implementation and management.

Content

- Maintenance and development for service reliability
- Space and equipment for maintenance
- Information systems and management methods
- Strategies
- Material requirements and maintenance investments

Literature / Study Material

- Käynnissäpidon johtaminen ja talous, Scandinavian Center for Maintenance Management
- Vijma Maintenance-kunnossapidon tiedonhallintajärjestelmä (Computerised maintenance)

Learning Methods

Lectures, homework, assignment, computer practice

Assessment One written examination and assignment

Languages of Instruction Finnish

Plant simulation, 3 op KC03BE20091 (study unit)

Lecturers Jorma Mettälä

Study Descriptions

Objectives

Students will gain insight into plant simulation in discrete production lines.

Content

• Plant simulation program and its areas of application

Literature / Study Material Exercise material and theory in Finnish and in English

Learning Methods Lectures, computer-aided exercises, approved assignment/work book

Assessment Examination

Languages of Instruction Finnish

Inorganic and technical chemistry, 6 op KC03BE20101 (study unit)

Lecturers Jaana Latvala, DSc

Objectives Students will learn the main aspects of general and inorganic chemistry.

Content

- Main aspects of general and inorganic chemistry
- Chemical calculations
- Chemistry of elements
- Chemical equations
- Acids and alkali
- Chemical calculation methods and concepts
- Chemical analysis
- Handling laboratory chemicals and safe working methods

Literature / Study Material Antila, Karppinen, Leskelä, Mölsä and Pohjakallio: Tekniikan kemia (Engineering chemistry)

Learning Methods Lectures, assignments, and calculations

Assessment Written examination or interim tests

Prerequisites Upper secondary school or vocational school chemistry

Languages of Instruction Finnish

Chemistry laboratory works, 5 op KC03BE20112 (study unit)

Lecturers Merja Kyntäjä, BSc

Objectives

The aim of the course is to provide students with basic knowledge of biological materials analysis.

Content

- Titration gravimeter, spectrophotometric, chromatographic methods, e.g. UV/VIS, HPLC
- Calculation of results
- Handling of laboratory chemicals and safe working methods

Literature / Study Material Working instructions

Learning Methods Laboratory assignments, calculations, and seminar

Assessment Approved reports and seminar

Prerequisites

• Inorganic and Technical Chemistry (alternatively, to be taken simultaneously with Analytical Chemistry)

Languages of Instruction Finnish

Organic chemistry, 3 op KC03BE20120 (study unit)

Lecturers Jaana Latvala, PhD

Objectives

Students will be able to recognise organic compounds, and they will gain knowledge of the types of reactions of the main compound categories.

Content

- Functional groups of organic compounds and nomenclature basis (IUPAC)
- Types of reactions, lipids, proteins, carbohydrates and polymers
- Organic synthesis in laboratory conditions

Literature / Study Material

Jokela, Niinistö: Orgaanisen kemian perusteet ja sovellukset (Basics of organic chemistry and its applications). Otatieto

Learning Methods Lectures, laboratory work

Assessment Examination

Prerequisites Inorganic and Technical Chemistry

Languages of Instruction Finnish

Basics of food technology, 3 op KC03BE20126 (study unit)

Lecturers Marjatta Salminen, MSc

Objectives

The aim of the course is to provide students with basic knowledge of industrial food production and production equipment.

Content

The topics discussed in the course include the structure of the Finnish food industry, chief industrial production methods in the food industry, meat products, cereal products, dairy products, edible fats, sugars, fruit and vegetable products, drinks and confectionery.

Literature / Study Material

Saarela, Hyvönen, Määttälä, von Wright: Elintarvikeprosessit (Food processes). Savonia

Learning Methods Lectures and seminars Assessment Examination

Prerequisites

Compulsory for those who have not completed corresponding studies in a vocational institution

Languages of Instruction Finnish

Further Information Compulsory for upper secondary school graduates

Microbiology 1, 3 op KC03BE20151 (study unit)

Lecturers Marjatta Salminen, MSc

Objectives

Students will gain knowledge of various types of microbes and their living conditions. They will also become familiar with the concepts associated with microbiology.

Content

- Microbes, morphology and reproduction, growth curves, specific growth rate, living conditions and prevention of growth
- Bacteria, yeast, fungi, moulds, algae, microbes and viruses
- Common bacteria causing food spoilage
- Microbes used in food production
- Hygiene and sterilisation
- Aseptic work
- Microbe cultivation
- Dilution

Literature / Study Material Lecturer's material

Learning Methods Lectures, laboratory work and project journal

Assessment Examination

Prerequisites Compulsory for those who have not completed corresponding studies in a vocational institution

Languages of Instruction Finnish

Process automation, 3 op KC03BE20161 (study unit)

Lecturers Veli–Jukka Uitto, MSc

Objectives

Students will understand the conditions of process automation and become familiar with various controls, sensors and components.

Content

- Conditions of process automation: controls, sensors and components
- PI-chart

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures and exercises

Assessment Examination

Prerequisites Basics in Automation

Languages of Instruction Finnish

Sustainable development, 3 op KC03BE20170 (study unit)

Lecturers Jorma Tuomisto, MSc

Objectives

Students will acquire insight into environmental protection related to engineering. They will learn to take a positive and responsible attitude toward environmental protection and become familiar with the possibilities of environmental technology. Students will understand the goals of sustainable development.

Content

• Air pollution

- Climate and energy supply
- Clean water and sewage
- · Contaminated soil and ground waters
- Recycling and refuse
- Raw materials and the ecocyclic principle
- Environmental systems
- Environmental administration

Literature / Study Material Lecturer's own material

Learning Methods Lectures and group work, active participation and final examination

Assessment Written examination and assessment of the seminar presentation

Languages of Instruction Finnish or English if required

Food production project work, 2 op KC03BE20180 (study unit)

Objectives

Students will understand the various tasks involved in production in the food industry. They will also gain knowledge of the expertise required in the working world.

Content

Students will prepare a presentation and report pertaining to their summer work. They will provide an analysis of their status in the company's organisation.

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Project work and project reports

Assessment Approved project report and seminar presentation

Languages of Instruction Finnish or English if necessary

PROFESSIONAL STUDIES MODULES, 75 op KC03BE00 (study entity)

Professional Studies consist of four modules. Compulsory modules include Food Technology (basic), Process Technology (basic), and Biotechnology (basic). The fourth module, which consists of continuation courses in Bio– and Food Technology and Process and Automation Technology, or Entrepreneurship is an elective course depending on the students' line of specialisation.

Food technology basic module, 15 op KC03BE30 (study entity)

The objective of the bacic module in Food Technology is to provide students with basic knowledge of the variables affecting chemical and microbiological quality, as well as the fundamental concepts of food legislation.

Food chemistry, 5 op KC03BE30051 (study unit)

Lecturers Jaana Latvala, PhD

Objectives

Students will acquire knowledge pertaining to the more important food nutrients and the changes that take place in food due to processing and storage.

Content

The topics discussed in the course include the fundamentals of raw food material, chief nutrients, browning, oxidation, colouring and flavouring agents, additives, foreign substances, functional food products, and sensory evaluation of foods.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, laboratory assignments, and exercises

Assessment Two interim examinations or final examination

Prerequisites

- Organic Chemistry
- Food Technology I (for upper secondary school graduates)

Languages of Instruction Finnish

Food processes, 5 op KC03BE30061 (study unit)

Lecturers Marjatta Salminen, MSc

Objectives

Students will acquire advanced knowledge in industrial food processing, packaging and storage.

Content

The topics discussed in the course include industrial food processing and equipment, freezing, cooking, pasteurisation, sterilisation, minimal processing, processing time and processing optimization, packaging methods and materials.

Literature / Study Material Fellows: Food Processing Technology, Woodhead

Learning Methods Lectures, exercises, and laboratory work

Assessment Approved written examination, calculation exercises and assigned reports

Prerequisites

- Food Technology 1,
- Food Hygiene
- Food Chemistry

Languages of Instruction Finnish

Food hygiene and legislation, 5 op KC03BE30031 (study unit)

Lecturers Merja Kyntäjä, BSc

Objectives

Students will learn the principles of producing safe, hygienic food, the fundamentals of hygienic design, as well as the maintenance of facilities.

Content

The topics discussede in the course include food–related diseases, food poisoning bacteria, fungi, viruses and parasites, foreign objects, pests and their prevention, and personal hygiene. Students will also learn about hygiene in factories and when using equipment, as well as methods for cleaning, self–monitoring and HACPP, as well as microbiological monitoring methods. The course provides knowledge about the structure of food legislation, laws and statutes, EU legislation and directives pertaining to food.

Literature / Study Material

- Legislation pertaining to food
- EU legislation
- Other material to be announced at the beginning of the course

Learning Methods

Lectures, exercises, homework, and laboratory work

Assessment Examination

Prerequisites

- Microbiology 1 or vocational school courses pertaining to the food industry
- Food Technology 1 or vocational school courses pertaining to the food industry

Languages of Instruction Finnish

Process technology basic module, 15 op KC03BE40 (study entity)

The objective of the basic module in Process Technology is to provide students with fundamental knowledge in designing and planning, which are related to production processes and facilities in the food industry.

Logistics, storage and packaging, 4 op KC03BE40012 (study unit)

Lecturers Jarmo Alarinta, MSc

Objectives

Students will acquire the ability to select appropriate conveying, storage and packaging methods for food processing plants.

Content

The topics discussed in the course include the fundamentals of selection and capacity of conveying, storage and packaging methods and materials flow, conveyor structures, operation and capacity, storage methods and equipment, packaging materials and methods, and feeding and bundling equipment.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises

Assessment Two written examinations

Languages of Instruction Finnish

Fluid technology and heat transfer technology, 5 op KC03BE40024 (study unit)

Lecturers Jarmo Alarinta, MSc

Objectives

Students will understand the more important issues involved in fluid technology, heat transfer and refrigation problems.

Content

The course comprises the fundamentals of the theory of fluids, and the selection and capacity of various flow systems. The course also introduces students to the various methods for transferring heat and refrigeration in the food industry. The course provides insight into the heat transfer theory and the selection and capacity of various heat transferring equipment and refrigeration techniques.

Literature / Study Material To be annouced at the beginning of the course.

Learning Methods Lectures, calculations and homework, and a project

Assessment Examination

Languages of Instruction Finnish

Plant design, 3 op KC03BE40051 (study unit)

Lecturers Jarmo Alarinta, MSc

Objectives

Students will acquire theoretical knowledge for a project in factory design. They will understand the fundamentals of designing a production plant and production process and know how to construct them, starting from an idea and building it into a functional factory.

Content

The course comprises the basics of factory design and implementing a plan, i.e. the stages of plant design: design, construction and introduction, combining production lines from unit processes, profitability and other comparative calculations, project group work and the use of expert advice and literature.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and group work

Assessment Examination

Prerequisites

- Fluid Technology
- Heat Transfer Technology

- Measuring Techniques
- Industrial Economics

Languages of Instruction Finnish

Measuring techniques, 3 op KC03BE40036 (study unit)

Lecturers Veli–Jukka Uitto, MSc

Objectives

Students will understand measurements used in the food processing industry and know how to use the sensors used in making measurements. They will also be able to identify the more common dimensional errors and what causes them.

Content

The course involves the discussion of process technology sensors and their operational principles.

Literature / Study Material Material distributed by the lecturer

Learning Methods Lectures, calculations, and homework

Assessment One approved written examination and calculation exercises

Prerequisites

- Basics in Automation
- Process Automation

Languages of Instruction Finnish

Microbiology 2, 3 op KC03BE50021 (study unit)

Lecturers Mervi Hujanen, LSc (Tech.)

Objectives

Upon completion of this course, students will possess knowledge in the categorization of microbial species, their characteristics, and cultivation methods.

Content

The topics discussed in the course include the utilization of microbiology in food technology, biotechnology and environmental technology. Students will also learn about the characteristics of microbes, laboratory methods utilized in microbiology, microbe cell physiology, genetics, metabolism, ecology and biotechnology, as well as the storage of microbes.

Literature / Study Material Lecturer's material

Learning Methods Lectures, field trips, laboratory work, seminar or literary assignment

Assessment Examination

Prerequisites Microbiology 1

Languages of Instruction Finnish

Biochemistry, 6 op KC03BE50031 (study unit)

Lecturers Mervi Hujanen, LSc (Tech.)

Objectives

Students will understand the chemistry of living cells and the significance and structure of various biopolymers such as DNA, RNA, proteins and carbohydrates.

Content

The course comprises the fundamentals of biochemistry and metabolism, nucleotides and nucleic acids, aminoacids, proteins, carbohydrates, lipids, genes and their replication.

Literature / Study Material Turpeenoja: Biokemiaa (Biochemistry)

Learning Methods Lectures, seminar and laboratory work

Assessment Examination

Languages of Instruction Finnish

Bioprocesstechnology, 6 op KC03BE50041 (study unit)

Lecturers Mervi Hujanen, LSc

Objectives

Upon completion of the course, students will possess knowledge of biotechnical processes and the significance of biotechnology.

Content

The topics discussed in the course include industrial microbes, mutations, and genetic engineering. Students also learn about the methods and equipment used in fermentation and further processing, immobilization and cell recycling technology, and chemo–state. The most common bioreactor types, their measurement and adjustment are also discussed.

Literature / Study Material

Aittomäki, Eerikäinen, Leisola, Ojamo, Suominen & von Weyman 2002. Bioprosessitekniikka (Bioprocess technology)

Learning Methods Lectures, field trips and laboratory work

Assessment Examination

Prerequisites Biochemistry

Languages of Instruction Finnish

Process and automation technology continuation module, 15 op KC03BE60 (study entity)

The objective of the continuation module for Process and Automation is to advance students' knowledge of the design and automation of food production lines, and to provide fundamental knowledge in the design and automation of food processing facilities.

Food processes, 7 op KC03BE50071 (study unit)

Lecturers Jarmo Alarinta, MSc

Objectives

Upon completion of the course, students will possess advanced knowledge of unit operations for the food processing technology.

Content

The course comprises the principles of various food processing theories, and the choice and capacity of equipment. Students will also learn about various processing techniques such as grinding, sifting, sorting, filtering, centrifuging, mixing, granulating, extracting, membrane techniques.

Literature / Study Material Lecturer's material

Learning Methods Lectures, exercises, homework and laboratory work

Assessment Two written examinations and laboratory reports

Languages of Instruction Finnish

Control engineering, 3 op KC03BE40032 (study unit)

Lecturers Veli–Jukka Uitto, MSc

Objectives

Students will understand the significance of control engineering in process control, contollers and the significance of parameters. They will acquire the ability to read control charts.

Content

The course introduces students to typical control structures and the effects of control parameters on processes. Students also learn about the structure of control systems, open and closed controls, as well as P, PI and PID controllers and their parameters and tune–up.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises

Assessment Examination and assignments

Prerequisites

- Basics in Automation
- Process Automation

Languages of Instruction Finnish

Machine and equipment design, 2 op KC03CE40112 (study unit)

Objectives

Students will acquire knowledge of the requirements for the design and procurement of processing equipment in the food industry.

Content

The topics discussed in the course include surface materials, quality, tolerance, finishing, and pressure containers.

Literature / Study Material To be announced during lectures. *Learning Methods* Lectures, field trips and homework

Assessment Examination

Prerequisites

- Technical Drawing and CAD
- Statistics
- Strength Theory
- Manufacturing Methods
- Machine Elements

Languages of Instruction Finnish or English

Process design, 5 op KC03CE40321 (study unit)

Lecturers Jarmo Alarinta

Objectives

Students will be competent in calculating capacity, equipment size and other measurements, as well as in selecting calculations related to a production line of unit processes.

Content

The topics discussed in the course include production-line materials and energy levels, capacity and other mathematical tasks related to the selection of equipment.

Literature / Study Material Coulson et al: Chemical Engineering 3

Learning Methods Lectures, calculations and group work

Assessment Examination

Prerequisites

Factory DesignIndustrial Economics

Languages of Instruction Finnish

Robotics, 3 op KC03CE40241 (study unit)

Lecturers Veli–Jukka Uitto, MSc

Objectives

Students will gain insight into the potential and limitations of robotics in the food industry and learn to program an industrial robot.

Content

The topics discussed in the course include robot structures, sensors, gripping devices, tools, programming, and applications.

Literature / Study Material Robotiikka (Robotics). Suomen Robottiyhdistys Ry

Learning Methods Lectures and laboratory programming exercises Assessment Assignments and examination

Prerequisites Basics in Automation

Languages of Instruction Finnish

Food process technology project, 2 op KC03CE40172 (study unit)

Objectives

Students will complete a commissioned project in designing, or other related project, either independently or in a group.

Content

The course teaches students about project work related to food processes. It involves problem solving in food processing technology or the preparation of a report as part of a larger project. The course provides insight into practical project work, problem solving methods, data acquisition, and independent and team work

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Project work and project reports

Assessment Approved project report

Languages of Instruction Finnish or English if necessary

Further Information

Especially suited for projects commissioned by the industry. Total credit units: 3–6 ECTS (2–4 CR), depending on the extensiveness and scope of the project. Students may also do the project as group work.

Biotechnology and food technology continuation module, 15 op KC03BE70 (study entity)

The objective of the continuation module in Food Technology is to advance students' knowledge of biotechnology, food technology, and the concepts of quality. It also offers insight into the latest methods of research and development. In addition, students may specialize in selected areas within the field of food technology or in the latest methods of biotechnology.

Product development, 6 op KC03BE60011 (study unit)

Lecturers Marjatta Salminen, MSc

Objectives

Upon completion of the course, students will possess knowledge of product development, which focuses on consumer interests and potential testing methods.

Content

The course comprises consumer surveys, generation of ideas, project selection, product design, experimental design methods and recipe optimization, price calculations, preservation and packaging tests, and marketing.

Literature / Study Material Fuller: New Food Product Development, CRC

Learning Methods Lectures and supervised product design project, approved written examination

Assessment Approved product development report and literary assignment

Prerequisites Study Descriptions Food Processing LegislationFood Chemistry

Languages of Instruction

Finnish

Food industry quality management, 4 op KC03CE60030 (study unit)

Lecturers Henrietta Gullman, MSc

Objectives

Students will acquire knowledge of quality control, quality systems, and in-house quality control in the food industry.

Content

The course comprises the principles of quality systems, design, and statistical quality-control methods.

Literature / Study Material Lecturer's material

Learning Methods Lectures

Assessment Approved exam

Prerequisites Suomi tai englanti

Meat technology 1, 3 op KC03CE60141 (study unit)

Lecturers Eero Puolanne, DSc

Objectives

Students will possess knowledge about the factors affecting quality and the use of meat. They shall also gain insight into the most important meat production processes.

Content

The topics discussed in the course include animal species used for slaughter, slaughtering, structure and composition of muscles, postmortem changes in meat, and the production of meat products.

Literature / Study Material Puolanne: Lihateknologia 1 (Meat technology). University of Helsinki

Learning Methods Lectures

Assessment Approved written examination

Prerequisites

- Biochemistry
- Food Chemistry

Languages of Instruction Finnish or English

Meat technology 2, 2 op KC03CE60151 (study unit)

Lecturers Ilkka Pellinen, BSc
Objectives

Students will acquire advanced knowledge in quality and the production of meat products.

Content

The topics discussed in the course include ingredients and production methods for sausages and other meat products, shelf–life, nutritional value and organoleptic quality, as well as the chief production equipment used in the industry.

Literature / Study Material To be announced at a later date.

Learning Methods Lectures, field trips, and practical exercises

Assessment Approved written examination and approved exercises

Prerequisites

- Biochemistry
- Food Chemistry

Languages of Instruction Finnish

Dairy technology, 3 op KC03CE60161 (study unit)

Lecturers Marjatta Salminen, MSc

Objectives Students will acquire knowledge of dairy products, their composition and industrial production.

Content

The topics discussed in the course include the composition and quality components of milk, milk processing in dairies, production of soured milk products, butter, ice cream and cheese, and provides an overview of probiotics and functional food.

Literature / Study Material Lecturer's material

Learning Methods Lectures, field trips, and laboratory work

Assessment Examination

Prerequisites

- Microbiology 1
- Food Chemistry
- Biochemistry

Languages of Instruction Finnish

Cereal technology 1, 3 op KC03CE60191 (study unit)

Lecturers Marjatta Salminen, MSc

Objectives

Students will acquire basic knowledge of cereal types, their composition, use and nutritional value. They will also be familiar with the fundamentals of milling processes, animal feed and baking.

Content

The topics discussed in the course include cereal types, grain structure and composition, cereal storage and quality

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control. It also teaches about wheat, rye, barley and oat milling and malting, the production of starch and starch syrups, cereal-based feed and extrusion product composition and production, as well as the basics of breadmaking.

Literature / Study Material Hoseney: Principles of Cereal Science and Technology, AACC

Learning Methods Lectures, homework, and laboratory work

Assessment Examination

Prerequisites

• Food Chemistry

Languages of Instruction Finnish

Cereal technology 2, 2 op KC03CE60201 (study unit)

Lecturers Marjatta Salminen, MSc

Objectives

Students will acquire advanced knowledge in bakery production and the factors affecting product quality.

Content

The topics discussed in the course include the production of bread, pastries, buns and biscuits, frozen dough, sour dough and sponge dough, and additives, as well as the machinery used in bakeries.

Literature / Study Material

Kulhomäki, Salovaara: Laatuleipää, käsikirja leipurille. Savola: Kahvileipää–käsikirja leipurille. Heinonen, Jouppila, Salovaara: Kondiittorin käsikirja, Leipomoalan edistämissäätiö (handbooks for bakers and pastry chefs)

Learning Methods Lectures and baking exercises

Assessment Examination

Prerequisites Food Chemistry

Languages of Instruction Finnish

Molecule biology, 3 op KC03CE60171 (study unit)

Lecturers Mervi Hujanen

Objectives Students will acquire insight into the possibilities and methods of molecular biology.

Content

The topics discussed in the course include DNA copying and manipulation, the transfer of DNA to cells, genetic code, PCR, restoration enzymes, plasmids and competent cells, gel electrophoresis, cloning and clone screening, restricted mutation, and electrolysis

Literature / Study Material

- Suominen & Ollikka 1994. Yhdistelmä–DNA–tekniikan perusteet (Basics of combined DNA). Dark. Tummavuoren kirjapaino Oy. Vantaa
- Watson, Tooze & Kurtz. 1983. Recombination DNA. Scientific American Books. New York, USA

Learning Methods Lectures and laboratory work

Assessment Approved written examination and laboratory work

Prerequisites

- Microbiology 2
- Biochemistry

Languages of Instruction Finnish or English

Environmental biotechnology, 2 op KC03CE60211 (study unit)

Lecturers Jouni Ilvesoksa, MSc (Chem. Eng.)

Objectives Students w

Students will acquire knowledge of the potential of biotechnology in water purification, soil cleaning and waste handling.

Content

The topics discussed in the course include the fundamentals of methods and processes used in water purification, microbiology of water and water protection and hygiene, biotechnology applicable to sewage treatment and purification processes. Students will also learn about the basics of environmental poisons and their methods of disposal, biological handling methods for various types of waste, and biotechnical air filtration.

Literature / Study Material Lecturer's material

Learning Methods Lectures and field trip

Assessment Examination

Prerequisites

- Bioprocessing Technology
- Food Hygiene

Languages of Instruction English if necessary

Food process technology project 2, 2 op KC03CE60222 (study unit)

Objectives

Students will carry out a project, either independently or in a group, which is related to food biotechnology.

Content

The course involves problem solving in food biotechnology or the preparation of a report as part of a larger project. The course provides insight into practical project work, problem solving methods, data acquisition, as well as self-study and team work.

Literature / Study Material Material required for the project

Learning Methods Project work and project reports

Assessment Approved project report

Prerequisites

• Bioprocessing Technology

Languages of Instruction Finnish or English

Entrepreneurship module, 15 op KC03CY10 (study entity)

The objective of the Entrepreneurship Module is to provide students with the basic knowledge of business in general and its different areas such as logistics, cost control, marketing, human resources management and accounting. Students may select International Marketing, Corporate Law and Corporate Strategy studies as part of the module. Some of the courses in the International Programme (IP) at the Business School can also be included in this module.

Human resources management, 4 op KC03CY10010 (study unit)

Lecturers Lasse Tarhala, MSc

Objectives

The purpose of the course is to provide knowledge of the concepts involved in human resources management.

Content

The topics discussed in the course include modern human resources management, the learning organization, strategy and organization culture, management in changing organizations, situation management and interaction, individuals as part of a working community, motivation, dedication and result discussions, the development of skills and human resources management, and human resources management in international organisations. The course comprises field trips to various companies and there will also be guest lecturers.

Literature / Study Material

Viitala: Henkilöstöjohtaminen (Human resources management)

Learning Methods Active participation in lectures, group work and seminars, approved exercises

Assessment Seminars and final examination

Prerequisites

• Industrial Economics

Languages of Instruction Finnish

Project leadership, 4 op KC03CY20031 (study unit)

Lecturers Jarmo Alarinta, MSc

Objectives

Students will gain the knowledge of the principles and methods of working in a project.

Content

The course involves project organization and how it functions. Students will learn how to take the goals of a project into consideration, as well as the development of those goals. Time, resources and cost control in project planning are also discussed.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Project work, lectures and case studies

Assessment Approved project work and examination

Prerequisites

• Industrial Economics

Languages of Instruction Finnish

Business economics, 4 op KC03CY10020 (study unit)

Lecturers Lasse Tarbala M

Lasse Tarhala, MSc

Objectives

Students will gain advanced knowledge of the operational and technological aspects of industrial enterprises, human resources, production and marketing strategies, as well as learn how to develop strategy.

Content

The course teaches students how to apply Management by Objective in various areas and levels of an organization. Other topics discussed in the course include the concepts of efficiency, such as strategic efficiency and operative efficiency. Students also learn about enterprise and the supervision of operations, strategic models and business acumen, finance and business, strategic planning and management and external resources. The course also involves discussion of the central issues pertaining to business and enterprise, such as costs, customer value, leadership, financial analysis and the reasons for weakened profitability, as well as target marketing, competition strategies, strategic procedures, budgets, strategic enterprise and interactive management.

Literature / Study Material

- Bengt Karlöf: Johtamisen käsitteet ja mallit. (Management concepts and models)
- Mika Kamensky: Strateginen johtaminen (Strategic management)
- Lecturer's material

Learning Methods

Lectures, case studies and seminars, approved assignments

Assessment Seminars and final examination

Prerequisites

• Industrial Economics

Languages of Instruction Finnish

Marketing, 3 op KC03CY10040 (study unit)

Lecturers Helena Mikkilä, MA

Objectives

Students will acquire insight into marketing concepts, models, as well as marketing strategy and how it should be implemented.

Content

The topics discussed in the course include customer–focused marketing as a competitive tool, customer–focused marketing, market segmentation and positioning, internal marketing and the organization of marketing: structure and resources. Students also learn about competition in service, market–centred management, marketing communication and service culture.

Literature / Study Material

- Grönroos: Nyt kilpaillaan palveluilla (competitive service)
- Philip Kotler: Muuttuva markkinointi (changing marketing)
- Lahtinen & Isoviita: Asiakaspalvelu ja markkinointi (customer service and marketing)

Learning Methods Lectures, seminars, field trips to various companies, guest lecturers, and assignments

Assessment Seminars and course-end examination

Prerequisites

• Industrial Economics

Languages of Instruction Finnish

FREE CHOICE STUDIES, 15 op KC03DE90 (study entity)

Students may select optional courses from the above modules in Professional Studies and/or from the available electives and/or from other universities of applied sciences or institutions of higher education. Students wishing to qualify as a health inspector will find suitable courses in the Construction Engineering Degree Programme.

PRACTICAL TRAINING, 30 op KC03ER00 (study entity)

Objectives: Students will work in the field of food processing and biotechnology, which will allow them to enhance their expertise in their chosen line of specialization and to apply the learned theoretical studies in practice. Content: Further information pertaining to practical training can be found in the guidelines compiled by the School of Engineering. Literature: All available material related to the studies Learning methods: Supervised practical training takes place in the spring term of the third year of study. Assessment: Journals and a report of the training periods are required. Language: Finnish/English/German or as agreed

FINAL THESIS, 15 op KC03FE80 (study entity)

Objectives: The aim of the final thesis is to prepare students for their future career by having them carry out a study on a topic agreed upon with their supervisors(s). Content: Students will be competent in connecting the theory they acquired while studying with new information to produce a consistent scientific study with practical emphasis. They are also required to solve any problems that may arise in the study. Literature: All material available in any form Learning methods: A written study as described in the guidelines compiled by the Seinäjoki University of Applied Sciences Assessment: Seminars and maturity test based on the final thesis Language: Finnish/English or as agreed

Degree Programme in Forestry (In Finnish)

Head of degree programme: Hannu Lassila, Tel. +358 20 124 5808, hannu.lassila@seamk.fi Student counsellor: Jorma Toopakka, Tel. +358 20 124 5828, jorma.toopakka@seamk.fi ECTS/Internacional coordinator: Pirkko Kivinen, Tel. +358 20 124 5807, pirkko.kivinen@seamk.fi

Degree and qualification awarded

Bachelor of Natural Resources, Forestry Engineer

Entrance requirements

See the Applicant's Guide

General description of the Degree Programme

Objectives

The core knowledge of a forestry engineer includes, apart from biology, also the basics of entrepreneurship and economics. Co-operative, communicative and management skills are of importance. Consideration of environmental impacts is an essential part of the education.

Students orienting towards Forestry will find employment in forestry organizations and companies. Forestry engineers work, for example, in wood procurement and harvesting operations, forest advisory, forestry planning, forestry education and as independent entrepreneurs. Environmental planning and development open up new possibilities. The key areas of the choice of orientation are silviculture and forest planning as well as wood procurement and wood harvest.

The studies of Nature and Rural Tourism provide the student with the skills needed for both working as an independent entrepreneur as well as working for companies in the sector. The central areas of this choice of orientation are tourism entrepreneurship and marketing skills as well as the possibilities offered by nature.

Students orienting towards Marketing in Forestry and Woodworking Industry work in communications, marketing and production both in Finland as well as in other countries. The forest cluster, starting from domestic forestry organizations, provides the following employments amongst others: marketing and sales manager, production planner, production manager, export agent, press officer. The rapidly growing bio energy business offers new possibilities. The essential areas of this choice of orientation are marketing skills and expertise on the products of forest and wood industries.

Objectives of the Degree Programme

- Ecology: –The student understands the basics of forestry. S/He knows the different forest and peat land types and is able to identify the essential flora in a given forest as well as the valuable environment of the forest.
- Silviculture The student understands the biologic, ecologic and economic starting points and targets of forest growing.
- Wood procurement The student understands the different sectors of the wood procurement chain.
- Forest planning The student is able to move independently in terrain with the help of different maps and aerial photographs and knows how to use the tools of forest measurement.
- Multiple use of forests The student understands the importance and combatibility of the different types of forest utilization.
- Business know-how The student understands the operation of a company as a whole and assumes an economic way of thinking. The student has the competence for establishing her/his own business and assessing its profitability as well as her/his own marketing skills.

Orienting towards Forestry

- Silviculture and forest planning The student is able to devise and carry out plans of forest management independently paying attention to technical, economic and ecological considerations as well as the forest owner's aims.
- Wood procurement The student understands the different sectors of the wood procurement chain and is able to take into consideration the technical, economic and ecological factors as well as the forest owner's aims.

Orienting towards Nature and Rural Tourism

- The basics of tourism The student knows the special features of tourist industry, especially nature and rural tourism. S/He is capable of taking economic, social, ecological and cultural responsibility when creating and managing tourism services.
- Nature as an asset of tourism The student knows the established practices and ways of traveling in the nature. S/He has a profound knowledge of the Finnish nature and it's phenomena. The student masters the basics of planning and construction of recreational areas. S/He is able to produce healthy, safe and profitable nature tourism services promoting the welfare of the clients.
- Tourism entrepreneurship The student understands the importance of hygienic know-how in tourism. S/He is capable of developing and marketing products of nature and rural tourism by means of product development and productization as well as taking into account the requirements set by the environment. The student is able to analyze customers in regards of developing a service oriented business. The student knows the principles of consumer behaviour and how to exploit them. The student knows the essential legislation regarding tourism and the safety requirements related and is able to apply them in her/his work.

Orienting towards Marketing in Forestry and Woodworking Industry

- Product know-how in forestry and woodworking The student knows the principles of manufacturing products
 of forest and woodworking industry, their utilization, properties and production control.
- Marketing competence The student knows the marketing environment of products of forest and woodworking industry and the application of marketing methods in that environment.

Pedagogy and learning methods

In constructive learning the student's active role and experience are particularly stressed. The goal is to understand the issues being learnt. The teacher acts as the director of the learning process.

Features of learning:

- 1. The student sets her/his own goals for learning.
- 2. The student is provided with a personal learning plan.
- 3. The subjects are connected to the student's own environment, work and experience.

4. Interaction between teachers and students is aimed to deepen the subject being learnt and help evaluate the learning experience.

5. The character of learning as a process is emphasized, not just the targets and contents.

6. The student pays attention to and assesses her/his own learning as well as that of the group together with the teachers. Systematically collected feedback will help improve the student's learning. The feedback will be processed together with the students and will be used in further improving the learning situation.

Different methods applicable to the subject will be applied in the teaching. Versatile methods support both the student's professional development and preparedness for working life as well as her/his professional skills. Some of the methods applied are lectures, independent acquisition of information, different projects, distance and Internet teaching, learning exercises, field exercises, and different cooperative learning methods.

Post-graduate studies

The graduate is eligible for a post-graduate degree in Agriculture and Rural Enterprises.

Structure of the studies

The Degree Programme (240 ECTS) consists of Basic and Vocational Studies common to all students (110 ECTS), Orientation Studies (70 ECTS), Elective Studies (15 ECTS), Practical Training (30 ECTS), and Thesis (15 ECTS). Each part is divided into study modules and further into study units. The aim is to complete the studies in four years.

The studies begin with the common studies of the degree programme. These include the basics of forestry as well as the basic skills of entrepreneurship and management. Field trips and excursions are an essential part of the studies. During the practical training period the student will gain experience on working life.

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Deciding on the choice of orientation takes place during to second year. The Compulsory Orientation Studies begin in the second year and a majority takes place in the third year. In the fourth year the student concentrates on the Elective Studies and the Thesis.

The Practical Training usually takes place in the summer.

The compulsory study modules in orienting towards Forestry are Silviculture I, Forest Management Planning I and Wood Procurement I. The study module closest related to one's thesis is also compulsory (i.e. Silviculture II, Forest Management Planning II or Wood Procurement II). The thesis and the last practical training must be related to the student's choice of orientation.

In orienting towards Nature and Rural Tourism the following study modules are compulsory: Basics of Tourism, Nature as an Asset of Tourism and Tourism Entrepreneurship. The thesis and the last practical training must be related to the student's choice of orientation.

The compulsory study modules in orienting towards Marketing in Forestry and Wood Trade are Wood Technology, Marketing I and Marketing II. The thesis and the last practical training must be related to the student's choice of orientation.

Degree Programme in Forestry (In Finnish), 240 cr (1.9.2008) METSATAL 2008

Code	Name	St	udy	Yea	ır	CR	
		1.	2.	3.	4.		
KB02A2	BASIC STUDIES					55	
KB02AOP	Orientation		1			5	
KB02AOPOA2	Studying at University of Applied Sciences	х				2	
KB02AOPOR3	Orientation to Forestry	х				3	
KB02AVI	Communication skills					11	
KB02AVITE3	Finnish Language Used in Working Life and Communication in General	x				3	
KB02AENTV3	English, Communication in Working Life	х				3	
KB02ARUTV3	Swedish, Communication in Working Life		x			3	
KB02AVIMV2	Communications in Forestry			х		2	
KB02AME	Methodological studies		-			12	
KB02AMEAT4	Basics of information technology	х				4	
KB02AMEMA4	Mathematics	x				4	
KB02AMETI4	Basics of statistics	х				4	
KB02AYH	Social studies					11	
KB02AYHTT5	Health and Safety in a Working Environment	x				5	
KB02AYHKT2	National economy	x				2	
KB02AYHYM4	Individual in the changing world	х				4	
KB02AON	The Thesis Process						
KB02AONOP4	Process of thesis			x		4	
KB02ALU	Natural sciences					12	
KB02ALUFK3	Physics and chemistry	x				3	
KB02ALUKS3	Botany	x				3	
KB02ALUDE3	Dendrology		x			3	
KB02ALUKP3	Classification of Habitats	х				3	
KB02B1	COMMON VOCATIONAL STUDIES					55	
KB02BLI	Studies in Business					17	
KB02BLILT5	Accounting		x			5	
KB02BLIYT3	Introduction to business economics		x			3	
KB02BLIMR3	Marketing	x				3	

KB02BLIMP3	Forest policy		х			3		
KB02BLIKO3	Law Merchant and Law of Oblications		x			3		
KB02BJO	Management	ment 9						
KB02BJOPR3	Project management and planning			x		3		
KB02BJOJO6	Management		x			6		
KB02BMT	Basic Studies in Forestry							
KB02BMTPT4	Woodworking Industry and Technology	x				4		
KB02BMTSP3	Basics of Forest Planning	x				3		
KB02BMTMH3	Basics of silviculture	x				3		
KB02BMTPH3	Basics of Wood Procurement	x				3		
KB02BMTPJ2	Geographical information system		х			2		
KB02BMTLP2	Basics of logistics		х			2		
KB02BMTMO3	Basics of the Multiple Use of Forests		х			3		
KB02BYO	Environmental studies					9		
KB02BYOYT6	Environmental sciences	x				6		
KB02BYOML3	Management of Forest Environment		x			3		
KB02C70	ORIENTATION STUDIES					70		
KB02CMT	Compulsory Study Modules in Forestry Production					38		
KB02CMH1	Silviculture 1					11		
KB02CMHMA2	Soil Science		х			2		
KB02CMHMG5	Forest Growing		х			5		
KB02CMHMU4	Forest regeneration			x		4		
KB02CMS1	Forest management planning 1							
KB02CMSMM4	Forest Measurement		х			4		
KB02CMSKK3	Basics of Mapping and Remote Sensing		х			3		
KB02CMSST4	Planning and information systems			х		4		
KB02CMSHA4	Forest Planning Practices			х		4		
KB02CPH1	Wood procurement 1 1							
KB02CPHP19	Wood procurement 1		х			9		
KB02CPHMT3	Forest roads			х		3		
KB02CLU	Compulsory Study Modules in Nature and Rural Tourism 44							
KB02CMP	Basics of tourism	·				8		
KB02CMPMP4	Basics of tourism		х			4		
KB02CMPMS4	Rural tourism		х			4		
KB02CLM	Nature as an Asset of Tourism	·				15		
KB02CLMLL3	Wilderness Skills and Moving in Nature			х		3		
KB02CLMLT3	Knowledge of Nature		х			3		
KB02CLMLM3	Nature tourism			х		3		
KB02CLMYV2	Environment as a Recreational Resort			х		2		
KB02CLMRL1	Cooking in the Wild				x	1		
KB02CLMMR3	Structures of Multiple Use			X		3		
KB02CMY	Tourism entrepreneurship					13		
KB02CMYHY2	Hygienic Knowledge and Auto Control in Tourism				х	2		

KB02CMYMJ4	Marketing and Distribution Channels of Tourism Products				x	4	
KB02CMYJU2	Product Safety and Jurisprudence in the Tourism Business				x	2	
KB02CMYKI5	Language of Tourism			x		5	
MARKK1	Marketing I (See Compulsory Study Modukles in Marketing in Forestry and Wood Trade)					8	
KB02CMPM	Compulsory Study Modukles in Marketing in Forestry and Wood Trade					52	
KB02CPT	Wood technology					27	
KB02CPTSV3	Sawing techniques		x			3	
KB02CPTPK6	Wood based panels and composites		x			6	
KB02CPTPT9	Joinery industry			x		9	
KB02CPTHI6	Wood and Timber Construction				x	6	
KB02CPTTM3	Product Development and Design				x	3	
KB02CMR1	Marketing 1						
KB02CMRTU4	Productization and Marketing Communications		x			4	
KB02CMRMJ4	Marketing Management and Maintaining Customer Relationship			x		4	
KB02CMR2	Marketing 2		-			17	
KB02CMRIJ5	Control of Market Intelligence, Information Systems and Marketing Research			x		5	
KB02CMRVA4	Documents of Export and Domestic Trade			x		4	
KB02CMRKT3	Transportation Technology				x	3	
KB02CMRAT5	Information technology 2			x		5	
KB02CVA	Optional Study Modules						
KB02CMH2	Silviculture 2						
KB02CMHTA2	Forest Tree Breeding and Plant Construction			x		2	
KB02CMHOJ3	Maintenance of Forest Drainage Area				x	3	
KB02CMHPA2	Forest pathology and damages				x	2	
KB02CMHTV2	Ecology and Management of a Hemiboreal Oak Zone					2	
KB02CMHPS2	Silviculture in northern Finland				x	2	
KB02CMS2	Forest management planning 2 7						
KB02CMSKH3	Real estates and pricing				x	3	
KB02CMSPJ2	Positioning Systems				x	2	
KB02CMSPH2	Utilization of GIS				x	2	
KB02CPH2	Wood procurement 2						
KB02CPHP26	Wood procurement 2			x		6	
KB02CBE	Bioenergy (In English)					15	
KB02CBETP3	Principles for bioenergy procurement and utilization					3	
KB02CBELY3	Bioenergy business and heat-entrepreneurship					3	
KB02CBEHP3	Forest energy – procurement and utilization					3	
KB02CBEMB3	Bioenergy procurement and utilization on farms					3	
KB02CBEHA1	Bioenergy practical training					1	
KB02CBEET2	Procurement and utilization of energy-peat					2	
KB02CMO	Multiple use of forests					12	
VD02CMOEV2	Survival skills in Finland			x		3	

KB02CMOHH3	Nature Management Projects				x	3	
KB02CMOKK3	Fishing and the Fishing Industry			x		3	
KB02CMORM3	Game Management and Hunting			x		3	
KB02CKIELI	Language Studies						
KB02CENMY3	English: Forest, Environment and Industry		x			3	
KB02CENPA6	English: The Jargon of Wood Product Industry			x		6	
KB02CENKN3	English: Conference and Negotiation Skills			x		3	
KB02CENLP3	English: Business Communications and Marketing of Wood Products				x	3	
KB02CRUMY3	Swedish, forest, environment and industry			x		3	
KB02CVE	Russian			х		3	
KB02CSA	German				x	3	
KB02D	ELECTIVE STUDIES						
KB20EHA	PRACTICAL TRAINING					30	
KB02EHAHA30	Practical training			x		30	
KB02F	THESIS					15	
KB02FONON15	Thesis				x	15	

Study Descriptions

BASIC STUDIES, 55 op KB02A2 (study entity)

During the first two year of Basic Studies, students learn basic knowledge about forest ecology and care, forestry technology, planning, purchasing wood and the diverse use of it. There are also courses in marketing, entrepreneurship, languages, communication, and methods. Practical exercises in the forest and field trips are an essential part of the studies. Practical training provides students with experience from the working world.

Studying at University of Applied Sciences, 2 op KB02A0P0A2 (study unit)

Lecturers

- Forest Officer Raittila Erkki, MSc
- Engineer Jorma Toopakka, MSc

Objectives

The course familiarizes students with the study environment and school culture, the degree programme, compiling a Personal Study Plan, and the types of support offered to them by the university. and its implementation. Students will receive information about the various teaching methods used in the university and learn and study techniques. In addition, students will understand the importance of independent study and control when developing themselves and their professional skills.

Content

1. Learning environment: the organisation of the institute, university of applied sciences, degree programme, international activities, student unions, tutoring and other support services. 2. Teaching methods: study techniques, information acquisition. 3. Personal Study Plan

Literature / Study Material

Study Guide 2008–2009 and material gathered during assignments

Learning Methods

Lectures, guided exercises, field trips. Compulsory tasks will be announced at the beginning of the course.

Assessment Pass/fail Languages of Instruction Finnish, English

Orientation to Forestry, 3 op KB02AOPOR3 (study unit)

Lecturers

Engineer Toopakka Jorma, MSc

Objectives

Students will master essential, field–related terminology, and they will be familiar with the structure of the forest cluster of Finland, the operational environments associated with timber trade, forestry and rural tourism, as well as the central organisations involved in these fields. Students will also understand the status of timber trade, the forest industry and rural tourism in the Finnish national economy.

Content

- Finnish forests and their utilisation
- Status of the timber trade, the forest industry and rural tourism in the national economy of Finland
- Forest cluster
- Operational environment for the forest industry, timber trade, and rural tourism
- Essential organisations and their functions
- · Essential terminology
- Significant sources of information

Literature / Study Material

- Finnish Forest Research Institute. The Statistical Yearbook of Finland 2007.
- Metsäteollisuus ry. Avain suomen metsäteollisuuteen 2007.
- Other material as indicated by the lecturer.

Learning Methods Lectures, exercises and excursions

Assessment Active participation, completion of all tasks and exercises, examination. Evaluation on a scale of 1 to 5.

Languages of Instruction Finnish

Finnish Language Used in Working Life and Communication in General, 3 op KB02AVITE3 (study unit)

Lecturers Sarvikas Helena, MSc

Objectives

During the course, students will complete both oral and written communication exercises. Upon completion of the course, students will be competent in choosing tools and methods of communication relevant to a given situation. They will also be able to evaluate their own communication skills.

Content

The module consists of two separate parts:

- Expert Communications (1.5 ECTS) and
- Group Communications in the Working World (1.5 ECTS)

Content:

- Addressing groups and giving presentations
- Making documents: layout, content, tools, demands and special features of the target group
- Different communication cultures, specifically through students' own professional field
- Group communication in different roles, documentation and evaluation

Literature / Study Material

- Repo,I. & Nuutinen T. 2003. Viestintätaito. Otava.
- Koskimies R. 2002. Asiantuntijan esiintymistaito. Oy Finn Lectura Ab.

- Mattila H., Ruusunen T. & Uola K. 2006. Viestinnän työkaluja amk-opiskelijalle.
- Uimonen, T. 2003. Taitoa tekijälle. Tehoa teksteihin. Opas tiedottavaan kirjoittamiseen. Inforviestintä Oy.

Learning Methods

- Lectures
- Various communicative exercises
- Written assignments, both individually and in groups
- Some online learning

Assessment

- Exercises in class
- Written assignments (in class, independently and in groups)
- Grading based on a scale of 1–5

Languages of Instruction Finnish

English, Communication in Working Life, 3 op KB02AENTV3 (study unit)

Lecturers John Pearce

Objectives

Students will improve their skills in the English language. They will understand and be able to use key terminology, both orally and in writing, pertaining to their own field. Students will master the English language to the extent that they are able to work in their own profession in the labor markets of forestry and forest industries. Upon completion of the course, students will be competent in providing their personal information and describe their level of education and work experience, and they will also be able to fill out job applications in English. Students will also be able to describe their workplace, its services and functions. They will possess competency in guiding others and conveying instructions. They will also be able to communicate in writing appropriate to a given situation. Finally, students will be able to describe the economic life in their native country.

Content

- Telling about oneself and one's level of education
- Job applications, curriculum vitae
- Oral and written presentation of one's duties at work
- Guiding and instructing others, either face-to-face or on the phone
- Making notifications, a memo, report and/or a summary and electronic communication
- Searching for and processing information (e.g. searching for an article on the Internet)
- Basic terminology associated with forestry and forest industries

Literature / Study Material Lecturer's material

Learning Methods

Oral exercises such as dialogues, group conversations and lectures, and written exercises.

Assessment

Active demonstration of English language skills (incl. oral presentations and dialogues), completion of written assignments and exercises, and an examination. All parts of the course must be passed to receive a grade for the course. Evaluation is based on a scale of 1 to 5.

Prerequisites

Students must be able to master the key structures of the English language.

Languages of Instruction Finnish, English

Swedish, Communication in Working Life, 3 op KB02ARUTV3 (study unit)

Lecturers Titta Huhtamäki, MA

Objectives

Students will improve their skills in the Swedish language. They will understand and be able to use key terminology, both orally and in writing, pertaining to their own field. Students will master the Swedish language to the extent that they are able to work in their own profession in the labor markets of forestry and forest industries. Upon completion of the course, students will be competent in providing their personal information and describe their level of education and work experience, and they will also be able to fill out job applications in Swedish. Students will also be able to describe their workplace, its services and functions. They will possess competency in guiding others and conveying instructions. They will also be able to communicate in writing appropriate to a given situation. Finally, students will be able to describe the economic life in their native country.

Content

- Telling about oneself and one's level of education
- Job applications, curricula vitae
- Oral and written presentation of one's duties at work
- Guiding and instructing others, either face-to-face or on the phone
- Making notifications, a memo, report and/or summary and electronic communication
- Searching for and processing information (e.g. searching for an article on the Internet

Literature / Study Material

Lecturer's material

Learning Methods

Oral exercises such as dialogues, group conversations and lectures, and written exercises.

Assessment

Active demonstration of Swedish language skills (incl. oral presentations and dialogues), completion of written assignments and exercises, and an examination. All parts of the course must be passed to receive a grade for the course. Evaluation is based on a scale of 1 to 5.

Prerequisites

Students must be able to master the key structures of the Swedish language.

Languages of Instruction Finnish, Swedish

Communications in Forestry, 2 op KB02AVIMV2 (study unit)

Lecturers Helena Sarvikas, MA

Objectives Students will

- become familiar with communications as a part of the activities on a work community,
- have command of the aims of internal and external communications and the purposes of those aims,
- be familiar with the background of communications in forestry in Finland and the expectations of various actors in the field,
- be familiar with current channels of public announcements and how the media works,
- have command of appropriate and profitable ways with which an expert influences an organisation's way of making announcements, creating an image, and co-operating communicatively, and
- know how to apply their communication skills to the development of the forest industry and their own work.

Content

- Internal and external communications in organisations and companies. Making announcements, keeping contacts, company image, business relations
- Image of forestry in Finland and in other contries, organisations and experts involved in forestry communications, target groups of communication, interaction
- Relating news, making public announcements, crises in the distribution of information
- Channels for forestry communications, co-operation with the media
- Organising a trip in the forest, public events

Literature / Study Material

• Aula P. & Heinonen J. 2004. Maine - menestystekijä. WSOY.

- Jensen R. 1999. The Dream Society: How the Coming Shift From Information To Imagination Will Transform Your Business. McGraw–Hill.
- Juholin E. & Kuutti H. 2003. Mediapeli anatomia ja keinot. Inforviestintä.
- Kortetjärvi-Nurmi S., Kuronen, M-L. and Ollikainen M. 2002. Yrityksen viestintä. Edita.
- Makkonen J. & Tuomi-Nikula J. 1998. Metsäviestintä. Metsälehti Kustannus.
- Siukosaari A. 2002. Yhteisöviestin.
- Other material

Learning Methods

- Discussions,
- Exercises, independently and in groups
- Co-operation with target group organisations
- Lectures by experts
- Examination

Assessment

- Active participation on a regular basis
- Exercises
- Exam
- Evaluation on a scale of 1 to 5

Languages of Instruction Finnish

Basics of information technology, 4 op KB02AMEAT4 (study unit)

Lecturers

- Jyrki Foudila
- Hannu Lassila, LA

Objectives

Students will be competent in using computers and information networks during their studies and at work, and they will understand their importance as tools for communication and work.

Content

The course involves the discussion of computers, software, peripheral devices and information networks. Students will learn about various software packages and data services. Students also have the opportunity to learn about operating systems and data networks as needed.

Literature / Study Material

• Hyppönen A., Ojala A., Joutsi J. 2007. Tietokoneen käyttötaito 1. WSOYPro/Docendo-tuotteet.

Learning Methods

- Exercises on computers and software
- Assignments
- Group work

Assessment

- Final exam
- Exercises
- Grading based on a scale of 1 to 5

Languages of Instruction Finnish

Mathematics, 4 op KB02AMEMA4 (study unit)

Lecturers Hannu Lassila, LA

Objectives

Students will have command of the basic mathematics needed in forestry, and they will be competent in utilising computers to solve mathematical problems. The purpose of the course is to complement students' previous knowledge of mathematics, develop their mathematical logic and ability to use mathematics as a tool for solving problems.

Content

- Revision of basic mathematics
- Percentages and interest
- Geometry
- Equations and their applications
- Logarithm and exponent functions
- Differential calculus and mathematical models
- Computers as tools to solve mathematical problems

Literature / Study Material

- Textbooks for mathematics and business
- Material indicated by the lecturer
- Computer software

Learning Methods Lectures, assignments

Assessment

- Assignments and exams
- Grading based on a scale of 1 to 5

Languages of Instruction Finnish

Basics of statistics, 4 op KB02AMETI4 (study unit)

Lecturers Hannu Lassila, LA

Objectives

Students will learn to read and interpret ready-made statistics, become familiar with the basics of statistical research and be able to use statistical methods in their own studies and at work. They will also be competent in using charts and diagrams to present the results of their own work.

Content

- Presentation and interpretation of statistical data
- Phases and methods involved in statistical research
- Statistical research methods

Literature / Study Material

- Karjalainen L. 2004 (or later). Tilastomatematiikka. Pii-Kirjat.
- Heikkilä T. 2004 (or later) Tilastollinen tutkimus. Edita.

Learning Methods Lectures and exercices

Assessment Compulsory exercises and exams. Evaluation on a scale of 1 to 5.

Languages of Instruction Finnish

Further Information Online studies: 2 cr

Health and Safety in a Working Environment, 5 op KB02AYHTT5 (study unit)

Lecturers

Engineer Pekka Lietepohja Pekka

Objectives Students will

- know how to act in situations where first-aid is required,
- be able to manage wood harvesting operations safely,
- know the complex of problems of mental work safety and be able to recognise the most common symptoms of burn-out,
- understand the social importance of work,
- be able to analyse the mechanisms of social interaction,
- understand the pluralistic value of their sociologic environment, and
- know the essential specifications of labour legislation.

Content

- First-aid I
- Training for the work health and safety license
- The health and safety responsibility of a supervisor
- Work safety at wood harvesting
- Mental health and safety
- Explanation models and basic concepts of sociology
- Social interaction
- · Legislation controlling working conditions

Literature / Study Material

- Sulkunen P. 1994. Sosiologian avaimet. WSOY
- Hannigan J. A., Environmental Sociology, 1995
- Äimälä M., Åström, J. Rautiainen H., Nyyssölä, M. 2003. Käytännön työoikeutta esimiehille. WSOY

Learning Methods Lectures and exercises

Assessment

- Written exams and exercises
- Evaluation on a scale of 1 to 5

Languages of Instruction Finnish

Further Information Online studies: 2 cr

National economy, 2 op KB02AYHKT2 (study unit)

Lecturers Forest Officer Raittila Erkki

Objectives

- Students will be familiar with the most important concepts of the national economy and know where to find relevant information and statistics.
- Students will understand economic growth, production and price forming as well as factors related to market disturbance.
- Students will know the circulation of economy and be to estimate the influence of different factors on it.
- Students will know the tools and influences of the economical and monetary policy.

Content

- · Basic concepts
- The market

- Determination of prices and welfare
- Economic growth and international trade
- Statistics
- Monetary and economic policy
- Economic systems, integration and global economy
- Directions of economic development

Literature / Study Material Pekkarinen J. & Sutela P. Kansantaloustiede.

Learning Methods Lectures, exercises in groups, examination

Assessment

- Examination (80 %)
- Evaluation on a scale of 1 to 5

Languages of Instruction Finnish

Individual in the changing world, 4 op KB02AYHYM4 (study unit)

Lecturers Engineer Pekka Lietepohja

Objectives

- Students will know the most important mechanisms of learning.
- They will be able to identify the power and norm structures in a group.
- Students will know the basic structure of the models contributing to the working satisfaction of an individual.
- Students will know the basics of creative behavior and understands the open and the closed character of problems.
- They will be able to employ the common methods of problem solving.
- Students will understand the influence of social and global changes on working life.
- Students will be able to identify the influence of the change on society.
- They will be able to adapt the changes in the requirements set to professions.
- Students will understand the regeneration of professions and the importance of continuous education.

Content

- The psychology of learning
- Group dynamics
- Socialization
- Work satisfaction
- Creativity and problem solving
- Changes in society and working life
- Labour markets of the future

Literature / Study Material

- Erämetsä T. Myönteinen muutos. 2003 Tammi.
- Virkkala V. Luova ongelmaratkaisu. 1994. Virkkala.V.
- Siltala J. Työelämän huonontumisen lyhyt historia. 2004. Otava.
- Carnall C., Managing Change in Organizations. 2003. Prentice Hall.
- Other material as indicated during lectures.

Learning Methods Lectures and exercises

Assessment

The grade for the course is determined on the basis of exam and exercises. Evaluation is based on a scale of 1 to 5.

Languages of Instruction Finnish

Process of thesis, 4 op KB02AONOP4 (study unit)

Lecturers

- Tapani Tasanen Tapani, DSc (Agr. and For.)
- Helena Sarvikas, MA
- Risto Lauhanen, DSc (Agr. and For.)

Objectives

The course is a part of the studies supporting the process of thesis writing. Students will know the basics of scientific research work, particularly in their own field. They will learn about the requirements of academic texts and publications and will be competent in using academic language in their own thesis.

Content

- Definition of thesis, objectives, supervision, progress of work and assessment
- Conceptual and methodological basis of scientific thinking as well as planning and implementation of research
- Various methods for collecting information and data and problems concerning the reliability and generalisation of research results
- Writing an academic text

Literature / Study Material

- Guidelines for Writing a Thesis. Seinäjoki University of Applied Sciences.
- School's complementary instructions for writing a thesis
- Hirsijärvi S., Remes P. & Sajavaara P. 2005. Tutki ja kirjoita. 11th edition. Kirjayhtymä Oy.
- Anttila P. 1998. Tutkimisen taito ja tiedon hankinta. Artefakta 2.

Learning Methods

- Lectures
- Exercises
- Group work
- Research analysis
- Compulsory attendance

Assessment

- Active attendance and participation
- Approved exercises
- Evaluation based on a scale of 1 to 5

Prerequisites

- Studying at the University of Applied Sciences
- Introduction to Statistics

Languages of Instruction Finnish

Further Information Research and development: 1 cr

Physics and chemistry, 3 op KB02ALUFK3 (study unit)

Lecturers Hannu Lassila, LA

Objectives

Students will become familiar with the physical and chemical phenomena currently prevailing in our environment. They will understand the significance of physics and chemistry in society and become familiar with the world's scientific outlook.

Content

• Basics of chemistry

- Acids and bases
- Electrochemistry
- Basics of organic chemistry
- Environmental chemistry and physics
- Energy production

Literature / Study Material To be announced.

Learning Methods This is an online course.

Assessment

- Exams
- Assignments
- Evaluation based on a scale of 1 to 5

Languages of Instruction Finnish

Further Information Online studies: 2 cr

Botany, 3 op KB02ALUKS3 (study unit)

Lecturers

- Sirpa Välilehto, LA
- Forest Officer Pauli Teivaanmäki, MSc

Objectives

- Students will know the more common plant species.
- Students will know the basics of the plant system.
- Students shall know the structure of plants as regards cells, tissue and organism.
- Students will know the basic areas of plant physiology: water, nutrients and energy, plant development, and reproduction.

Content

- Knowledge of plant species
- Plant systems
- Plant morphology and anatomy
- Plant physiology

Literature / Study Material

- Botany books
- Plant collections
- Pankakoski A. 1999. Puutarhurin kasvioppi. 8th or 9th edition.

Learning Methods

Lectures, exercises, demonstrations on species recognition.

Assessment

- One exam on identifying species
- One exam on theory
- Evaluation based on a scale of 1 to 5

*Both exams are equal in value.

Languages of Instruction Finnish

Dendrology, 3 op KB02ALUDE3 (study unit)

Lecturers

Forest Officer Pirkko Kivinen

Objectives

Students will learn to identify native and foreign tree and shrub species (outer appearance, ecological characteristics and features for timber trade) grown in Finland. They will know the more common timber tree genera and species on the various continents of the world, as well as the way they are used in the areas where they grow.

Content

- Native species of trees and shrubs: features of growth and use
- Foreign forest trees, distribution and significance

Literature / Study Material

- Hämet-Ahti L. et al. Suomen puu- ja pensaskasvio.
- Luukkonen, O. 1997. Dendrologian kurssi.
- Sarvas R. 1964. Havupuut. WSOY.
- Bayord H. 1981. The Oxford Encyclopedia of Trees of the World. Oxford University Press.
- Fagerstedt K. et al. 1996. Mikä puu mistä puusta. Yliopistopaino.
- Pihlström K. 1993. Träden och vi. Föreningen för skogskultur r.f.
- Jalopuumetsät. Metsälehtikustannus. 1996.
- Other material as indicated by the lecturer.

Learning Methods

- Lectures
- Field trips
- Assignments
- Portfolio
- Field trips are compulsory

Assessment

- Written exam
- Exam on identifying various trees and shrubs
- Portfolio of tree species
- Active participation
- Evaluation based on a scale of 1 to 5

Languages of Instruction Finnish/English

Classification of Habitats, 3 op KB02ALUKP3 (study unit)

Lecturers

Forest Officer Lotta Jaakkola, MSc

Objectives

Students will have command of the basics of classification of habitats in forests and peat lands as well as the historical background of the classification. Alternative classification methods will also be introduced.

Content

- The ecologic basis of forest types
- Classification of habitats in forests
- Forest types and their recognition
- Basics of peat land classification
- Classification of peat lands with tree coverage
- Classification of peat lands with drainage
- Classification of dried peat lands
- Stage of decomposition of peat

Literature / Study Material

- Laine J. & Vasander, H. 2005. Suotyypit ja niiden tunnistaminen.
- Kuusipalo J. 1996. Suomen metsätyypit.

Learning Methods Lectures, field visits, collecting plant samples

Assessment

Written exam and collection of plant samples. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

COMMON VOCATIONAL STUDIES, 55 op KB02B1 (study entity)

During the first two year of Basic Studies, students learn basic knowledge about forest ecology and care, forestry technology, planning, purchasing wood and the diverse use of it. There are also courses in marketing, entrepreneurship, languages, communication, and methods. Practical exercises in the forest and field trips are an essential part of the studies. Practical training provides students with experience from the working world.

Accounting, 5 op KB02BLILT5 (study unit)

Lecturers Forest Officer Raimo Jaakkola, MSc

Objectives

Students will have command of the principles of double–entry bookkeeping and understand the requirements set forth by legislation external accounting. Additionally, students will know how to enter typical business transactions into the books and make financial statements based on them. They will also know how to do external accounting and understand the significance of having a budget.

Content

- legislation
- Business transactions
- Double-entry bookkeeping
- Balancing of accounts
- Methods of cost calculations
- Budgeting

Literature / Study Material

- Ihantola & Leppänen. Yrityksen kirjanpito: perusteet ja sovellutusharjoitukset. Gaudeamus.
- Neilimo & Uusi-Rauva. 2005. Johdon laskentatoimi.
- Lecturer's material

Learning Methods Lectures and assignments, independent study

Assessment Continuous assessment and examination. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Introduction to business economics, 3 op KB02BLIYT3 (study unit)

Lecturers

Forest Officer Heikki Holma, DSc (Econ. and Bus. Adm.)

Objectives

Students will understand the importance of entrepreneurship as a part of the national economy and be familiar with the process of establishing a company.

Content

- Process of establishing a company
- Types of companies
- Financing
- Legislation

Literature / Study Material Material as indicated by the lecturer.

Learning Methods Lectures and assignments

Assessment Examination. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Marketing, 3 op KB02BLIMR3 (study unit)

Lecturers

Forest Officer Mirja Jääskeläinen, MSc

Objectives

Students will become familiar with modern marketing ideas and understand the importance of marketing in business development. Upon completion of the course, students will

- know the theoretical basis, concepts and models of marketing,
- be familiar with the ways of marketing in some companies/organisations within their field of education,
- be able to assess and compare their work with competitors operating in the same field and with other companies/organisations operating in different fields, and
- understand the importance of creating and maintaining a competitive edge in business development.

Content

- Theoretical basis of marketing, its concepts and models
- Competitive tools in marketing, image marketing and consumer behaviour
- Development and maintenance of competitive edge
- Business development through marketing
- Case studies

Literature / Study Material

- Rope T. & Vahvaselkä, I. 1998 or later. Nykyaikainen markkinointi. WSOY.
- Armstron G. & Kotler P. 2000. Marketing. An Introduction. (assigned pages). Prentice-Hall International.
- Juslin H. & Neuvonen J. 1997. Metsäteollisuustuotteiden markkinointi. Ministry of Education.

Learning Methods

Lectures and exercises (as well as individual and group exercises)

Assessment

The grade consists of two parts: exam 50% and exercises 50%. Both parts will be assessed. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Forest policy, 3 op KB02BLIMP3 (study unit)

Lecturers

Forest Officer Erkki Raittila, MSc

Objectives

Students will know the structure of the forest industry and timber trade, as well as the objectives and methods of national and international forest policies.

Content

- Forest resources and forest ownership of Finland
- Forestry organisations
- Forestry legislation
- Forestry programmes
- Forestry taxation and employment impacts
- Sources of statistics for forestry and timber trade
- Forestry worldwide and within the European Union

Literature / Study Material

- Kiviniemi M. 2004 Metsäoikeus, Kustannus oy Metsälehti.
- Ollonqvist P. 1998, Metsäpolitiikka ja sen tekijät. Chapters 1, 8 and 9. Summaries of other chapters.
- Latest monitoring report from the national forestry programme
- Publications by the Ministry of Agriculture and Forestry
- Other material as indicated by the lecturer

Learning Methods

Lectures and exercises, excursions

Assessment

Participation in excursions, exercises and exam. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Law Merchant and Law of Oblications, 3 op KB02BLIKO3 (study unit)

Lecturers Forest Officer Raimo Jaakkola, MSc

Objectives

Students will become familiar with the regulations of commercial, liability and contract legislation regulating business operations.

Content

- Trade of movable property and premises
- Contract legislation
- Consumer protection
- Promotion of competition
- Debt relationships
- Compensation for damage

Literature / Study Material

- Kivelä & Nordel: Yrittäjän oikeutta
- Legislation as indicated

Learning Methods Lectures and exercises

Assessment Examinaton. Evaluation on a scale of 1 to 5.

Languages of Instruction Finnish

Further Information Online studies: 1 cr

Project management and planning, 3 op KB02BJOPR3 (study unit)

Lecturers

- Forest Officer Mirja Jääskeläinen
- Engineer Pekka Lietepohja

Objectives

Students will become familiar with the concepts of project work, project planning, and project management, as well as financing programmes significance to initiating projects. Upon completion of the course, students will

- have command of the various phases in a project cycle,
- be competent in compiling project plans,
- be aware of the importance of project management and the measures used in a project,
- be familiar with the more significant regional development programmes, rural development programmes, programmes financed by the EU, and other international programmes that can be utilised in financing forestry and timber trade projects, and
- be aware of various organisations that offer project financing.

Content

- Contepts and procedures in project work
- Organisation of projects
- Project cycle and compiling a project plan
- Project management
- Project financing
- Learning from project work

Literature / Study Material

- Silfverberg P. 2001. Ideasta projektiksi -projektisuunnittelun käsikirja. Edita.
- Development Co-operation of Finnish NGOs Manual 2003.
- http://global.finland.fi/
- Mäkelä & Stenlund. 1995. Projektijohtaminen, toiminnanohjaus verkostotaloudessa.
- PRAVO or similar material as indicated at the beginning of the course.

Learning Methods

- Lectures
- Guided assignments
- Learning through project work

Assessment

- Active participation
- Practice project
- Learning through project work
- Grading based on a scale of 1 to 5

Languages of Instruction Finnish

Further Information Research and development: 1 cr

Management, 6 op KB02BJOJO6 (study unit)

Lecturers Engineer Pekka Lietepohja

Objectives

Upon completion of the course, students will be competent in working as a supervisor of an organisation. They will be competent in planning an organisation's objectives and taking a leading role at work. Students will have command of process management and be familiar with quality control. They will also develop their customer service skills and understand the role of interest groups.

Content

- Development of organisations
- Status of the supervisor in an organisation
- Models of management
- Significance of management to the activities of the work community
- · Consciousness of an organisation and meaningful supervision
- Managing customer relations in a changing environment

Literature / Study Material

- Juuti P. 2006 . Organisaatiokäyttäytyminen. Otava.
- Juuti P 2003. Johtaminen ja organisaation alitajunta. Otava.
- Miettinen E. & Saarinen E. 1991. Muutostekijä. WSOY.
- Kauhanen J. 1997. Henkilöstövoimavarojen johtaminen. WSOY.
- Spiik K-M. 2004. Tulokseen Tiimityöllä. WSOY.
- Robbins S. P. 2003. Organizational Behavior. PRENHALL.
 Kauppinen T. J. 2002. Arvojohtaminen. Otava.
- Other material as indicated by the lecturer

Learning Methods

- Lectures
- Assignments
- Analyses based on literature

Assessment

- Assignments
- Interim exams
- Evaluation based on a scale of 1 to 5

Languages of Instruction Finnish

Further Information Online studies: 2 cr

Woodworking Industry and Technology, 4 op KB02BMTPT4 (study unit)

Lecturers

- Forest Officer Ossi Vuori
- Artenome Paula Avara-Pihlajamäki, woodworking teacher

Objectives

Students will know the structure, properties and defects of wood and understand their significance with regard to utilisation and processing of wood. They will know the structures of the domestic forest industry and wood utilisation, wood volumes used as well as the more significant companies in the field. Students will understand the manufacturing processes of sawn wood, plywood, chipboard, fiberboard, as well as that of pulp and paper and the structure of the production costs.

Content

- Structure and properties of wood
- Structure of wood on cell level, differences between hardwood and softwood, structure of wood material and different parts of tree
- Physical properties of wood and its chemical composition
- Defects of wood in regards of wood utilization
- Use and processing of wood
- History of the development of wood and forest utilisation
- Essential requirements for measurements and quality of logs, paperwood and energy wood based on the needs of the consumer
- Manufacturing of and products made from sawn timber, plywood, pulp and paper

Literature / Study Material

- Kärkkäinen M. 2003. Puutieteen perusteet.
- Koponen. 2002. Puulevytuotanto.
- Sipi M. 2006. Sahatavaratuotanto.
- Samples from Finnish Forest Industries.
- Other material as indicated by the lecturer.

Learning Methods

Lectures, laboratory exercises, field trips to production plants.

Assessment

- Exam on identifying wood species
- Exam on theory
- Grading based on a scale of 1 to 5

Languages of Instruction Finnish

Further Information Online studies: 1 cr

Basics of Forest Planning, 3 op KB02BMTSP3 (study unit)

Lecturers Forest Officer Antti Väätäinen, MSc

Objectives

Students will be able to find their way around in the outdoors with the help of a basic map and aerial photograph. They will also know how to measure individual trees use the relascope method when measuring wood volumes in forest compartments. Students will be competent in utilising a forest management plan.

Content

- Basics of orienteering
- Using various tools to measure trees and forest areas
- Using of forest a management plan

Literature / Study Material

- Tapion taskukirja 2002.
- Auvinen P. Metsänmittaus.

Learning Methods Lectures, assignments and exercises

Assessment

Exercises, continuous demonstration of knowledge, examination. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Basics of silviculture, 3 op KB02BMTMH3 (study unit)

Lecturers

- Jorma Toopakka, MSc
- Juhani Joensuu, DSc

Objectives

Students will know the basics of silviculture and importance of wood production as well as the working methods and labour costs.

Content

- Goals and changes in silviculture
- Silvicultural work during the rotation period
- Working methods in forest regeneration and tending of young tree stands
- Practical work in tending young stands, forest regeneration and maintenance of tools and equipment

Literature / Study Material

- Hyvän metsänhoidon suositukset (Tapio 2006).
- Valid collective labour agreement for the field of forestry.

Learning Methods

Lectures, assignments and exercises in the forest

Assessment

- Continuous assessment
- Participation in the practical exercises
- Work demonstration and exam
- Grading based on a scale of 1 to 5

Prerequisites First–aid I

Languages of Instruction Finnish

Basics of Wood Procurement, 3 op KB02BMTPH3 (study unit)

Lecturers

- Jorma Toopakka, MSc
- Juhani Joensuu DSc

Objectives

Students will gain insight into customer–oriented purchasing of timber. They will be familiar with various species of wood, including their requirements for measuring and quality. Students will have command of manually producing paperwood and logs safely, as well as the harveting gathering of wood. They will also be familiar with pricing.

Content

- Customer-oriented purchasing of timber
- Principles methods of manually gathering wood
- Upkeeping tools
- Pricing work

Literature / Study Material

- Uusitalo J. 2003. Metsäteknologian perusteet.
- Rantala S. (ed.). 2005. Metsäkoulu.

Learning Methods

- Lectures (4 h)
- Field trips to warehouses (16 h)
- Logging course (40 h)

Assessment

- Active participation in exercises
- Continuous assessment
- Demonstration of skills
- Exam
- Grading based on a scale of 1 to 5

Prerequisites First–aid I

Languages of Instruction Finnish

Further Information Online studies: 1 cr

Geographical information system, 2 op KB02BMTPJ2 (study unit)

Lecturers Forest Officer Antti Väätäinen, MSc

Objectives

Students will be familiar with the Global Positioning System and know how to apply their knowledge in their profession.

Content

- System of coordinates
- geographic information systems and GPS
- Data gathering
- Selection
- Reporting
- Visualization

Literature / Study Material To be announced.

Learning Methods

- Online learning
- Guided exercises
- Assignments

Assessment

- Exercises
- Continuous assessment
- Grading based on a scale of 1 to 5

Prerequisites Introduction to Information Technology

Languages of Instruction Finnish

Further Information Online studies: 1 cr

Basics of logistics, 2 op KB02BMTLP2 (study unit)

Lecturers Jorma Imppola, MSc (Eng.)

Objectives

Students will learn bout the basic concepts of logistics and understand the structure of the material flow of an industrial company.

Content

- Logistics and its basic concepts
- History of logistics
- Material flow of a productive company and its guidance from the raw material supplier to the final user of the product (procurement of raw material, production process, marketing/delivery logistics)
- Green logistics
- Logistics in a orporate economy
- Strategy of logistics

Literature / Study Material

- Lauhanen R. 2002. Logistiikan perusteet.
- Other material as indicated by the lecturer.

Learning Methods Lectures, group work, excursions Assessment Exercises, examination. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Basics of the Multiple Use of Forests, 3 op KB02BMTMO3 (study unit)

Lecturers Jorma Toopakka, MSc

Objectives Student will have command of

- various ways of utilising forests and how to combine those ways,
- the historical background of the diverse of forests and research methods for examining nature for recreational use,
- the evaluation of the immaterial benefits of forests, and
- the methods applied in multi–goal forest planning.

Content

- Finnish forests and the possibilities of utilisation
- Diverse use of forests
- Recreational use of forests
- Landscaping value of forests
- Economic valuation of the 'non-market' values of the forests
- Role of forest planning in combining forms of use

Literature / Study Material

- Selection of articles chosen by the lecturer.
- Kangas J. & Kokko A. 2001. Metsän eri käyttömuotojen arvottaminen ja yhteensovittaminen. Metla's bulletin 800.

Learning Methods Lectures, field trips

Assessment Examination. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Environmental sciences, 6 op KB02BYOYT6 (study unit)

Lecturers

- Välilehto, LA
- Forest Officer Helena Merisaari, MSc
- Forest Officer Lotta Jaakkola, MSc

Objectives Students will learn

- the structure of the ecosystem and how it functions,
- the importance of organic and inorganic environmental factors for species and populations,
- the general principles of population ecology and the importance of ecologic interactions for the balance of nature,
- the general state of environmental protection in the world and Finland in particular,
- the administration and legislation of environmental protection,
- how to take personal responsibility for the environment,
- the goals of nature protections and methods to achieve them, and
- how to consider the needs of environmental protection in forestry planning and operations.

Content

The course comprises three parts: 1. Ecology (2 ECTS), 2. Protection of the Environment (2 ECTS), and 3. Protection of Nature (2 ECTS).

- Basic concepts of ecology, the structure of the ecosystem and its basic functions, population dynamics, forest ecology
- Structure of the forest ecosystem and its processes, succession and proportons of tree species
- Different sectors of environmental control, environmental administration and legislation, systems for controlling the environment, YVA, sustainable development
- Protection of the original landscape and species, protection programmes and protection systems, legislation for nature protection, international and voluntary nature protection

Literature / Study Material

- Hakala H. & Välimäki J. 2003. Ympäristön tila ja suojelu Suomessa.
- Kellomäki S. 2005. Metsäekologia. Silva Carelica 7.
- Vuorisalo T. 2002. Ympäristöekologia. 5th edition. University of Turku: Centre for Extension Studies.
- Natura Conservation Act 1096/1996 and decree
- Lecture handouts, assigned online material, et.

Learning Methods

Lectures and exercises, independent study, field trips

Assessment

- Exams
- Approved assignments
- Grading based on a scale of 1 to 5

Prerequisites

Nature Conservation before Introduction to Silviculture and Caring for the Natural Forest

Languages of Instruction Finnish

Management of Forest Environment, 3 op KB02BYOML3 (study unit)

Lecturers

- Sirpa Välilehto, LA
- Forest Officer Helena Merisaari, MSc

Objectives

Students will understand the importance of caring for nature as a part of forest utilisation and silviculture. They will learn to plan and implement the measures related to silviculture and forest utilization taking into account the different elements of sustainability.

Content

- History of forest utilisation
- Development history of sustainable forestry
- · Guidelines and regulations related to forest management
- Protection of waterways
- Valuable biotypes of forests and indicator plants
- Care recommendations for commercial forests
- Forest certification
- Landscape management
- Financing the care of nature
- Relics

Literature / Study Material

- Kellomäki S. 1984. Metsätaloudellinen ympäristönhoito.
- Metla's website: extensive, current material
- Häggman B. et al. 2006. Metsäluonnon hoidon perusteet. 8th edition. Tapion julkaisu 23/2006.
- Hänninen E. et al. 1997. Metsämaiseman hoito. Tapio ja Metsäteho Oy.
- Joensuu S. 2007. Metsätalouden vesiensuojelu. Tapio.

ops.seamk.fi - Study Guide - Seinäjoki University of Applied Sciences

- Komulainen M. 1995. Taajamametsien hoito. Metsälehti.
- Meriluoto M. et al. 2004. Årvokkaiden elinympäristöjen turvaaminen. Tapio.
- Forest Act 1093/1996. Sections pertaining to the care of nature. (Available in Enflish on FINLEX).
- Legislation pertaining to sustainable silviculture financing.
- Current silvicultural recommendations.

Learning Methods

- Lectures
- Group work and independent study
- Reports
- Field trips
- Exercises in the forest

Assessment

- Theory exam
- Test in the forest
- Approved independent study assignments
- Grading based on a scale of 1 to 5

Prerequisites

- Classification of Habitats
- Introduction to Silviculture
- Botany

Languages of Instruction

Finnish

ORIENTATION STUDIES, 70 op KB02C70 (study entity)

Students choose their preferred track of study during their second year of study. Courses in their chosen track must be completed in modules. Students begin the compulsory courses for their track in the second year of their studies, but the majority of the courses are completed in the third year. Upon completion of these courses, students concentrate in elective courses and their final thesis in their fourth year of study. Compulsory modules in the Silviculture Track include the Silviculture I, Forest Planning I and Wood Purchasing I. Likewise, the advanced module that is most closely related to a student's thesis topic (Silviculture II or Forest Planning II or Wood Purchasing II) is compulsory. The final thesis and last practical training period must be integrated into the track studies. Compulsory modules in the Nature and Rural Tourism Track include Introduction to Tourism, Nature Travel as a Resource, and Entrepreneurship in Tourism. The final thesis and last practical training period must be integrated into the track studies. Compulsory modules in the Forestry and Timber Track include Wood Technology, and Marketing I and II. The final thesis and last practical training period must be integrated into the track studies.

Soil Science, 2 op KB02CMHMA2 (study unit)

Lecturers

Forest Officer Lotta Jaakkola, MSc

Objectives

Students will be familiar with the structure of soil in Finland and its historical development. They will also recognise the more common rock and soil types and be familiar with their properties. They will be competent in comparing different soil types with regard to forest regeneration and growing, and they will understand the basics of soil chemistry, physics and micro–organisms. Students will also understand the influence of environmental factors on the formation of organic debris, the importance of organic material for nutrient circulation and the basics of the ecology of soil organisms.

Content Soil

- Formation of soil
- Classification of soil types
- Soil typs and formations, their structures and geographical distrubution

Soil properties

• Physical properties

• Chemical properties

Biology of forest soil

- Organic material
- Fauna
- Microbes

Pedogenesis and description of soil

Literature / Study Material Mälkönen E. (ed.). 2003. Metsämaa ja sen hoito. Finnish Forest Research Institute (Metla) and Metsälehti Kustannus.

Learning Methods

- Letures
- Independent study and group work
- Field trip to the Finnish Forest Research Institute in Parkano
- Exercises outdoors

Assessment

- Written exam
- Assignments
- Continuous assessment
- Grading based on a scale of 1 to 5

Languages of Instruction

Finnish

Forest Growing, 5 op KB02CMHMG5 (study unit)

Lecturers

- Forest Officer Antti Väätäinen, MSc
- Forest Officer Helena Merisaari, MSc

Objectives

Students will understand the principles of forest growing and be able to apply them in practice. They will be aware of the alternatives in forest management in a decision–making situation (forest owner's goals, probable outcome, economic profitability).

Content

- Basics of forest growing
- Caring for young stands
- Intermediary harvestings
- Production of high-quality wood
- Nutrient uptake
- Environmental factors
- Requirements of different types of forest use

Literature / Study Material

- Reinikainen et al. 1998. Puiden ravinnepuutokset. Metla's bulletin 688.
- Tapio's guidelines for forest care
- Hynynen et al. 2005. Tuottava metsänkasvatus.
- Mälkönen. 2003. Metsämaa ja sen hoito.
- Forest Act, Act on the Financing of Sustainable Forestry, forest certification.
- Other material as indicated by the lecturer.

Learning Methods

- Lectures
- Field exercises with consideration of the goals of forest planning and wood procurement
- Assignments

Assessment

- Active participation in exercises
- Continuous demostration of knowledge
- Exam
- Grading based on a scale of 1 to 5

Languages of Instruction Finnish

Further Information Online studies: 2 cr

Forest regeneration, 4 op KB02CMHMU4 (study unit)

Lecturers Forest Officer Antti Väätäinen, MSc

Objectives

Students will understand the basics of forest regeneration and know how to apply their knowledge in practice. They will be aware of alternatives available in forest management in decision–making situations (forest owner's goals, probable outcome, economic profitability).

Content

- Basic in forest regeneration
- Regeneration methods
- Environmental factors
- Requirements of different forms of forest use

Literature / Study Material

- Mälkönen et al. 2000. Forest Regeneration in the Northern Parts of Europe. FFRI. Research paper 790.
- Metsätalouden vesiensuojelu. Tapio 2007.
- Metsänviljelyopas 2001. Metsäteho.
- Tapio's guidelines for caring for forests
- Valkonen et al. 2001. Onnistunut metsänuudistaminen.
- Luoranen-Kiljunen. 2006: Kuusen paakkutaimen viljelyopas. Metla.
- Forest Act, Act on the Financing of Sustainable Forestry and forest certification.
- Other material as indicated by the lecturer.

Learning Methods

- Lectures
- Online study
- Assignments
- · Field exercises with consideration of forest planning and wood procurement

Assessment

- Active participation on exercises
- Continuous demonstration of knowledge
- Exam
- Grading based on a scale of 1 to 5

Languages of Instruction Finnish

Further Information Online studies: 2 cr

Forest Measurement, 4 op KB02CMSMM4 (study unit)

Lecturers Forest Officer Antti Väätäinen, MSc

Objectives

Students will be competent in surveying/estimating characteristics of forest stands (mensuration) using various methods and calculating the results of the measurements. They will also be capable of assessing the methods and results.

Content

- Forest stand sample lots, sample lot estimation
- Compartment estimation
- Multi-source inventory methods

Literature / Study Material

- Auvinen P. 1997 or later. Metsänmittaus. Miniatry of Education.
- Metsän mittaus ja kartoitus. Silva Carelica 40. University of Joensuu.
- Husch B. et al. 2003. Forest Mensuration.
- Tapion taskukirja 2002. Gummerus. Jyväskylä.
- Other material as indicated by the lecturer.

Learning Methods

- Lectures
- Assignments
- Field exercises with consideration to forest planning and wood procurement

Assessment

- Active participation in exercises
- Continuous demonstration of learning
- Exam
- Grading based on a scale of 1 to 5

Prerequisites

- Methodology
- Introduction to Silviculture
- Introduction to Forest Planning

Languages of Instruction

Finnish

Basics of Mapping and Remote Sensing, 3 op KB02CMSKK3 (study unit)

Lecturers

Forest Officer Antti Väätäinen, MSc

Objectives

Students will learn to create and use various maps needed in the field of forestry. They will possess basic knowledge of remote sensing and of how to utilise aerial photographs.

Content

- Reading maps
- Surveying methods in mapping
- Basics of remote sensing
- Using satellite images, aerial photographs and laser scanning

Literature / Study Material

- Auvinen et al. 1997. Metsän kartoitus.
- Tokola et al. 1998. Metsän kaukokartoitus.
- Publications by the National Land Survey of Finland.
- Other material as indicated by the lecturer.

Learning Methods

- Online learning
- Assignments
- Exercises
- Field exercises

Assessment

- Active participation in exercises,
- Continuous demonstration of knowledge
- Examination
- Grading based on a scale of 1 to 5

Prerequisites

- Methodology
- Basic studies in forestry
- Forest Surveying

Languages of Instruction Finnish

Further Information Online studies: 1 cr

Planning and information systems, 4 op KB02CMSST4 (study unit)

Lecturers

Forest Officer Raimo Jaakkola, MSc

Objectives

Students will learn to use different methods of collecting, processing and publishing information needed in decision–making. They will be competent in using forest management plans in various decision–making situations.

Content

- Concepts related to forestry planning and decision-making
- Methods
- · Calculation and data processing systems

Literature / Study Material

- Pukkala. 2007. Metsäsuunnittelun menetelmät.
- Paananen et al. 2006. SOLMU Metsäsuunnitelman maastotyöopas.
- Other material as indicated by the lecturer

Learning Methods Lectures and exercises

Assessment Examination. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Further Information Online studies: 1 cr

Forest Planning Practices, 4 op KB02CMSHA4 (study unit)

Lecturers Forest Officer Raimo Jaakkola, MSc

Objectives

Students will learn to create a forest management plan with consideration of the forest owner's needs, sustainable development as well as the requirements of appropriate silviculture.

Content

- Collecting field data
- Recording the data
- Calculations and output data

Literature / Study Material

- Paananen et al. 2006. SOLMU Metsäsuunnitelman maastotyöopas.
- Other material as indicated by the lecturer.

Learning Methods Exercises

Assessment Approved forest plan

Prerequisites

- Planning and Data Processing Systems
- Introduction to Mapping and Remote sensing
- Forest Mensuration
- Growing Forests
- Forest Regeneration

Languages of Instruction Finnish

Further Information Research and development: 1 cr

Wood procurement 1, 9 op KB02CPHP19 (study unit)

Lecturers Forest Officer Ossi Vuori, MSc

Objectives

- Students will possess comprehensive knowledge of the processes of customer-oriented wood supply (purchase, harvest, long-distance transport, wood measuring).
- Students will be familiar with the specifications of timber trade, learn how to estimate the stand marked for cutting and how to fill in timber trade documents.
- Students will understand the basics of wood procurement and procedures as well as integrated contracting and machinery contracting.
- Students will also be familiar with the data processing systems relevant to wood procurement, work safety, long-distance transport systems.

Content

- Lectures
- Summaries of research publications made and presented in groups
- Excursions
- Practical exercises in the school forest and in class

Literature / Study Material

- Uusitalo J. 2003. Puunhankinnan perusteet.
- Handouts and online material as indicated by the lecturer.

Assessment

- Approved assignments and exercises
- Exams
- Grading based on a scale of 1 to 5

Prerequisites

Introduction to Wood Procurement

Languages of Instruction Finnish

Forest roads, 3 op KB02CPHMT3 (study unit)

Lecturers Forest Officer Ossi Vuori, MSc

Objectives

- Students will be familiar with the planning, construction and implementation of domestic forest roads.
- Students will know the different forest road categories and their construction.
- Students will know factors having influence on forest road planning, construction and maintenance.
- Students will know the legislation and regulation concerning forest roads.
- Students will be able to draw up a forest road construction plan.

Content

- Legislation concerning private roads, the environment and soil
- Technical structure of forest roads
- Planning, construction and implementation
- Maintenance of forest roads

Literature / Study Material

- Metsäteho. Metsätieohjeisto. 2001. Law and decree concerning private roads.
- Metsätalouden Kehittämiskeskus Tapio. Metsätiet ja metsäluonto. 2003.
- Finnish Road Association. Tiekunta ja tieosakas. 2001.

Learning Methods Lectures, field work, excursions.

Assessment

- Approved exercises
- Examination
- Grading based on a scale of 1 to 5

Languages of Instruction Finnish

Basics of tourism, 4 op KB02CMPMP4 (study unit)

Lecturers

- Arja Kortesluoma, BBus (Hospitality Management)
- Sirpa Välilehto, LA

Objectives

- Students will be familiar with the special features of tourism and factors influening the tourism business, as well as tourism as a business.
- Students will possess basic knowledge of the development of tourism, the regional impacts of tourism, different fields of activities, as well as the types of jobs in the tourism business.
- Students will be aware of the various sectors and services in tourism.

Content

- Concepts and phases of development in tourism
- Impact of tourism
- Tourism and the environment
- Sustainable development and environmentally friendly travel
- Regional character of tourism and types of tourist destinations
- Regional structure of tourism in Finland
- Travel businesses

Literature / Study Material

- Vuoristo K-V. & Santasalo T. 1991. Suomen matkailun aluerakenne.
- Vuoristo K-V. 2003. Matkailun muodot. 3rd edition.
- Hemmi J. 2005. Matkailu, ympäristö, luonto.
- Vuoristo K–V. & Vesterinen N. 2001. Lumen ja suven maa. Suomen matkailumaantiede.
- Parviainen J. 1997. Matkailuyrityksen ympäristöopas.
 Borg P., Kivi E. & Partti M. 2002. Elämyksestä elinkeinoksi.
- Other material: handouts, articles and reports (to be announced).

Learning Methods

- Lectures
- Guest lecturers and other speakers
- Field trips
- Case studies
- Group work
- Assignments
- Utilisation of printed and online material

Assessment

- Exercises: pass/fail
- Exam: grading based on a scale of 1 to 5

Languages of Instruction Finnish

Rural tourism, 4 op KB02CMPMS4 (study unit)

Lecturers

- Arja Kortesluoma, BBus (Hospitality Management)
- Sirpa Välilehto, LA

Objectives

Students will understand the special features of rural tourism, substantial supply of the sector and sub-sectors, knowledge and skills required in the business.

Content

- Definition of rural tourism, concepts and development
- Impacts and future prospects of rural tourism
- Special features of entrepreneurship, services and lines of business in rural tourism
- Accommodation services, restaurant services, auxiliary services, meeting and party services, programme services (activities, traditions, well-being, etc.)
- Customer service and customer contacts of an entrepreneur in rural tourism
- Quality-control systems (Maakuntien parhaat, Laatutonni, Malo, PS, Hyvää Suomesta)

Literature / Study Material

- Martikainen R. 2003. Maaseutumatkailu, toimialaraportti.
- Maaseutumatkailun teemaryhmä: Maaseutumatkailun strategia ja kehittämisohjelma.
- Verhelä P. & Lackman P. 2003. Matkailun ohjelmapalvelut.
- Field-related reports by the Ministry of Employment and the Economy: Maaseutumatkailu, Ohjelmapalvelut (latest issues).
- Synergos. Maaseutumatkailun kuluttajatutkimus 2006.
- Other material as indicated by the lecturer.

Learning Methods

- Lectures
- Guest lecturers and other speakers
- Field trips
- Case studies
- Group work
- Assignments

• Utilisation of printed and online material

Assessment

- Exercises: pass/fail
- Exam
- Grading based on a scale of 1 to 5

Prerequisites Introduction to Tourism

Languages of Instruction Finnish

Wilderness Skills and Moving in Nature, 3 op KB02CLMLL3 (study unit)

Lecturers Jorma Toopakka, MSc

Objectives

Upon completion of the course, students will understand the written and unwritten rules of the devoted hiker. They will possess traditional wilderness skills that help them to survive in the outdoors during all seasons. They will also know how to use and upkeep equipment needed in the outdoors and how to use GPS. Additionally, students will be competent in making meals outdoors and in orienteering. They will also be introduced to legislation pertaining to outdoor recreation.

Content

- Introduction to outdoor recreation, various roles of the outdoors person
- Opportunities offered by Finnish nature
- Traditional wilderness skills
- Equipment
- Food and hiking
- Maps and orienteering
- Legislation related to outdoor recreation, Everyman's Rights and responsibilities Safety and first aid

Literature / Study Material

- Aulio O. 1990. Suuri retkeilykirja.
- Corander N. 1990. Retkeilijän erätaidot 1 ja 2.
- Hentman R. 1998. Reppu selässä.
- Hentman R. 2005. Herkutellen luonnossa.
- Other material as indicated by the lecturer.

Learning Methods

Lectures, excursions and distance learning.

Assessment

Assessment will be based on assignments, active participation and an exam. Evaluation is based on a scale of 1 to 5.

Languages of Instruction Finnish

Knowledge of Nature, 3 op KB02CLMLT3 (study unit)

Lecturers

- Sirpa Välilehto, LA
- Veijo Kangasmäki, PhD
- Jorma Toopakka, MSc

Objectives

Students will be familiar with Finnish nature, its typical features and the versatility of its phenomena. Upon completion of the course, students will recognise the more common organisms in nature and be familiar with the type of environment they need to survive. Students will be capable of actively observing their environment and know which species can be found in a given area. They will also be familiar with the essential phenomena of nature and factors influencing it.

Content

- Basic features of the development of the nature of Finland
- Classification and recognition of organisms
- Phenomena of nature and their variations
- Using one's knowledge of nature in eco-tourism

Literature / Study Material

- Hanhela & Hanhela. 1999. Suomen fauna. CD collection.
- Material as indicated at the beginning of the course.

Learning Methods

Lectures, excursions, exercises, and distance learning.

Assessment

Assessment will be based on active participation, exercises, exam and continuous demonstration of learning. Evaluation is based on a scale of 1 to 5.

Prerequisites Botany

Languages of Instruction Finnish

Nature tourism, 3 op KB02CLMLM3 (study unit)

Lecturers Sirpa Välilehto, LA

Objectives

Students will learn the benefits of nature as a leisure-time environment and the potential of a nature tourism business.

Content

- Various forms of nature tourism
- Programme services based on nature
- Entrepreneurship in nature tourism
- Safety in nature tourism

Literature / Study Material

- Hall C. M. & Härkönen T. 2006. Lake Tourism.
- Hemmi J. 2005. Matkailu, ympäristö, luonto.
- Järviluoma J. & Saarinen J. (eds.). 2001. Luonnon matkailu- ja virkistyskäyttö tutkimuskohteena. Bulletin of the Finnish Forest Research Institute 796.
- Sievänen T. (ed.). 2001. Luonnon virkistyskäyttö 2000. Bulletin of the Finnish Forest Research Institute 802.
- Kukkola, J. & Renfors, T. & Kallioniemi, K. Suo mahdollisuutena matkailussa. 2002.
- Savonlinnan koulutus– ja kehittämiskeskuksen julkaisuja 9/2003. Oi jos Suomen järvet matkakohteeksi muuttuisi.
- Verhelä, P. & Lackman, P. Matkailun ohjelmapalvelut. 2003.
- Vähätalo, L. & Ruotsalainen, M. Metsästä elämyksiä. Opas metsämatkailupalvelun toteuttamiseen 1996.

Learning Methods

Excursions, lectures, field trips to various companies, and exercises.

Assessment

Participation on excursions and visits, approved exercises, and an exam. Evaluation is based on a scale of 1 to 5.

Prerequisites Introduction to Tourism

Languages of Instruction Finnish

Environment as a Recreational Resort, 2 op KB02CLMYV2 (study unit)

Lecturers

- Sirpa Välilehto, LA
- Jorma Toopakka, MSc

Objectives

Students will be familiar with the opportunities the environment offers for recreation. Upon completion of the course, students will know how to design and construct various nature trails and be familiar with the construction of recreational sites and the types of services the sites can offer. Maintenance of the sites is also discussed.

Content

- The environment as a recreational travel destination, then and now
- Relationship between nature tourism and recreational use of nature
- Experiential travel industry
- Designing recreational areas and nature trails
- Structure of recreational areas and designing
- Maintenance of recreational areas

Literature / Study Material

- Hemmi J. 2005. Matkailu, ympäristö, luonto.
 Karjalainen E. & Väre I. 1995. Ulkoilureitti: opas ulkoilureittien suunnittelijoille, rakentajille ja hoitajille.
- Sievänen T. (ed.). 2001. Luonnon virkistyskäyttö 2000.
- Other material as indicated by the lecturer.

Learning Methods

Lectures, excursions, exercises, and distance learning.

Assessment

Assessment is based on active participation, exercises, an exam, and continuous demonstration of learning. Evaluation is based on a scale of 1 to 5.

Languages of Instruction Finnish

Cooking in the Wild, 1 op KB02CLMRL1 (study unit)

Lecturers

- Sirpa Välilehto, LA
- Tauno Pohjola, MSc

Objectives

Students will learn how to prepare food in the outdoors. They will know how to make meal cards and calculate costs and the VAT.

Content

- Hygiene in the outdoors
- Preparing food in the outdoors
- Making meal cards and calculating costs
- Claculating VAT

Literature / Study Material As indicated by the lecturer.

Learning Methods

- Lectures, practical exercises
- Students responsible for paying for raw materials
- Participation compulsory

Assessment Exercises: pass/fail

Languages of Instruction Finnish

Structures of Multiple Use, 3 op KB02CLMMR3 (study unit)

Lecturers Esa Eloranta, MSc

Objectives

Students will be familiar with the tradition of wood (and especially of log) constuction in Finland and be able to apply their knowledge in multiple–use construction. Students shall know how to use and maintain the hand tools needed in log construction and how to build simple log constructions. They will also be familiar with issues concerning pricing work.

Content

- Basics of the multiple-use construction
- Tools, working methods and materials needed in wood construction
- Log structures
- Pricing

Literature / Study Material To be announced during the course.

Learning Methods Lectures, excursions, exercises, and distance learning.

Assessment

Assessment is based on active participation, assignments, an exam and continuous demonstration of learning. Evaluation is based on a scale of 1 to 5.

Prerequisites Introduction to Wood Procurement

Languages of Instruction Finnish

Hygienic Knowledge and Auto Control in Tourism, 2 op KB02CMYHY2 (study unit)

Lecturers Seija Pihlajaviita, MSc (Agr. and For.)

Objectives

Student will understand the significance of hygiene and in-house control and the related legislation. They will also be aware of the importance of current hygiene proficiency in a travel business.

Content

- Hygiene Proficiency Test
- In-house control plan for a travel business and related legislation

Literature / Study Material

- Pönkä A. 1996. Omavalvonta ja hygienia ravitsemisliikkeissä.
- Pönkä A. 1999. Ruokamyrkytykset ja elintarvikehygienia.

Learning Methods

Lectures and exercises (e.g. making/updating an in-house control plan)

Assessment

- Active participation in lessons
- Exercises: pass/fail
- Approved Hygiene Proficiency Test

Languages of Instruction Finnish

Marketing and Distribution Channels of Tourism Products, 4 op KB02CMYMJ4 (study unit)

Lecturers

- Arja Kortesluoma, BBus (Hospitality Management)
- Sirpa Välilehto, LA

Objectives

Students will become familiar with the methods of marketing tourism in a customer-oriented way based on segmentation. They will be aware of the various sub-sectors of marketing communication and the measures needed for them. Students will also be familiar with the more significant marketing and sales organisations in the field of tourism, the various distribution channels and the special demands they place on the tourism business.

Content

- Basics of tourism marketing
- Marketing of images and services
- Customer–oriented marketing
- Importance of marketing in product development
- Competition methods of marketing
- Marketing plan as a tool in tourism business
- Distribution channels of tourism products
- Working environment of tourism marketing
- Tourist agencies as a sales channel
- Tourism cooperation and networks
- Tourism organisations as a marketing channel, cooperation forms
- Tourism projects as a business model
- Co-operation and networks in the tourism business
- Regional tourism organisations

Literature / Study Material

- Boxberg et al. 2001. Matkailutuotteen markkinointi- ja jakelukanavat.
- Komppula R. 2000. Matkailuyrityksen sitoutuminen verkostoon. Case study of the tourism network in Northern Karelia: University of Lapland.
- Santala & Vesterinen & Moilanen. 2004. Matkailun kehittämisen alueellinen työnjako ja vastuut.
- Lahtinen & Isoviita. 2004. Markkinoinnin perusteet.

Learning Methods

- Case studies
- Group work and assignments
- Independent study and assignments
- Guest speakers from the field of tourism
- Field trips
- Utilisation of printed and online material

Assessment

- Exercises: pass/fail
- Exam: grading based on a scale of 1 to 5

Prerequisites

- Introduction to Tourism
- Introduction to Entrepreneurship
- Marketing I

Languages of Instruction Finnish

Product Safety and Jurisprudence in the Tourism Business, 2 op KB02CMYJU2 (study unit)

Lecturers

Arja Kortesluoma, BBus (Hospitality Management)

Objectives

Students will be familiar with the legislation related to tourism, and they will understand the opportunities and limitations various regulations and specifications place on enterprises and work in tourism.

Content

- Legislation pertaining to the establishment of a travel business
- Package travel products, package travel and package travel business legislation
- Tourism and consumer protection
- Safety of tourism services and risk analysis
- Documents concerning safety and security required by the Finnish Consumer Agency
- Responsibilities and liabilities of a company
- Tort Liability Act

Literature / Study Material

- Huovinen U. 2002. Matkailun lainsäädäntö.
- Maaseutumatkailun teemaryhmä: Tunne turvaa.
- Finnish Consumer Agency websitre: guidelines concerning the safety of programme services.
 National Supervisory Authority for Welfare and Health: Alkoholiasiat ravintolassa.
- Other literature to be announced at the beginning of the course.

Learning Methods

- Case studies
- Group work and assignments
- Independent study and assignments
- Guest speakers from the field of tourism
- Field trips
- Utilisation of printed and online material

Assessment

- Assignments: pass/fail
- Exam: grading based on a scale of 1 to 5

Prerequisites

- Marketing I
- Marketing and Distribution Channels of Tourism Products

Languages of Instruction Finnish

Language of Tourism, 5 op KB02CMYKI5 (study unit)

Objectives

Students will be competent in providing service and guidance in a foreign language.

Content

Students will learn vocabulary related to nature and rural tourism, such as programme services, hiking, fishing, hunting, different types of recreation and general knowledge of nature.

Literature / Study Material As indicated by the lecturer.

Learning Methods

- Lectures
- · Written and oral exercises

Assessment

- Exercises: pass/fail
- Exam: grading based on a scale of 1 to 5

Prerequisites

- Basic compulsory studies in a foreign language
- Elective courses in a foreign language

Languages of Instruction Finnish, foreign language

Sawing techniques, 3 op KB02CPTSV3 (study unit)

Lecturers

- Artenome Paula Avara-Pihlajamäki, woodworking teacher
- Juhani Joensuu, forestry teacher
- Hannu Humalamäki, MSc

Objectives

Students will become familiar with the structure and development of the sawmill industry and sawing techniques. Upon completion of the course, students will

- be familiar with various sawing techniques and the dimensions of sawn timber produced with each technique, machinery and equipment, as well as the factors affecting profitability and efficiency,
- be familiar with the reception, sorting and handling of raw wood at a sawmill,
- be familiar with the sorting, drying techniques and post-handling processes of sawn timber, as well as processed and by-products, and
- be familiar with the customer-oriented planning, guiding and supervising of asawmill.

Content

- Structure and development of the sawmill industry
- Handling of logs in the forest and at the sawmill
- Sawing techniques, machinery and equipment, dimensions of sawn timber
- Drying, sorting and post-handling
- Processed products and by-products
- Technical and economic bases of the sawmill industry

Literature / Study Material

Books published in the wood product industry book series:

- Puutuoteteollisuuus 1; Tekniset ja taloudelliset perusteet.
- Puutuoteteolisuus 2. Raaka-aineet ja aihiot.
- Puutuoteteollisuus 5. Sahatavaratuotanto. Ministry of Education. 2002.

Learning Methods

- Lectures
- Mill visits
- Sawing and sorting exercises
- Written exam

Assessment

Active participation, mill visits, sawing and sorting exercises, an exam. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Wood based panels and composites, 6 op KB02CPTPK6 (study unit)

Lecturers Artenome Paula Avara–Pihlajamäki, woodworking teacher

Objectives

Students will be familiar with the types of raw materials, characteristics, manufacturing and pre-processing of wood-based panels. Related terminology will also be discussed. Upon completion of the course, students will

- be competent in determining appropriate types of wood-based panel products for different situations,
- be familiar with the technical details of packing, transport and after–use recycling,
- understand EN standards and be able to compare the competitivity of domestic and imported wood-based panels, and
- have command of the logistics and organisation of a wood-based panel plant, customer-oriented quality consciousness, production control, and economic and work safety issues.

Content

- Raw materials and their appropriate use in different products
- Manufacturing processes: chipboards, plywood, fibreboards, other wood-based panels and composites
- Structureal properties and quality classification
- Packing, transport and recycling
- Exercises on the use of the EN standards
- Production control and economy
- Occupational safety

Literature / Study Material

- Koponen H. 2002. Puutuoteteollisuus 4. Puulevytuotanto. Ministry of Education.
- Other material as indicated by the lecturer

Learning Methods

Lectures, exercises, laboratory exercises, field trips to factories, and a written exam.

Assessment

Active participation, exercises and reports, factory visits, and exam. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Joinery industry, 9 op KB02CPTPT9 (study unit)

Lecturers

Artenome Paula Avara-Pihlajamäki, woodworking teacher

Objectives

Students will be familiar with joinery industry and both manual and automatic manufacturing methods of different wood products. Upon completion of the course, students will

- understand the technical and economic bases of the joinery industry,
- have command of woodworking machines and the manufacturing process,
- be able to choose raw materials that meet the quality requirements of the end-product and the requirements of the working machines, as well as to estimate production costs,
- be familiar with the products manufactured in the joinery industry, customer quality and production technology, and
- follow the development of the field, both in Finland and abroad.

Content

- Technical and economic bases of the joinery industry
- Products of joinery industry and EN standards (furniture industry)
- Products of timber construction and EN standards (doors, windows, fixtures, stairs, floors, wall materials, other components)
- Production processes (working with wood, joints, gluing, finishing, surface-treatment, packing and transport)
- Development and new innovations in the field

Literature / Study Material

- Puutuoteteollisuus 1. Tekniset ja taloudelliset perusteet.
- Puutuoteteollisuus 2. Raaka–aineet ja aihiot.
- Puutuoteteollisuus 3. Puusepänteollisuus. Ministry of Education. 2002.
- Other material as indicated by the lecturer.

Learning Methods

Lectures, exercises, visits to factories and a final exam.

Assessment

Active participation, exercises and reports, factory visits, and exam. Evaluation based on a scale of 1 to 5.

Prerequisites

- · Woodworking Industry and Technology
- Production of Sawn Timber
- Wood-based Panels and Composites

Languages of Instruction Finnish

Wood and Timber Construction, 6 op KB02CPTHI6 (study unit)

Lecturers

- Tiina Haapasaari, BSc (Eng.)
- Esa Eloranta, MSc

Objectives

Students will familiar with basic issues in wood construction, planning construction projects, the use of wood as a construction material, wood structures, construction systems and the more common production and construction methods of wooden houses and timber. Upon completion of the course, students will

- be familiar with the proceedings of a construction project,
- be familiar with the requirements and advantages of wood as construction material,
- understand the open wood construction system and its areas of application,
- be familiar with the more common industrial production methods of wooden houses,
- be familiar with the more common production, work and preparation methods of log construction,
- understand the main principles of planning of log constructions,
- consider the special requirements of wood in timber construction, and
- be familiar with basic issues in erecting and surface-treating a log house.

Content

- Building projects
- Wood as a construction material (its advantages, load-bearing wood constructions)
- Open wood construction system
- Industrial production methods of wooden houses
- Log production, working and preparation methods
- Designing log constructions and special requirements of wood
- Erecting and surface-treating log constructions

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, guided exercises, and field trips.

Assessment

Assessment is based on active participation, exercises, excursions and exams. Evaluation is based on a scale of 1 to 5.

Prerequisites

- Production of Sawm Timber
- Wooden Base Panels and Composites
- Joinery Industry

Languages of Instruction Finnish

Product Development and Design, 3 op KB02CPTTM3 (study unit)

Lecturers

Artenome Paula Avara-Pihlajamäki, woodworking teacher

Objectives

Students will be familiar with the terminology and methods applied in product design, and understand the significance of industrial design as a part of a company's product design and customer strategy. Upon completion of the course, students will

- be capable of assessing the significance of product design as part of business development,
- acknowledge the significance of product development and technical and environmental quality,
- know the basics of professional design drawing,
- acknowledge the significance of co-operation between customer and designer in product development,
- be able to define the product development needs of the customer, and
- be able to assess the suitability of a product concept for a company's current situation and develop it further.

Content

- · Basics of product development and design
- Customer details in product development and design; its nature, collecting and interpretation
- Drawing techniques
- Positioning of product and product concept
- Financing and innovations

Literature / Study Material

- Lecture material
- Cagan J. & Vogel G. M. 2003. Kehitä kärkituote, Ideasta innovaatioksi. Gummerus Kirjapaino Oy.
- Keinonen T. & Jääskö V. 2003. Tuotekonseptointi. Teknologiateollisuus ry. Helsinki.

Learning Methods

- Lectures
- Co-operative learning
- Exercises
- · Field trips to various companies

Assessment

Active participation, exercises and reports, excursions, and a written exam. Evaluation is based on a scale of 1 to 5.

Prerequisites

- · Woodworking Industry and Technology
- Production of Sawn Timber
- Wood-based Panels and Composites
- Joinery Industry

Languages of Instruction Finnish

Productization and Marketing Communications, 4 op KB02CMRTU4 (study unit)

Lecturers

Forest Officer Mirja Jääskeläinen, MSc

Objectives

The course will provide students with basic knowledge of marketing communication and its different methods and the utilisation of those methods. Students will apply their knowledge in a comprehensive project. Upon completion of the course, students will

- understand what marketing communication is, the aims and significance of it, as part of an organisation's operations and with regard to interest groups,
- have used case studies to practise using various methods of marketing communication, and
- have applied their knowledge extensively in a project (advertisement campaign, trade fair department, organising a PR event, etc.).

Content

- Introduction to marketing communication
- Personal sales work
- Advertising
- Sales promotion
- PR work
- Sponsoring The course is integrated into the teaching of IT, particularly into the teaching of image processing and publication software.

Literature / Study Material

- Vuokko P. 2003. Markkinointiviestintä, vaikutus ja keinot. WSOY.
- Other material to be announced at the beginning of the course.

Learning Methods

Lectures, guided exercises, project, and an examination.

Assessment

Assessment is based on active participation, exercises and exam. Evaluation is based on a scale of 1 to 5.

Languages of Instruction Finnish

Further Information

- Online studies: 1 cr
- Research and development: 2 cr

Marketing Management and Maintaining Customer Relationship, 4 op KB02CMRMJ4 (study unit)

Lecturers

Forest Officer Mirja Jääskeläinen, MSc

Objectives

Students will become familiar with how to plan and manage marketing and utilise their previous knowledge in drawing up a marketing plan for an example company. Upon completion of the course, students will

- understand marketing planning as an integral part of a company's strategic operations and management,
- be familiar with the complete marketing planning model and the data environment model, as well as with the significance and implementation of operationalizing them,
- understand the differences and similarities between the strategies in consolidate companies, business, and marketing as well as the relationship of the strategies to the structures, procedures and modes of operation,
- understand the ideas behind strategic and operative management, which are also feasible in managing marketing,
- be competent in evaluating development in the field and the impact it has on a company's marketing, and
- be able to apply their knowledge to make a marketing plan for an example company.

Content

- Planning and management of strategic and operative marketing
- Complete model for planning of marketing and model of data environment
- Strategic decisions in marketing, structures, measures and action plans

Literature / Study Material

- Juslin H., Hansen E. 2002. Strategic Marketing in the Global Forest Industries (assigned pages). Authors Academic Press.
- Juslin H. & Neuvonen, J. 1997. Metsäteollisuustuotteiden markkinointi. Ministry of Education.
- Other material to be announced at the beginning of the course.

Learning Methods

Lectures, guided exercises, excursions, and an exam.

Assessment

Assessment is based on active participation, exercises and exam. Evaluation is based on a scale of 1 to 5.

Control of Market Intelligence, Information Systems and Marketing Research, 5 op KB02CMRIJ5 (study unit)

Lecturers

Forest Officer Mirja Jääskeläinen, MSc

Objectives

Students will be familiar with the general sources of information in the fields of forestry and timber trade as well as with the ways of obtaining and mediating marketing information. Students will be introduced to the macro– and micro–levels of research in the marketing environments of forestry and timber trade, as well as to the marketing data systems and marketing research methods. Upon completion of the course, students will

- be competent in systematically utilising sources of marketing datan in forestry and timber trade,
- be competent in utilising data and communication technology for gathering, processing, storing, delivering and presenting information,
- be familiar with the markets of forestry and timber trade and, in particular, with markets of the wood product industry,
- understand marketing data systems in forestry and timber trade and be able to assess them,
- understand the importance of marketing data as a part of the operations and development of a company,
- be able to plan a small-scale study related to their own field, divide the research process into stages, compare the pros and cons of the different methods of collecting information, select a method suitable for their own research and write a report, and
- understand the importance of market research as a part of information acquisition system.

Content

- Part 1. Control of Marketing Data: domestic and global markets in forestry and timber trade, the more significance marketing areas and competition, consumer behaviour, organisations related to the marketing of products in forestry
- Part 2. Sectors and Data Systems of Marketing Research in Forestry: planning and implementation of marketing, production, demand and supply of products in forestry, raw wood market, competition, delivery systems, and customers.
- Part 3. Marketing Research: marketing research and ethics, defining the research problem and objectives of the study, research plans and defining needed information, gathering information, processing and analysing data.

Literature / Study Material

- Markkinatieto yrityksen kansainvälistymisessä. 2001. Fintra's publication No. 18.
- Juslin H. & Hansen E. 2002. Strategic Marketing in the Global Forest Industries (assigned pages). Authors Academic Press.
- Lotti L. 2001. Tehokas markkina-analyysi. WSOY.
- Other material, websites and databanks as assigned by the lecturer.
- Research publications in Finnish and English.

Learning Methods

Lectures, guided exercises both individually and in groups, and presentation of results.

Assessment

Assessment based on the three parts of the course: exercises and possible written exam will be taken into account. Evaluation is based on a scale of 1 to 5.

Languages of Instruction Finnish

Documents of Export and Domestic Trade, 4 op KB02CMRVA4 (study unit)

Lecturers

Forest Officer Mirja Jääskeläinen, MSc

Objectives

Students wil become familiar with documents pertaining to domestic and international trade and, in particular, with the trading technology used in the forest industry. Upon completion of the course, students will

- have command of the modes of doing business and understand their significance in trading and making trade agreements,
- be familiar with the forms used in trading in the forest industry,
- acknowledge the importance of trade agreements as the basis of ancillary agreements arising from the trade agreements,
- be able to fill in the essential documents related to trade negotiations, trade agreements, and doing business, as well as commissions for ancillary agreements,
- be competent in assuring that all documents pertaining to doing business, payment transactions, delivery, etc. are valid (Finnish and English copies), and
- be familiar with the organisations related to domestic and international trade and the services they offer for the promotion of business and internationalisation.

Content

- Business transactions, trade customs and trade agreements
- Other documents
- Delivery options
- Organisations related to trade and their services
- Forms of internationalisation

Literature / Study Material

- Handout, template contracts and documents, vocabulary
- Statements and collections, etc. published by the International Chamber of Commerce
- Detailed list of publications to be announced at the beginning of the course

Learning Methods

Lectures, guided exercises, excursions, and an exam.

Assessment

Assessment is based on active participation, exercises and exam. Evaluation is based on a scale of 1 to 5.

Languages of Instruction Finnish

Transportation Technology, 3 op KB02CMRKT3 (study unit)

Lecturers Jorma Imppola, MSc (Eng.)

Objectives

Students will be familiar with loading, transport and delivery. Emphasis is placed on logistics systems and the procedures and opportunities for development of customer-oriented delivery chains in forestry. Upon completion of the course, students will

- understand the significance of the logistics chain in the delivery of raw wood and other materials and processed products as a factor generating added value to the company and the customer,
- be familiar with methods of transport and their properties and details related to the loading of goods,
- be familiar with the planning and control systems of transports,
- acquire basic knowledge of required transport and freight insurance services and related docuyments, and
- be familiar with the various parties involved in the delivery chain.

Content

- Basics in transporation technology
- Types of transportation and their properties, packing and loading goods
- Planning and controls transports
- Services and documents associated with transportation and freight insurance
- Customs formalities
- Distribution systems, management of the delivery chain, parties and partners in the delivery chain

Literature / Study Material

- Karhunen J., Pouri R. and Santala J. 2004. Kuljetukset ja varastointi järjestelmät, varastointi ja toimintaperiaatteet. Logistics Finland.
- Koskinen H., Koskinen P., Markkula R., Mattson M., Ollikainen J., Sarjanen P. and Vinnari O. 2000. Huolinta–alan käsikirja. latest edition. Finnish Freight Forwarders' Association.

• Other material and websites to be announced at the beginning of the course.

Learning Methods

- Lectures
 - Guided exercises
 - Field trips
 - Exam

Assessment

- Active participation
- Exercises
- Exam
- Grading based o a scale of 1 to 5

Languages of Instruction Finnish

Information technology 2, 5 op KB02CMRAT5 (study unit)

Lecturers

- Hannu Lassila, LA
- Forest Officer Antti Väätäinen, MSc
- Forest Officer Heikki Holma, MSc
- Technician Jyrki Foudila

Objectives

Students will be familiar with database programmes, data bases and logistics systems used in the forest industry for controlling freight and information flows. They will learn about photo–processing, graphics and publication software, as well as about the models, methods and tools used on online business, particularly in the forest industry. Upon completion of the course, students will

- be competent in using Access programme to create a small-scale database,
- be familiar with GIS and GPS systems and where to utilise them,
- possess extensive kowledge of databases and logistics systems used in the forest industry and be able to assess and utilise them,
- possess basic knowledge of photo-processing, graphics and publication software and the material related to advertising and communication,
- possess basic knowledge of online business applications, and
- be competent in evaluating and developing business in the forest industry using online business applications.

Content

Part 1. Databases and Logistics Systems (integration with logistics and transport technology courses): databases, GIS and GPS systems, applications in the forest industry Part 2. Photo–processing and Publication Software (integration with marketing communication, particularly with advertising, courses): photo–processing, graphics and publication software Part 3. Online Business (integration with marketing, particularly with the documents of domestic and export trade, sales technique and business communication courses) operation models, tools and applications, eBusiness applications in the forest industry

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

- Working with computers and commercial programmes
- Exercises
- Field trips
- Exam

Assessment

Assessment is based on the exam and exercises, which are graded on a scale of 1 to 5.

Prerequisites Introduction to Information Technology Languages of Instruction Finnish

Forest Tree Breeding and Plant Construction, 2 op KB02CMHTA2 (study unit)

Lecturers

Forest Officer Lotta Jaakkola, MSc

Objectives

Students will be familiar with the basics of seed and seedling production. They will understand the physiology, handling and purchasing process of seeds and how to grow forest trees, as well as the cost calculations involved in growing. They will also be aware of the requirements concerning quality of forest trees. Students will be familiar with the guidelines and requirements related to the trade of forest tree seeds and seedlings, as well as with tree breeding and the basic methods of breeding.

Content

- Types of seeds for forest trees and their basic properties
- Seed production, purchase and handling
- Methods of assessing the quality of seed
- Seedling material
- Purchase and reception of seedlings
- Storing and transport of seedlings
- Basics of tree breeding

Literature / Study Material

- Rikala R. 2002. Metsätaimiopas.
- Nygren M. 2003. Metsäpuiden siemenopas.
- Nieminen & Tavaila. 1987. Metsäpuiden taimien kasvatus.
- Long-term tree breeding programme

Learning Methods Lectures, field trip to a nursery

Assessment Written exam. Evaluation based on a scale of 1 to 5.

Languages of Instruction Finnish

Maintenance of Forest Drainage Area, 3 op KB02CMHOJ3 (study unit)

Lecturers

Forest Officer Antti Väätäinen, MSc

Objectives

Students will be competent in compiling a maintenance plan for a forest drainage area taking into account environmental issues and logistics. They will have command of basic knowledge in forest management and be capable of applying that knowledge in practice.

Content

- Significance of forest drainage
- Planning and implementation of maintenance drainage
- Environmental impacts and taking them into consideration
- Measures related to the management of forest drainage area

Literature / Study Material

- Instructions on forest management by Tapio.
- Joensuu et al. 2007. Metsätalouden vesiensuojelu.
- Metsäteho 1998. Ojitusalueiden puunkorjuu.
- Tapio 1999. Ojitettujen soiden puuntuotanto ja ympäristönhoito.
- Water Act.

- Act on the Financing of Sustainable Forestry decrees as well as application guidelines by the Ministry of Agriculture and Forestry.
- Other material as indicated by the lecturer.

Learning Methods

- Lectures
- Online study
- Assignments
- Field exercises

Assessment

- Active participation in exercises
- Continuous demonstration of learning
- Exam
- Grading based on a scale of 1 to 5

Prerequisites

- Forest Soil
- Growing Forests
- Forest Regeneration

Languages of Instruction Finnish

Further Information Online studies: 1 cr

Forest pathology and damages, 2 op KB02CMHPA2 (study unit)

Lecturers Forest Officer Lotta Jaakkola, MSc

Objectives

Students will recognise the more significant factors or organisms, animals, insects and microbes that cause damage to living trees and timber, including the symptoms of damage. They will be competent in applying this knowledge to forest management and damage control. Students will also understand the guidelines and specifications related to pesticides and protection and apply them in their work.

Content

- Biotic and abiotic damage and source of damage and their recognition
- Economic importance of forest damage
- Control of forest damage
- Polymorphism of nature and forest damage
- · Laws and degrees related to forest damage
- Forest insurance

Literature / Study Material

- Uotila A. & Kankaanhuhta V. 1999. Metsätuhojen tunnistus ja torjunta. Kustannusosakeyhtiö Metsälehti.
- Kurkela T. 1994. Metsän taudit. Otatieto Oy.
- Nuorteva M. 1999. Metsähyönteisten maailmasta. Tremex Press Oy.
- Metla's website.
- Other material as indicated during lectures.

Learning Methods Lectures, species identification

Assessment

Written and a species identification exam. Evaluation based on a scale of 1 to 5.

Prerequisites Forest Soil Languages of Instruction Finnish

Silviculture in northern Finland, 2 op KB02CMHPS2 (study unit)

Lecturers Forest Officer Antti Väätäinen, MSc

Objectives

Students will understand the special features of the silviculture in Northern Finland.

Content

Basics of silviculture and the requirements set by other forms of forest utilisation in Northern Finland.

Literature / Study Material To be announced.

Learning Methods

- Independent study
- Trip to Lapland

Assessment

- Assignments
- Participation in trip to Lapland
- Pass/fail

Prerequisites

- Forest Regeneration
- Growing Forests

Languages of Instruction Finnish

Real estates and pricing, 3 op KB02CMSKH3 (study unit)

Lecturers Forest Officer Raimo Jaakkola, MSc

Objectives

Students will understand the legislation and restrictions related to using and controlling real estate. They will be competent in applying the more common methods of valuating forests.

Content

- Valuation methods
- Formation of property

Literature / Study Material

- Tapion taskukirja, latest edition
- Other material as indicated by the lecturer

Learning Methods Lectures, exercises

Assessment Exam. Evaluation based on a scale of 1 to 5.

Prerequisites

- Commercial law
- Law of obligations

Languages of Instruction Finnish

Positioning Systems, 2 op KB02CMSPJ2 (study unit)

Lecturers

Forest Officer Antti Väätäinen, MSc

Objectives

Students will be competent in using various methods of positioning and in assessing the appropriateness of those methods for various situations.

Content

- Satellite positioning systems (GPS, Glonass, Galileo) and methods that utilise them (absolute, differential and relative positioning)
- GPS and other positioning methods

Literature / Study Material

- Miettinen S. 2006. GPS-käsikirja. WSOY.
- Websites with current resources.

Learning Methods

- Online learning
- Guided exercises and assignments closely related to positioning systems and mapping

Assessment

- Exercises
- Continuous demonstration of knowledge
- Pass/fail

Prerequisites

- Introduction to Positioning Systems
- Introduction to Mapping and Remote Sensing

Languages of Instruction Finnish

Utilization of GIS, 2 op KB02CMSPH2 (study unit)

Lecturers

Forest Officer Antti Väätäinen, MSc

Objectives

Students will be aware of the opportunities offered by GIS and be competent in utilising the more common methods of analysis when using GIS.

Content

- Sources of information
- Analysis methods of screen and vector data
- Visualization
- Developmental outlooks of the GIS

Literature / Study Material To be announced.

Learning Methods

- Online learning
- Guided exercises and assignments

Assessment

- Exercises
- Continuous demonstration of knowledge
- Pass/fail

Prerequisites

- Introduction to Geographical Positioning Systems
- Introduction to Geographical Information Systems
- Introduction to Mapping and Remote Sensing

Languages of Instruction Finnish

Wood procurement 2, 6 op KB02CPHP26 (study unit)

Lecturers

- Forest Officer Ossi Vuori, MSc
- Engineer Mauri Pienimaa, MSc

Objectives

- Students will be familiar with customer-oriented wood procurement (planning, monitoring, purchase of wood, harvest, long distance transport, measurement of wood) through practice.
- Students will have command of making wood procurement plans, budgets, proposals and of making harvesting plans using a matrix.
- Students will be capable of measuring paperwood, log batches and control batches for harvesters.
- Students will be aware of the practices involved in transporting timber.

Content

- Practical exercises (wood procurement, harvesting plan, environmental and quality control of harvest, measurement of log piles, measurement of logs, data processing systems, communication with students learning to operate forest machinery, safety at work, making contracts) in the forest, classroom and with a harvesting simulator
- Logistics training with a wood hauling truck

Literature / Study Material

- Uusitalo J. 2003. Metsäteknologian perusteet.
- Handouts and online material as indicated by the lecturer.

Assessment

- Approved exercises and assignments
- Demonstrations
- Grading based on a scale of 1 to 5

Languages of Instruction Finnish

Principles for bioenergy procurement and utilization, 3 op KB02CBETP3 (study unit)

Lecturers

- Risto Lauhanen, DSc (Agr. and For.)
- Forest Officer Jussi Laurila, MSc
- Juhani Törmä
- Hannu Lassila, LA

Objectives

Students will be familiar with and understand the basic terminology and concepts in the field of bioenergy. They will be familiar with methods of production, units of measurement, energy balance and potential, as well as the different combustion techniques for each form of bioenergy.

Content

- Forms of producing and using bioenergy
- Units of measurement
- Basics of energy balance and potential
- Combustion techniques

Literature / Study Material

- Lauhanen R. & Laurila J. 2007. Bioenergian tuotannon haasteet ja tutkimustarpeet.
- Metla's report 42. pp. 58. Online publication.: http://www.metla.fi/julkaisut/workingpapers/2007/mwp042.html
 Other material as indicated in Moodle.

Learning Methods

- Lectures
- Calculations
- Assignments
- Field trips to energy plants

Assessment

- Active participation
- Field trips
- Assignment
- Grading based on a scale of 1 to 5

Prerequisites Courses in mathematics, physics and chemistry

Languages of Instruction Finnish

Further Information

- Online studies: 2 cr
- Research and development: 2 cr

Bioenergy business and heat-entrepreneurship, 3 op KB02CBELY3 (study unit)

Lecturers

- Risto Lauhanen, DSc (Agr. and For.)
- Forest Officer Heikki Holma, DSc (Econ. and Bus. Adm.)
- Esa Koskiniemi, MSc

Objectives

Students will know the basic terminology and definitions of bioenergy business as well as the risks and possibilities of the heating business.

Content

- Energy business
- Heatig business
- Business planning

Literature / Study Material As indicated in Moodle.

Learning Methods

- Lectures
- Business plan

Assessment

• Active participation

- Business plan
- Grading based on a scale of 1 to 5

Further Information

- Online studies: 2 cr
- Research and development: 2 cr

Forest energy – procurement and utilization, 3 op KB02CBEHP3 (study unit)

Lecturers

- Risto Lauhanen, DSc (Agr. and For.)
- Forest Officer Jussi Laurila, MSc
- Hannu Humalamäki, MSc

Objectives

Upon completion of the course, students will understand the basics of the procurement logistics and the use of forest energy and be familiar with industrial safety. They will also know how to measure fuel wood and be aware of the expenses involved and financial assistance available. In addition, students will be familiar with environmental issues and research activities in the field and be able to determine suitable objectives for procuring forest energy and assess the quality of working sites.

Content

- Forest energy procurement integrated into the procurement of commercial timber
- Caring for seeding stands and young forest with regard to the production of forest energy
- Machines and equipment
- Costs
- Occupational safety
- Choosing a site for forest energy

Literature / Study Material

- Hakkila P. 2004. Puuenergian teknologiaohjelman loppuraportti. TEKES.
- Lauhanen R. & Laurila J. 2008b. (eds.). Bioenergian hankintalogistiikka.
- Case studies from South Ostrobothnia. University of Applied Sciences publication B, report 33. pp. 138. Online publication:
- http://kirjasto.seamk.fi/includes/file_download.asp?deptid=1953&fileid=2722&file=SeamkB33.pdf&pdf=1
- Metsäteho. 2008. Metsäenergian hankinnan tuloskalvosarja.

Learning Methods Lectures, field exercises, literary assignments

Assessment

- Active participation
- Summary of research: pass/fail
- Field exercises

Languages of Instruction Finnish

Further Information

- Online studies: 2 cr
- Research and development: 1 cr

Bioenergy procurement and utilization on farms, 3 op KB02CBEMB3 (study unit)

Lecturers

- Risto Lauhanen, DSc (Agr. and For.)
- Jussi Esala, LSc (Agr. and For.)
- Juhani Törmä
- Tiina Haapasaari BSc (Eng.)

Objectives

Upon completion of the study, students will be familiar with industrial safety and the basics of bio-gas production, waste disposal, and the construction of a heat station.

Content

- Energy production and energy balance on a farm
- Production and use of reed canary grass, straw, energy grain and bio-gas, use, costs and safety
- Construction and measuring of a heat station for a farm
- Policies pertaining to funding

Literature / Study Material

- Lauhanen R. & Laurila J. 2007. Bioenergian tuotannon haasteet ja tutkimustarpeet.
- Metla's report 42. pp. 58. Online publication: http://www.metla.fi/julkaisut/workingpapers/2007/mwp042.htm
- Other material as indicated in Moodle.

Learning Methods Lectures, calculations and exercises

Assessment Active participation, assignement. Grading based on a scale of 1 to 5.

Further Information

- Online studies: 2 cr
- Research and development: 1 cr

Bioenergy practical training, 1 op KB02CBEHA1 (study unit)

Lecturers

- Risto Lauhanen, DSc
- Jussi Esala, LSc
- Juhani Törmä

Objectives

Students will be familiar with the practices of producing and using bioenergy, as well as industrial safety.

Content

• Production and use of bioenergy in practice

Literature / Study Material As indicated in Moodle.

Learning Methods

Practical training with a bioenergy entrepreneur, on a farm, a day on a wood chipping or peat vehicle or a day gathering data for the unit's project.

Assessment

- Active participation
- Portfolio
- Pass/fail

Further Information

- One credit for online studies
- One credit for R&D

Procurement and utilization of energy-peat, 2 op KB02CBEET2 (study unit)

Lecturers

• Risto Lauhanen, DSc (Agr. and For.)

- Jussi Esala, LSc (Agr. and For.)
- Juhani Törmä

Objectives

Students will be familiar with the basics of the peat industry, establishing a peat production area and subsequent use of peat land, as well as issues concerning environmental protection and permits.

Content

- Establishing a peat production area
- Production of milled and sod peat
- Protection of waters
- Environmental permits
- Subsequent use of peat production areas

Literature / Study Material

- Lauhanen R. & Laurila J. 2007. Bioenergian tuotannon haasteet ja tutkimustarpeet.
- Metla's report 42. pp. 58. Online publication:http://www.metla.fi/julkaisut/workingpapers/2007/mwp042.htm
- Lauhanen R. & Laurila J. (eds.). 2008b. Bioenergian hankintalogistiikka.
- Case studies from South Ostrobothnia. Seinäjoki University of Applied Sciences publication B. Report 33. pp. 138. Online publication:
- http://kirjasto.seamk.fi/includes/file_download.asp?deptid=1953&fileid=2722&file=SeamkB33.pdf&pdf=1
- Saunala H. & Salo H. Turvesoiden jälkikäyttöopas.
- http://www.vapo.fi
 - Other material as indicated in Moodle

Learning Methods

Lectures, field trips

Assessment

- Active participation
- Examination
- Grading based on a scale of 1 to 5

Further Information

- Online studies: 3 cr
- Research and development: 1 cr

Survival skills in Finland, 3 op KB02CMOEV3 (study unit)

Lecturers Toopakka Jorma, MSc

Objectives

The course will enhance the skills students learned in the Outdoor Life and Wilderness Skills course. Upon completion of the course, students will

- be competent in planning and carrying out various outdoor excursions,
- be competent in choosing appropriate equipment for outdoor excursions and be familiar with the safety risks,
- be competent in leading groups of people on outdoor excursions, and
- have command of orienteering.

Content

- Planning outdoor excursions
- Choosing places to take excursions
- Equipment
- Orienteering and acting as group leader
- Maintenance of equipment

Literature / Study Material

- Aulio O. 1990. Suuri retkeilykirja.
- Corander N. 1990. Retkeilijän erätaidot 1 and 2.

- Hentman R. 1998. Reppu selässä.
- Hentman R. 2005. Herkutellen luonnossa.
- Other material as indicated by the lecturer.

Learning Methods

Planning and implementation of an outdoor excursion

Assessment

Assessment is based on active participation and and continuous demonstration of skills. Pass/fail.

Prerequisites Outdoor Living and Wilderness Skills

Languages of Instruction Finnish

Nature Management Projects, 3 op KB02CMOHH3 (study unit)

Lecturers

Forest Officer Helena Merisaari, MSc

Objectives

Students will be familiar with various nature management projects and the financing alternatives for them. They will be competent in planning projects together with interest groups. Students will be able to work as supervisors in the project they have planned.

Content

- Nature management projects that meet the standards of the financing legislation for sustainable forestry
- Project models of the Metso programme
- Financing channels
- Familiarisation with existing projects, co-operation in the projects
- Making a plan and cost estimate, implementation of the projects

Literature / Study Material

- Model plans of the Forestry Development Center Tapio and instructions given for project planning and implementation (not generally published)
- Websites of Tapio and Forest Centers + other material as indicated

Learning Methods

- Lectures
- Independent study
- Excursions
- Practice project plan
- Contact and guided teaching: 45 h

Assessment

Participation in field exercises, practice project plan, exam. Evaluation is based on a scale of 1 to 5.

Prerequisites Environmental studies

Languages of Instruction Finnish

Further Information Research and development: 1 cr

Fishing and the Fishing Industry, 3 op KB02CMOKK3 (study unit)

Lecturers Forest Officer Toopakka Jorma, MSc

Objectives

Upon completion of the course, students will be familiar with the more significant organisations in the fishing industry and how those organisations operate. They will understand issues concerning ownership of Finland's inland waters, e.g. legislation and permits for fishing. Students will also be familiar with common fishing methods and tools used on Finland's inland waters. They will also recognise the types of fish living in those waters. Students will understand the importance of maintaining and restoring fishing waters, and they will know how to handle fish correctly. Students will also be introduced to fishing tourism and its potential in Finland.

Content

- Organisations in the fishing industry
- Ownership of Finland's inland waters, legislation and fishing permits
- Fish species in Finland
- Fishing methods, tools and equipment
- Maintenance of fishing waters
- Fishing tourism

Literature / Study Material

- Kalastussäädöksiä 2006. Federation of Finnish Fisheries Associations.
- Kalaveden hoito. 2002. Federation of Finnish Fisheries Associations.
- Brochure and other material from the Federation of Finnish Fisheries Associations.
- Kolmonen, J. 2005. Ruodotonta kalaa.
- Hanhela & Hanhela 1999. Finland's fauna CD collection
- Lehtonen & Nyberg. 2006. Suomen kalojen tunnistusopas.
- Myllylä & Lamanen 2007. Tuotteistettu kalastusmatkailu.
- Yhteisen kalaveden osakaskunta. 2002. Federation of Finnish Fisheries Associations.

Learning Methods

Lectures, excursions, exercises, and distance learning.

Assessment

Assessment is based on active participation, exercises, exam and continuous demonstration of knowledge. Evaluation is based on a scale of 1 to 5.

Languages of Instruction Finnish

Game Management and Hunting, 3 op KB02CMORM3 (study unit)

Lecturers Sipilä Seppo, MSc

Objectives

Upon completion of the course, students will be familiar with the more significant organisation that manage wild game hunting in Finland and the legislation pertaining to firearms and hunting. Students will also be familiar with the more common methods of hunting and managing wild game, as well as how to handle prey and cook with game. Additionally, students will be introduced to hunting tourism and its potential in Finland.

Content

- Hunting and game management organisations
- Legislation on hunting and firearms
- Most common wild game species
- Managing the living environment of wild game and estimating populations, common inventory methods
- Silviculture and game
- Common methods of game management
- Hunting and handling of prey: moose, hare, birds, and game food
- Hunting tourism

Literature / Study Material

- Hunter's guidebook. 1998. Metsästäjäin keskusjärjestö
- Ala-Ajos I. & Kairikko J. K. 2004. Rakentamisopas metsästäjille ja riistanhoitajille.
- Tapion Taskukirja 2002
- Hanhela & Hanhela. 1999. Finland's fauna CD collection.

Learning Methods

Lectures, excursions, exercises, and distance learning.

Assessment

Assessment is based on active participation, exercises, exam and continuous demonstration of knowledge. Evaluation is based on a scale of 1 to 5.

Languages of Instruction Finnish

English: Forest, Environment and Industry, 3 op KB02CENMY3 (study unit)

Lecturers

Pearce, John

Objectives

Students will expand their vocabulary related to the forest, environment and forestry. They will be able to use both in written and spoken English in work–related situations, and they will be able to talk about topics related to forestry in English and benefit from English language literature in their studies.

Content

- Sustainable forestry and timber trade
- · Forest policy and certification of forests
- Wood production and management of the forest environment
- Wood procurement
- Forest planning
- Multiple use of forests
- Environmental protection
- Forest economy
- Structure and characteristics of wood
- Chemical and mechanical forestry

Literature / Study Material

- Forest, environment and industry. Finnish Forest Industries Federation, 2005. Helsinki.
- Teacher's material.

Learning Methods Spoken and written exercises

Assessment

Active demonstration of oral language skills, exercises, and exam. Evaluation is based on a scale of 1 to 5.

Prerequisites English Communications

Languages of Instruction Finnish, English

English: The Jargon of Wood Product Industry, 6 op KB02CENPA6 (study unit)

Lecturers Pearce, John

Objectives

Students will expand their vocabulary related to the wood product industry. They will be able to use both written and spoken English in work–related situations, and they will possess a positive attitude in developing their English language skills. Upon completion of the course, students will be able to describe the processes in the wood product industry and the products manufactured therein. They will be competent in communicating with technical and marketing experts and benefit from English language literature in their studies.

Content

- Sawmill industry
- · Chipboard, plywood and fibre board production

- Joinery industry
- Wood and log construction

Literature / Study Material Material and vocabulary as indicated by the teacher.

Learning Methods Written and spoken exercises

Assessment Active demonstration of oral language skills, exercises, and exam. Evaluation is based on a scale of 1 to 5.

Prerequisites English: Forest, Environment and Industry

Languages of Instruction Finnish, English

English: Conference and Negotiation Skills, 3 op KB02CENKN3 (study unit)

Lecturers Pearce John

Objectives

Students will have command of the more common terminology, practices and phraseology related to meetings and negotiations. Upon completion of the course, students will be able to participate in meetings and negotiations conducted in English and acknowledge the cultural differences related to the meeting and negotiation situations. They will be competent in producing the following written documents: notice of meeting, agenda, memorandum and minutes.

Content

- Negotiations and meetings
- Notice of meeting, agenda, memorandum and minutes
- Phraseology and negotiation culture

Literature / Study Material

- Huhta M. 2000. Connections, Communication Guidelines for Engineers. Edita.
- Mole J. 2003. Mind your Manners. Manging Business Cultures in the New Global Europe. Nicholas Brealey Publishing.
- Material and vocabulary as indicated by the teacher.

Learning Methods Oral and written exercises

Assessment Active demonstration of oral language skills, exercises, and exam. Evaluation is based on a scale of 1 to 5.

Prerequisites English: Forest, Environment and Industry

Languages of Instruction Finnish, English

English: Business Communications and Marketing of Wood Products, 3 op KB02CENLP3 (study unit)

Lecturers Pearce, John

Objectives

Students will be familiar with business communications in the English language in forestry and the wood–working industry. Upon completion of the course, students will understand essential terminology and be able to write business letters and notices in English. They will be familiar with various documents in English, and possess skills in spoken and written English to use in various business situations.

Content

- Business letters and documents
- Trade agreements for wood products
- Documents related to delivery, taxation, customs clearance, etc.
- Customer service and reclamation
- Online business

Literature / Study Material

- Ashley A. 2003. Oxford Handbook of Commercial Correspondence. Oxford University Press.
- Taylor S. 2004. Model Business Letters, E-mails & Other Business Documents. FT Prentice Hall, Financial Times.
- Huhta M. 2000. Connections, Communication Guidelines for Engineers. Edita.
- Mole J. 2003. Mind your Manners. Manging Business Cultures in the New Global Europe. Nicholas Brealey Publishing.
- Document models in English
- Teacher's material

Learning Methods Oral and written exercises

Assessment Oral and written exercises, assignments and written exam. Evaluation is based on a scale of 1 to 5.

Prerequisites English: Forest, Environment and Industry

Languages of Instruction Finnish, English

Swedish, forest, environment and industry, 3 op KB02CRUMY3 (study unit)

Lecturers Titta Huhtamäki, MA

Objectives

Students will expand their vocabulary related to the forest, the environment and forestry. They will be competent in both written and spoken Swedish in work–related situatuins. Students shall be able to talk about topics related to forestry in English and benefit from Swedish language literature in their studies.

Content

- Sustainable forestry and timber trade
- Forest policy and certification of forests
- Wood production and management of forest environment
- Wood procurement
- Forest planning
- Multiple use of forests
- Environmental protection
- Forest economy
- Structure and characteristics of wood
- Chemical and mechanical forestry

Literature / Study Material

Material and vocabulary as indicated by the teacher.

Learning Methods Spoken and written exercises

Assessment Active demonstration of oral language skills, exercises, and exam. Evaluation is based on a scale of 1 to 5.

Prerequisites Swedish Communications

Languages of Instruction Finnish and Swedish

Russian, 3 op KB02CVE (study unit)

Lecturers Titta Huhtamäki, MA

Objectives

The objectives of the course will be determined according to the level of the course and will be comparable to the English studies.

Content

The content of the course shall be based on the skills of the participants. When necessary, the course may comprise the very basic language study. Other Russia courses offered at the Seinäjöki University of Applied Sciences will be taken into account.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Written and oral exercises

Assessment

Oral proficiency, exercises, written assignments and examination. Evaluation is based on a scale of 1 to 5.

Prerequisites

There are no preprequisites for beginner courses. Participating in the advanced course requires students to have basic knowledge of Russian, which they studied either in upper secondary school or other institutions.

Languages of Instruction Finnish, Russian

Further Information Online studies: 1 cr

German, 3 op KB02CSA (study unit)

Lecturers Pirkko Kivinen, MSc

Objectives

The objectives of the course will be determined according to the level of the course and will be comparable with the English studies.

Content

The content of the course will be based on the skills of the participants. When necessary, the course may comprise the very basic language studies. Other German courses offered at the Seinäjöki University of Applied Sciences will be taken into account.

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Written and spoken exercises

Assessment Oral proficiency, exercises, written assignments and examination. Evaluation is based on a scale of 1 to 5.

Prerequisites

There are no preprequisites for the beginner courses. Participating in the advanced courses requires students to have basic knowledge of German, which they studied either in upper secondary school or other institutions.

Languages of Instruction Finnish, German

ELECTIVE STUDIES, 15 op KB02D (study entity)

Students must choose elective courses worth at least 15 ECTS (10CR). Students may choose their elective courses according to their own interests, provided that the courses meet the requirements of their degree programme. Each year, the School of Agriculture and Forestry in Tuomarniemi offers a wide range of courses, including courses offered in co-operation with the town of Ähtäri. More detailed information about the electve courses offered each year is located in the Study Guide and on the Intranet.

THESIS, 15 op KB02F (study entity)

The aim of the final thesis is to allow students to demonstrate their abilities and knowledge in practical expert positions related to their professional studies. The thesis can be, for example, a research or project related to project development or planning, presented as a written report. In some cases, the thesis may need to be confidential, e.g. a contract between the commissioner and the university of applied sciences. The final thesis also deepens students' professional skills, forms connections to various organizations in the working world and facilitates the students' transfer and adjustement to the tasks within their field. Students also learn to work consistently and systematically in both searching and using source material, as well as in applying research methods and reporting results. Objectives and content:

- Conducting and presenting an individual thesis plan in a seminar
- Independent or group work depending on the nature of the work
- Active participation in seminars
- Participation in personal consultation
- Compiling an independent written report and presenting it in a seminar

Learning methods and assessment:

- Conducting an individual thesis according to plans
- Working within agreed objectives and instructions
- Implementing, reporting and presenting a thesis
- Research plan and participation in seminars
- Functioning as an opponent in one seminar and in the final seminar
- Functioning as a chairman in the final seminar

The work is evaluated by a teacher in professional studies and the principal lecturer. The language and abstracts are revised. Literature: Material from seminars and consultations

Thesis, 15 op KB02FONON15 (study unit)

Lecturers

Principle lecturers and field-related lecturers

Objectives

When doing a final thesis on the university of applied sciences level, students work independently and purposefully under the guidance of their supervisor. During the thesis writing process, students

- familiarise themselves with the research and development of their profession,
- learn the traditions of doing research,
- practise solving problems and making decisions independently,
- produce a written report using appropriate academic language in Finnish or in another language, and
- gain experience in carrying out a purposeful project.

Content

- Choosing a topic, learning about the topic and creating a frame of reference
- Making a thesis plan, thesis plan seminar
- · Guided independent work
- Maturity Test
- Final seminar
- Participation in seminars

Literature / Study Material

- Guidelines for Writing a Thesis. Seinäjoki University of Applied Sciences.
- Supplementary instructions from the faculty

Learning Methods Guided independent work

Assessment

- Approved Maturity Test: pass/fail
 Thesis: grading based on Seinäjoki UAS's criteria
 Grading based on a scale of 1 to 5

Prerequisites Thesis Writing Process

Languages of Instruction Finnish

Further Information Research and development: 15 cr

Degree Programme in Health Care and Social Services / Elderly Care (In Finnish)

Degree Programme in Health Care and Social Services / Elderly Care (In Finnish), 210 cr (1.9.2008) VANTYO 2008

Code	Name	Study Year			ar	CR	
		1.	2.	3.	4.		
KFG11A	BASIC STUDIES					18	
KFG11A1	Polytechnic studies and study skills					6	
KGF11A91001	Polytechnic studies	x				2	
KGF11A91003	Co-operation skills	х				2	
KGF11A91004	Information technology	х				2	
KFG11A2	Language studies					6	
KGF11A005	Native language and communication	x				2	
KGF11A006	English	x				2	
KGF11A007	Swedish	x				2	
KFG11A3	Basic biological and medical studies					6	
KGF11A008	Anatomy, physiology and microbiology	x				3	
KGF11A009	Introduction to medical science and general internal medicine and surgery	x				3	
KFG11B	PROFESSIONAL STUDIES					137	
KFG11B1	The knowledge base in the health and social field					14	
KFG11B001	Analysis of the concepts in the social and health field	x				2	
KFG11B002	Theoretical foundation of nursing	x				2	
KFG11B003	Theoretical foundation of the work in the social field	x				2	
KFG11B004	Integrating seminar: nursing and social field work	x				2	
KFG11BE005	Practical training 1: Well–being of the old individual and of the community in nursing home	x				6	
KFG11B2	Finnish society and social and health services					10	
KFG11B006	Finnish society and social policy	x				3	
KFG11B007	Morbidity and health policy in Finland	x				3	
KFG11B039	Laws and decrees regulating elderly policy	x				2	
KFG11BE008	Practical training 2: The social and health service delivery system	x				2	
KFG11B3	Gerontological studies					21	
KFG11B009	Gerontological theories	x				2	
KFG11B010	Changes brought on by aging and elderly people's functional capacity	x				4	
KFG11B011	Experienced old age	x				3	
KFG11B008	Aging and society and elderly people's social problem situations	x				3	
KFG11B013	Practical training 3: Analysis of the functional capacity and living conditions of home–living	x				2	
KFG11BE014	Practical training 4: Promotion of elderly people's functional capacity in sheltered housing		x			7	
KFG11B4	Elderly research					10	
KFG11B005	Introduction to scientific thinking		x			2	
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KFG11B016	Quantitative research methods		x			2	
KFG11B015	Qualitative research methods		x			2	
KFG11B017	Action research			x		2	
KFG11B018	Analysis and summary of elderly research		x			2	
KFG11B5	Analysis of the profession and professional growth	the profession and professional growth					
KFG11B019	Job description and professional qualifications of Bachelors of Elderly Care		x			2	
KFG11B021	Analysis of the student's personal professional qualifications				x	2	
KFG11B6	Ethics in elderly care						
KFG11B022	Ethics of elderly care and of Bachelors of Elderly Care		x			2	
KFG11B023	Essay and seminar		x			2	
KFG11B14	Counselling in elderly care						
KFG11B024	Teaching and counselling			x		2	
KFG11B025	Supervision of reminiscence		x			2	
KFG11B026	Music therapy and creative therapies in elderly care		х			3	
KFG11BE027	Practical training 5: Creative activities in elderly care			x		2	
KFG11B8	Supporting elderly people's functional capacity					10	
KFG11B028	Meeting the basic needs and supporting the daily activities of the elderly		x			3	
KFG11B029	Elderly people's nutrition and special diets		x			2	
KFG11B030	Practical training 6: Supporting elderly people's functional capacity at home		x			5	
KFG11B9	Nursing sick elderly people					24	
KFG11B031	Geriatrics		х			2	
KFG11B032	Drug care of elderly people and clinical pharmacology		x			3	
KFG11B033	Nursing sick elderly people		x			3	
KFG11B034	Nursing theory and interventions in elderly care		х			2	
KFG11B035	Terminal care of elderly people		x			2	
KFG11B036	Practical training 7: Nursing sick elderly people in the ward		x			6	
KFG11B037	Practical training 8: Home nursing of elderly people		x			6	
KFG11B11	Supporting elderly people by social work interventions					14	
KFG11B040	Family work and networking in elderly care		x			2	
KFG11B041	Group and community work in elderly care		x			2	
KFG11B042	Empowering interventions in elderly care		x			2	
KFG11BE043	Practical training 9: Helping elderly people in social problem situations			x		6	
KFG11B12	Preventive and rehabilitative elderly care					10	
KFG11B044	Rehabilitation and physiotherapy of elderly people		х			2	
KFG11B045	Supporting family care-giving			x		2	
KFG11BE046	Practical training 10: Rehabilitation supervision of groups of elderly clients/family care-givers			x		3	
KFG11BE047	Practical training 11: Preventive house calls and the case management process				x	3	
KFG11B13	Care and rehabilitation of dementing elderly people						
KFG11B048	Care of dementing elderly people			x		2	

KFG11BE049	Practical training 12: Care of dementing elderly people and promotion of their functional capacity			x		7	
KFG11C	ADVANCED STUDIES						
KFG11C1	Management and development of elderly care						
KFG11C001	Management and economics in elderly care services			x		5	
KFG11C002	Quality management in elderly care			x		3	
KFG11C003	Project work as a tool in the development of elderly care				x	2	
KFG11C004	Entrepreneurship in elderly care			x		2	
KFG11CE005	Practical training 13: Management and development of elderly care			x		12	
KFG11CE006	Practical training 14: Publicity and influencing elderly policy			x		2	
KFG11CE007	Practical training 15: Elderly care development project				x	6	
KFG11D	DIPLOMA WORK					15	
KFG11C008	Final thesis and maturity test		x			15	
KFG11F	FREE CHOICE STUDIES					8	

Study Descriptions

Polytechnic studies and study skills, 6 op KFG11A1 (study entity)

Students will be introduced to the educational aims of the Seinäjoki University of Applied Sciences, to their degree programme, to the courses and other activities offered by the university and to the staff and student support services. They will familiarize themselves with the curriculum required for geriatric care the and come to see its aims and principles regarding pedagogy and contents. They will also become subjects of their own learning, capable of co-operation and self-directed studies. Finally, they will be introduced to sources of information, research methods and learn to use a PC and information networks as tools in their studies when acquiring, processing and producing information related to elderly care.

Polytechnic studies, 2 op KGF11A91001 (study unit)

Lecturers

Katriina Honkala, YTM; Tellervo Pihlaja, KM, Simo Ranta, THM

Objectives

The students will gain an overall picture of Seinäjoki University of Applied Sciences, of the School of Health Care and Social Work, of the studies and other activities offered to them and of the student support services. They will become familiar with their own degree programme and start constructing a conception of its aims and scope and of the professional competences involved in their future profession. The students will also learn to use central information sources and networks.

Content

Seinäjoki University of Applied Sciences, School of Health Care and Social Work, student support services, degree programme in elderly care, principles regarding pedagogy and learning contents, progress of the studies, study practices, practical training periods, study techniques, feedback systems, study arrangements for each term, information seeking and sources of information in elderly care, information search and library services, information search exercises in the health and social field, in elderly care and in WWW, independent assignments

Literature / Study Material

Guide to Seinäjoki University of Applied Sciences, Curriculum, Kirjallisten töiden ohjeistukset, tiedonhaun ohjeistukset

Learning Methods

Lectures, group work, independent study and assignments

Assessment

Participation in lectures and individual tutorials, independent study and assignments

Co-operation skills, 2 op KGF11A91003 (study unit)

Lecturers

Simo Ranta, THM, Tellervo Pihlaja, KTM

Objectives

The students will deepen their self–awareness by participating in group processes and learn to analyse their interaction skills with the help of a theoretical foundation.

Content

The role of culture in the regulation of interaction. Self–concept, ideal self, self–worth, self–esteem, values and attitudes in interaction. Individual motivational factors, observation, dealing with difference and controversy professionally

Literature / Study Material

Kopakkala, A. 2005. Porukka, Jengi, Tiimi. Ryhmädynamiikka ja siihen vaikuttaminen. Edita. (sov. osin) Vilen, M., Leppämäki, P., Ekström. L.2002. Vuorovaikutukseksellinen tukeminen sosiaali-ja terveysalalla. WSOY. (sov. osin).

Learning Methods Group sessions and assignments

Assessment Active participation in sessions; analysis of personal growth and development

Information technology, 2 op KGF11A91004 (study unit)

Lecturers Hilkka Latva–Somppi, FK

Objectives

The students will learn to use a PC and peripherals independently, understand their role as users of information networks and know how to apply information technology in their future profession and its development. The students will learn to use common applications and to evaluate the reliability of the information. They will improve their information seeking skills needed during the studies and in elderly care and become aware of their ethical responsibility in the use of information technology.

Content

The information technology and facilities available, current practices in the health and social sector, ethical viewpoints and data protection, device management, editing systems, e-mail, Winha student administration system, learning environments, Internet, search engines, Word text processing, Excel spreadsheet, PowerPoint graphics

Literature / Study Material

Material in the WebCT learning environment, other Internet material

Learning Methods

Participation in lectures, Web-based learning, independent assignments, examination

Assessment

Active participation, independent Web-based assignments, examination. Assessment scale 1-5

Language studies, 6 op KFG11A2 (study entity)

Objectives: Students will acquire adequate written and oral skills a foreign language and especially in their native language. which will allow them to communicate effectively in their future profession with elderly people. In Swedish, the second official language, students will possess the proficiency required of civil servants (Decree 256/95) and necessary for their professional practice and development (grades H4 or K5).

Native language and communication, 2 op KGF11A005 (study unit)

Lecturers Katariina Punkari, FM

Objectives

The students will understand how the degree of formality and correct language usage are the foundation of written

communication. They will be introduced to various types of information and learn to analyse and interpret them. They will participate in oral and writing assignments to learn argumentation and to develop their thinking. The students will learn to produce commonly used documents and be introduced to scientific writing. They will practise oral communication individually and in groups and study communication for meetings and negotiations.

Content

Research communication, scientific writing and documentation; A scientific essay, summary, report, poster, learning diary; Information literacy, media texts; Basics of writing documents; Preparing for oral communication situations, oral communication practices and their evaluation; Interaction, verbal and non-verbal communication, methods of illustration; Meetings and negotiations

Literature / Study Material

Repo, Irma & Nuutinen, Tahvo 2003. Viestintätaito. Opas aikuisopiskelun ja työelämän vuorovaikutustilanteisiin. Otava.

Learning Methods Lectures, oral and writing assignments, independent study

Assessment

Active participation in lessons, learning diary and examination

English, 2 op KGF11A006 (study unit)

Lecturers Tiina Vahvaselkä, FM

Objectives

The students will increase their oral and writing skills in English by revising central structures and practising polite communication and small talk. They will become motivated to maintain their skills independently. The will learn field–specific vocabulary and be introduced to scientific texts.

Content

English for elderly care; polite communication and small talk; central structures; introduction to scientific English.

Literature / Study Material Material given by the lecturer.

Learning Methods

Active participation in lessons, independent study and exercises

Assessment

Participation in lessons, oral test in pairs, summary of a Finnish text into English. Independent study: Preliminary summary and assignments. The assessment is based on the national critaria for polytechnics/universities of applied sciences (AMKKIA)

Prerequisites

English studies at upper secondary/vocational institute or equivalent

Swedish, 2 op KGF11A007 (study unit)

Lecturers Merja Lindholm, FM

Objectives

The students will develop their written and oral communication skills in Swedish by revising central grammar and extending their vocabulary related to elderly care.

Content

The contents include a revision of basic structures and vocabulary and writing, reading and speaking field-specific material.

Literature / Study Material Material given by the lecturer

Learning Methods Active participation, exercises Assessment

Active participation, especially in oral exercises, written examination, oral test in pairs.

Basic biological and medical studies, 6 op KFG11A3 (study entity)

Objectives: Students will be aware of the significance of the basic studies in medicine, as required in the Degree Programme in Geriatric Care, in constructing the professional skills of a geriatric care professional. They will acquire basic knowledge of the structure and functions of the human body and understand the significance of microbes to the health of human beings.

Anatomy, physiology and microbiology, 3 op KGF11A008 (study unit)

Lecturers

Ilm. myöhemmin LL, Leena Katajamäki, TtM

Objectives

The students will learn the structure, function and vocabulary of central body systems. They will learn where organs are located and know how the function of body systems maintains health. The studies will help them understand aging and the changes brought on by old age. The students will also study the role of microbes in health and pathology and gain a foundation for the study of infectious diseases, their treatment and asepsis in elderly care.

Content

Tissues, bones, muscles, the circulatory system, the respiratory system and breathing, the structure and function of the digestive system, the urinary system, the structure and function of the nervous system; Microbes in the environment and useful microbes; Types of microbes, immunology; principles of asepsis and elimination of microbes; Infectious diseases and microbiological samples

Literature / Study Material

Karhumäki. E. et al. 2005. Mikrobit hoitotyön haasteena; Niestedt, W. et al. 1990 tai uud. Ihmisen anatomia ja fysiologia; Material prepared by the lecturer

Learning Methods Lectures, discussion

Assessment

Active participation in lectures, independent study, examination and interim tests

Introduction to medical science and general internal medicine and surgery, 3 op KGF11A009 (study unit)

Lecturers Juhani Laakso MD

Objectives

The students will be introduced to the background and progress of various diseases and gain a foundation for the study of medical–surgical disorders and geriatrics. They will study the etiology, pathophysiology, examination and diagnostics of common medical–surgical disorders and learn to integrate medical–surgical knowledge with geriatrics and with the health promotion, care and rehabilitation of elderly patients. The students will learn to apply their knowledge when participating in the decision–making regarding their clients' care and rehabilitation and when counselling the clients and their families.

Content

Introduction to medical science: cardiovascular diseases, pulmonary diseases and diseases of the digestive system, metabolism and endoctrinal disorders, musculo-skeletal disorders, emergency care of medical patients, introduction to surgery, tumours of the breast tissue, abdominal disorders, burns, orthopaedics and traumatology, thoracic and vascular surgery and urology.

Learning Methods

Lectures, collaborative learning, assignments

Assessment

Initial examination (pathology), active participation and examination

PROFESSIONAL STUDIES, 137 op KFG11B (study entity)

Students will advance their professional qualifications through the study of caring and nursing. They will work in the social field and care for the elderly and provide services for elderly citizens. Students will learn to analyze their own activities and service delivery systems from the point of view of the client, theory, experiential knowledge and ethics. They will learn to make independent decisions and to plan, implement and evaluate elderly care.

The knowledge base in the health and social field, 14 op KFG11B1 (study entity)

Objectives: Students will learn to analyse central concepts in caring, nursing and in the social welfare field within various frameworks, and to explore the inter–relationship between individuals and their environment. They will also learn the central theoretical, ethical and philosophical foundations of caring, nursing and in the social welfare field, and acquire basic knowledge required in a professional, interactive and helping relationship. Students will also learn to seek, analyse and critically evaluate information independently and to practice collaborative learning and working techniques.

Analysis of the concepts in the social and health field, 2 op KFG11B001 (study unit)

Lecturers

- Kari Jokiranta, MSSc
- Simo Ranta, MSc (Nursing)

Objectives

Students will practise conceptual thinking and reflect on the interrelationships between concepts. They will learn to analyse central concepts in the health–care and social welfare field and to explore their contents within various frameworks. They will also learn what kinds of contents are generally accepted in the health–care and social welfare sector.

Content

The topics dealt with during this course include conceptions of human nature, welfare, way of life, lifestyle, life management, conceptions of health/illness, health promotion, insecurity, social problems, social exclusion, social support, the human being/environment, society and community, nursing, work in the social field/social work, theme seminar.

Literature / Study Material

- Ahlqvist K. & Ahola A. (eds.). 1996. Elämän riskit ja valinnat: Hyvinvointia lama-Suomessa.
- Eriksson K. et al. 2007. Hoitotiede. (appl. parts).
- Mikkola L. 2006. Tuen merkitykset potilaan ja hoitajan vuorovaikutuksessa (pp. 23-72).
- Perttilä K. 1999. Terveyden edistäminen kunnan tehtävänä. (appl. parts).
- Pohjolainen P. & Syren I. (eds.). 2006. Ikääntyvien elämäntyylit.
- Raitasalo R. 1996. Élämänhallintaa etsimässä (appl. parts)
- Vertio H. 2003. Terveyden edistäminen. Tammi. (appl. parts)
- Other material distributed by the lecturer

Learning Methods

Concept analysis, theme-based seminar and discussions

Assessment

Approved concept analysis, active participation in the seminars, and an exam.

Theoretical foundation of nursing, 2 op KFG11B002 (study unit)

Lecturers Simo Ranta, MSc (Health Science)

Objectives

Students will be introduced to the more common theoretical foundations and concepts of health promotion and nursing. Upon completion of the course, students will be aware of the goals of the nursing relationship with patients and the theory associated with it to develop their personal skills in supporting patients and interacting with them. Students will also reflect deeply on the relationship of individuals with their environment from the point of view of health and well–being, and have a deep understanding of the philosophical foundations of nursing and know how to apply them in geriatric care.

Content

- Development of nursing as a historical process
- Philosophical, ethical and scientific foundations of nursing
- Concepts of human nature, concepts and principles
- Health culture and health promotion
- Pender's Health Promotion Model and Roper-Logan-Tierney's Nursing Model
- Professional qualifications, roles and identity in nursing
- Legislation pertaining to patients' status and rights
- Experiencing illness and adaptating to illness
- Aims and cornerstones of a helping relationship, treatment scheme and documentation
- Therapeutic environment and care community
- Therapeutic communication

Literature / Study Material

- Hopia H. & Koponen L. Hoitotyön kirjaaminen. Hoitotyön vuosikirja 2007.
- Sarvimäki A. & Stenbock-Hult B. 1996. Hoito, huolenpito ja opetus (applicable parts)
- Sundeen S. et al. 1998. Nurse-Client Interaction. 6 ed. (chapters 5-7)
- Finnish Government. Act on the Status and Rights of Patients.
- Vile M., Leppämäki P., and Ekström L. 2002. Vuorovaikutuksellinen tukeminen sosiaali-ja-terveysalalla. WSOY. (applicable parts)
- Lecture material and other material distributed by the teacher

Learning Methods

Lectures, group work, individual assignments, co-operative learning

Assessment

- Active participation
- Approved assignments
- Examination

Prerequisites Analysis of Concepts in the Social Welfare and Health Care Field

Theoretical foundation of the work in the social field, 2 op KFG11B003 (study unit)

Lecturers

Anna-Kaarina Koivula, MSSc

Objectives

Upon completion of the course, students will understand the knowledge base in the field of social work and how it is derived from multiple disciplines and sources of knowledge. They will become aware of the relationship between the individual and society/community as a frame of reference in their work. Students will explore social work as a discipline, as professional practice and as a social movement. They will study the historical development of social work in Finland and see how it is related to the emergence of the welfare state. They will become aware of the role of interpretation in social problems and in the client/social worker relationship and comprehend the reflective nature of social work. They will be introduced to the ethical principles, values and conceptions of human nature in social work, and start constructing their personal value foundation for their future work. The students will learn to analyse and use concepts of social work and become aware of the foundation of the work.

Content

- Concept of social work and its goals
- Methods of working and employees
- Ethical principles and issues
- Purposeful work processes
- Client-oriented work
- Theoretical models for social work: psychosocial, system theory, solution-based theories
- Expertise in social work

Literature / Study Material

- Raunio K. 2004. Olennainen sosiaalityössä..
- Seppänen M. 2006. Gerontologinen sosiaalityö.
- Jaakkola J. et al. 1994. Armeliaisuus, yhteisöapu, sosiaaliturva. (pp. 261-339)

• Articles distributed by the lecturer

Learning Methods

- Lectures
- Analyses of case studies in groups
- Drama
- Journal
- Exam

Assessment

- Active participation in lessons
- Journal
- Approved exam

Prerequisites Analysis of Concepts in Social Welfare and Health Care

Integrating seminar: nursing and social field work, 2 op KFG11B004 (study unit)

Lecturers

- Anna–Kaarina Koivula, MSSc
- Simo Ranta, MSc (Nursing)

Objectives

Students will analyse and seek links between the central determinants and elements of nursing and work in the social field. Their seminar work will indicate they have begun to construct a foundation of values, theory and practice for elderly care.

Content

Goals, client perspectives, methods of support, ethical principles, supporting relationships, employee roles and requirements of extertise in health care and social work

Literature / Study Material

Material required for the courses Theoretical Foundations of Health Care and Theoretical Foundations of Social Work

Learning Methods

Independent assignment, active participation in seminars

Assessment

Successful completion of the independent assignment and active participation in seminars

Prerequisites

- Theoretical Foundations of Health Care
- Theoretical Foundations of Social Work

Practical training 1: Well-being of the old individual and of the community in nursing home, 6 op KFG11BE005 (study unit)

Lecturers

- Anna-Kaarina Koivula, MSSc
- Elina Hietaniemi, MSc (Health Science)

Objectives

Students will work in nursing homes to gather and analyse information pertaining to the well-being of the individuals and the community and of the factors related to the experience of health and illness. During the course, students will becoe familiar with the expertise involved in caring for the elderly whereby they will form an understanding of the the qualifications and expertise needed in elderly care. They will also be participants in the promotion of health and well-being of the work community.

- Supporting the well-being and ability to function of elderly people in a nursing home
- Reflecting upon one's experiences in the nursing home: relationship between the individual and community in the nursing home and the experiences of people when interacting with others, the expertise needed in nursing homes
- Interviews
- Evaluation of one's learning in relation to the theory learned

Learning Methods

- Practical training in a nursing home
- Community diagnosis assignment
- Active participation in seminars

Assessment

- Approved practical training in a nursing home
- Community diagnosis assignment
- Active participation in seminars

Finnish society and social and health services, 10 op KFG11B2 (study entity)

Objectives: Students will gain an overview of the historical development of the Finnish society and understand how the social and health problems of Finns are realted to societal development and the activities of individuals and communities. They will acquire profound knowledge of the problems and challenges in the health–care and social welfare sector, health–care and social welfare policies and their information systems, aims and means, with special emphasis on legislation. The students will also gain insight into public, community and private social welfare and health–care delivery systems and of their aims and current challenges.

Finnish society and social policy, 3 op KFG11B006 (study unit)

Lecturers Kari Jokiranta, MSSc

Objectives

Students will be introduced to the historical development of the Finnish society and social policy and understand the links between social change and the everyday life of individuals. They will become familiar with the foundations of social welfare policies and their underlying values and models and actions for implementing them. Students will understand the role of social welfare policy as a warrantor of social security and well-being and as a part of societal decision-making. Students will have command of the more crucial principles associated with social welfare policies and their own rights, as well as of the administrative structure of social welfare.

Content

- Basic rights of citizens and public administration
- Phases in the development of the Finnish society
- Development of social welfare policy
- Concept of social welfare policy and its underlying values
- Models for implementing social welfare policy
- Social security in Finland
- Administration, guidance and financing of social welfare policy in Finland
- Principles in social welfare legislation

Literature / Study Material

- Karisto A. & al. 1998: Matkalla nykyaikaan
- Lehto J. & al. 2006. Sosiaali- ja terveydenhuolto
- Tuori K. 2004. Sosiaalioikeus. WSLT. (appl.parts)

Learning Methods

Lectures, group discussions, independent assignment and exam

Assessment

Active participation in lessons, approved exdam and independent assignment

Morbidity and health policy in Finland, 3 op KFG11B007 (study unit)

Lecturers

Aila Vallejo Medina, lehtori, MSc (Nursing)

Objectives

Students will acquire basic knowledge of the health and illnesses of Finns, problems and challenges with health–care policies, and they will understand the prevention and rehabilitation activities needed for health problems in Finland. Students will be familiar with the methods for measuring and making statistics of the population's health/illness, and they will practise reading statistics and using various online documents associated with health and health–care policies. Students will have command of the central concepts associated with epidemiology. They will be aware of the main areas of strategy programmes, action programmes and procedures associated with health–care policies and know how to integrate them in their work with the elderly. Students will also be familiar with health–care policy legislation and the structure and functions of the health–care services system.

Content

- Basic epidemiological concepts
- Measuring health and statistics in Finland, registers and publications
- Health problems related to health behaviour and lifestyle
- Hereditary diseases, new and old
- Illness in Finland in the light of various statistics
- Health-care problems related to the environment and community
- Global health-care problems
- Health-care policies: HFA-21, KASTE, and the government's health promotion policy
- Health–care legislation

Literature / Study Material

- Ministry of Social Affairs and Health. 2008. Sosiaali ja terveydenhuollon kansallinen kehittämisohjelma
- Ministry of Social Affairs and Health. 2008. KASTE prgramme 2008-2011
- Government's health promotion policy
- WHO. Health for All 21
- E-material associated with measuring health
- Other material distributed by the teacher

Learning Methods

- Lectures
- Independent information acquisition about various issues in health, illness, statistics on health-care services
- Pair work
- Group work

Assessment Active participation, pair work, examination

Laws and decrees regulating elderly policy, 2 op KFG11B039 (study unit)

Lecturers Anna–Kaarina Koivula, MSSc

Objectives

Upon completion of the course, students will have command of the central contents of elderly policy legislation and understand how it affects the promotion of the welfare of elderly people. Students will become familiar with social welfare legislation, the underlying principles and their practical significance. They will learn to apply legislation in case studies and to solve common problems in applying legislation. Students will also gain insight into the nature of elderly care built on the foundation of legislation and of the qualifications required from them.

- Municipal services for elderly citizens
- Service fees
- Private social services
- Pensions
- Services for the disabled
- Legislation on guardianship

- Inheritance
- Intoxicant abuse work

Literature / Study Material

- Mäki-Petäjä-Leinonen A. 2003. Dementoituvan henkilön oikeudellinen asema.
- Narikka J. 2005: Sosiaali- ja terveyspalvelujen lainsäädäntö käytännössä.

Learning Methods Lectures, online learning

Assessment

Active participation in the online course and approved written assignments

Practical training 2: The social and health service delivery system, 2 op KFG11BE008 (study unit)

Lecturers

- Anna-Kaarina Koivula, MSSc
- Elina Hietaniemi, MSc (Health Science)

Objectives

Students will familiarize themselves with one municipality, it's social and health service needs. Upon completion of the course, students will have command of the various ways municipal social and health–care services are organised. They will be aware of the current challenges in the field and know how to compare various service solutions from various points of view.

Content

- Municipal residents and the structure of livelihood as the basis for carrying out social and health-care services
- Service needs of municipal residents
- Goals and strategies in the social welfare and health-care sector, strategy documents and their relationship with goals on the national level
- Structure and services of the social welfare and health-care service system
- Structure of the staff in the social welfare and health-care sector
- Needs for development of activities

Research and development: 2 op

Literature / Study Material

Information gathered by the students, which pertains to the goals and various organisational models in the social welfare and health-care service system.

Learning Methods

A report, completed either independently or in pairs, and seminar pertaining to the social welfare and health-care service system.

Assessment

- Approved report
- Active participation in the seminar
- Numerical grading

Gerontological studies, 21 op KFG11B3 (study entity)

Objectives: Students will understand gerontology as a multi–disciplinary field, which utilises various perspectives and approaches, and become familiar with the diverse amount of knowledge produced by these perspectives and approaches concerning the elderly and becoming old. Studies in gerontology provide a basis for theories of aging, understanding old age, changes in the ability to function, and as a societal phenomenon.

Gerontological theories, 2 op KFG11B009 (study unit)

Lecturers Sirkka–Liisa Palomäki, PhD

Objectives

Students will learn to see how multiple viewpoints and research methods are applied in gerontology. They will be introduced to various sectors of gerontology and to the knowledge and research methods produced by these sectors. Students will also examine theories of ageing and analyse their significance from the viewpoint of the elderly, the community, the elderly care professionals and society. Upon completion of the course, students will have command of the central concepts related to gerontological theories and models. They will have knowledge of the approaches to gerontological research, understand aging as multidimensional process of adaptation and development, and analyse aging on the level of the individual, community, culture and society by way of various theories.

Content

- Theories and models of gerontology and aging
- Research perspectives and challenges in gerontology
- Physical, psychological and social aging
- Aging as a phase in life and development, adaptation
- Cultural and societal aspects of aging

Research and development: 2 cr

Literature / Study Material

- Heikkinen E. & Rantanen T. (eds.). 2007 Gerontologia (applicable parts).
- Kuusinen J. & Paloniemi S. 2002. Kasvatusgerontologian teoriaa ja käytäntöä, In Heikkinen E. & Marin M. Vanhuuden voimavarat
- Articals from Gerontologia magazine

Learning Methods

Lectures and co-operative learning

Assessment Active participation, examination

Changes brought on by aging and elderly people's functional capacity, 4 op KFG11B010 (study unit)

Lecturers

- Aila Vallejo Medina, MSc (Nursing)
- Pia Haapala, MSc (Nursing)

Objectives

Students will be familiar with the anatomic, biological, psychological and social processes involved in aging. They will acquire basic knowledge of how to measure an elderly person's ability to function and how to define the holistic well-being of an elderly person. They will also be competent in promoting the health, well-being and ability to function of elderly people.

Content

- Changes brought on by ageing: functional and anatomical
- Multi-dimensional nature and assessment of functional capacity: metres and how to use them
- Individual ageing
- Factors that promote and prohibit functional capacity
- Promotion of self-esteem, life management, welfare, health and functional capacity
- Demonstrations and exercises for measuring an elderly person's ability to function

Literature / Study Material

- Heikkinen E. & Rantanen T. (eds.). Gerontologia. (appl. parts)
- Lyyra T–M., Pikkarainen A., Tiikkainen P. (eds.). 2007. Vanheneminen ja terveys.
- WHO. 2004. ICF- Toimintakyvyn, toimintarajoitteiden ja terveyden kansainvälinen luokitus. (appl. parts)
- Lecture material, current reports and articles

Learning Methods

Lectures, demonstrations, independent/pair assignments, independent study

Assessment

Active participation in lessons, approved assignments and examination

Languages of Instruction Finnish

Experienced old age, 3 op KFG11B011 (study unit)

Lecturers

Aila Vallejo Medina, MSc (Nursing)

Objectives

Through the study of research and fiction, students will become familiar with the types of experiences elderly people living in different circumstances have. They will understand the significance of this literature to the development of their professional expertise and emphathy. Student will consider elderly people as individuals and take their individual needs into consideration when obtaining services for them.

Content

- The experience of aging and old age in research and fiction
- Theory of gerotranscendence in understanding the experience of old age
- Lifespan and reminiscing about it
- Experiencing old age in different environments, in the country and in the city
- Relationship of the elderly with the material world
- Roles of an elderly person, hobbies, generation-specific experiences
- Experiences of the elderly pertaining to the home, services and institutional care

Research and development: 2 cr

Literature / Study Material

- Andersson S. 2007. Kahdestaan kotona- Tutkimus vanhoista pariskunnista. Stakes.
- Hervonen A. 2001. Vuosisadan vartijat, Ikääntymisen maailmanmestarit kertovat. Tammi (pp. 97-136)
- Tornstam L. 2005. Gerotrancendence– Developmental Theory of Positive Aging. Springer Publishing Company (chapters 3, 5, and 6)
- Vaininen M. et al. 1999. Rakkaat ja tarpeelliset tavarat
- Studies and articles about the experiences of aging
- Articles from the Gerontologia magazine
- Various sources of fiction
- Video programmes

Learning Methods

Lectures, discussions, groupwork and literary analysis

Assessment

- Active participation in lectures and groupwork
- Independent assignment: literary analysis based on the theoretical studies of experiential aging
- Examination

Aging and society and elderly people's social problem situations, 3 op KFG11B008 (study unit)

Lecturers

Anna-Kaarina Koivula, MSSc

Objectives

Students will learn to analyse demographic, historical, cultural, economic and public health factors, which affect the position and welfare of elderly citizens. They will become aware of the historical development and the various sectors of elderly policy in Finland. Students will also learn to detect and analyse social problems and understand their interpretative nature. They will learn to analyze and critically discuss the conceptions disseminated by the media, and learn to seek information independently. They will also learn to identify and analyse historical, cultural and social factors, which lead to the social exclusion of elderly policy from the perspectives of increased welfare, prevention of social exclusion and identification and promotion of the clients' resources. The students will become aware of the development needs and decision–making in elderly policy.

Content

• Status of elderly people in society and the underlying factors

ops.seamk.fi - Study Guide - Seinäjoki University of Applied Sciences

- Concept, implementation and development of elderly care policy in Finland and internationally
- Global, national and local elderly care policies and programmes
- Social problems of the elderly from the point of view of the individual, community and society
- Role of councils in elderly policy
- Role of media in defining social problems of the elderly

Literature / Study Material

- Suomi A. & Hakonen S. (eds.). 2008. Kuluerästä voimavaraksi.
- Seppänen M., Karisto A. & Kröger T. 2007. Vanhuus ja sosiaalityö.
- Kankare H. & Lintula H. (eds.). 2005. Vanhuksen äänen kuuleminen.
- Helander V. 2004. Seniorikansalainen voimavarana: havaintoja ja pohdintoja ikäpolitiikan suuntaamiseksi.
- Current programmes for strategies and procedures in elderly care
- Articles and other material distributed by the teacher

Learning Methods

Lectures, group work, independent assignment, examination

Assessment

Active participation in lessons, group work, independent assignment, examination

Practical training 3: Analysis of the functional capacity and living conditions of home–living, 2 op KFG11B013 (study unit)

Lecturers

- Anna–Kaarina Koivula, MSSc
- Elina Hietaniemi, MSc (Health Science)

Objectives

The students will learn to be observe, analyze and define the welfare, functional capacity, health, life management and living conditions of elderly people. They will interview and observe clients in their own environments, explore individual experiences of old age and analyze the related factors. The students will increase their skills in interviewing and interacting with elderly people, as well as their ability to apply their knowledge to place in their profession.

Content

- Interviews with elderly people living at home
- Observation, assessment and testing of the functional capacity of elderly people
- Assessment of the living conditions and environments of elederly people and the impact on their functional capacity
- Personal experiences of old age
- Supporting the welfare of elderly people

Learning Methods

- Introductory lectures
- Visits with elderly people based on relaxing-visiting and outreach ideologies
- Interviews concerning the welfare, health and living conditions of various elderly people
- Testing functional capacity
- Reflection on one's learning experiences

Assessment

- Approved practical training and evaluation report of it
- Reflection
- Post-seminar

Practical training 4: Promotion of elderly people's functional capacity in sheltered housing, 7 op KFG11BE014 (study unit)

Lecturers

- Elina Hietaniemi, MSc (Health Science)
- Anna-Kaarina Koivula, MSSc

Objectives

Students will learn to promote the health and functional capacity of elderly people in assisted living homes and nursing homes. They will practise ways to help elderly people utilise their memory skills and use music therapy and other creative methods with groups of elderly people. Students will apply basic gerontological knowledge to assess and promote the functional capacity of the aging. They will learn to supervise group activities and to apply various methods to promote the clients' well–being (e.g. reminiscence, physical exercise, music, arts and crafts, literature, painting). They will also reflect on their personal development and challenges for development.

Content

- Assisted living and nursing homes as a part of society's service system for the elderly
- Individual ageing as a subjective experience, life circle, needs for services and how to meet them
- Participation in the service processes of an assisted living or nursing home
- Supervision of activities for elderly people

Learning Methods

- · Practical training and assignments associated with it
- Supervision of groups of elderly people

Assessment

- Approved practical training and assignments
- Supervision of groups
- Numerical grading

Prerequisites Successfully completed courses between KGF11A3 and KFG11B012

Elderly research, 10 op KFG11B4 (study entity)

Objectives: Students will explore the concept of scientific thinking in elderly care. They will understand the significance of practical knowledge in development based on research. Students will be competent in carrying out research and development processes, in choosing appropriate research methods and in understanding ethical issues in research. They will also be competent in reporting about their study and apply their findings to elderly care. Students will have command of the analysis, evaluation and utilisation of scientific information in elderly care.

Introduction to scientific thinking, 2 op KFG11B005 (study unit)

Lecturers Kari Jokiranta, MSSc

Objectives

Students will be aware of the philosophical foundations of scientific knowledge and its areas of application. They will be competent in structuring their own view of the world and their activities.

Content

- Conceots and fundamental issues in philosophical thinking
- Philosopical foundations of the concept of the human being
- Knowledge and understanding
- Activity, values, and ethical reflection in one's activities
- Justice

Research and development: 2 cr

Literature / Study Material

- Airaksinen T. 1994. Johdatus filosofiaan.
- Sajama S. 1995. Arkipäivän filosofiaa.

Learning Methods Lectures, discussions and groupwork

Assessment Active participation in lectures, exam

Quantitative research methods, 2 op KFG11B016 (study unit)

Lecturers

Hilkka Latva–Somppi, MA

Objectives

Students will understand the foundations and processed of quantitative research, be familiar with the more common research methods and their areas of application, and have command of the SPSS statistics programme for analysing their research data. Upon completion of the course, students will be able to select appropriate research methods for a given study and apply various methods in their own thesis work. They will understand how to illustrate and interpret data using charts, parametres and graphics in the SPSS programme.

Content

- Central features and concepts of quantitative research
- Planning what tools to use to gather data
- Measuring variables
- Sampling
- Presentation and analysis of research data with the SPSS statistics programme (frequency charts, correlations, parameters and graphic presentations)

Research and development: 2 cr

Literature / Study Material

- Ernvall-Ernvall-Kaukkila. 2002. Tilastollisia menetelmiä sosiaali- ja terveysalalle.
- Heikkilä T. 2002. Tilastollinen tutkimus.
- Online material

Learning Methods Lectures, online learning and assignments

Assessment

- Active participation in lectures
- Independent assignments

Qualitative research methods, 2 op KFG11B015 (study unit)

Lecturers Sirkka–Liisa Palomäki, PhD

Objectives

Opiskelija perehtyy laadullisen tutkimuksen luonteeseen ja merkitykseen. Hän osaa toteuttaa laadullisen tutkimusprosessin menetelmällisesti ja eettisesti perustellen. Upon completion of the course, students will understand the foundations of qualitative research, have command of the processes involved in qualitative research, and be competent in evaluating and selecting appropriate material to carry out a study and in utilising basic qualitative research methods. They will understand the ethical issues involved in doing research with the elderly, and be able to evaluate and apply their acquired knowledge in their work with the elderly.

Content

- Foundations of qualitative research
- Processes involved in qualitative research
- Common research methods
- · Various ways to gather data and analyse it
- Reporting results
- Ethical research and reliability
- Application and evaluation of qualitative research in elderly care

Research and development: 2 cr

Literature / Study Material Vilkka, H. 2005. Tutki ja kehitä. *Learning Methods* Lectures and assignments

Assessment

- Active participation in lectures
- Exam
- Completion of assignments

Action research, 2 op KFG11B017 (study unit)

Lecturers Sirkka–Liisa Palomäki, PhD

Objectives

Students will learn what action research involves in approaching the phenomenon to be studied/developed. They will be able to apply action research in their final theses or development projects. Students will understand the potential in bridging theory and practice in the development of elderly care and work communities; they will learn to define research problems, to engage themselves in an interactive research and development process, the analyze the results and to report on the research process and development proposals.

Content

- Idea behind action research
- Defining problems associated with development/development task
- Process of action research
- Various structures, methods and data of action research
- Conclusions, evaluation, reporting
- Action research in work with the elderly and in developing work communities

Research and development: 2 cr

Literature / Study Material

- Heikkinen H., Rovio E. & Syrjälä L. 2006. Toiminnasta tietoon. Toimintatutkimuksen menetelmät ja lähestymistavat.
- Heikkilä A., Jokinen P. & Nurmela T. 2008. Tutkiva kehittäminen: avaimia tutkimus –ja kehittämishankkeisiin terveysalalla. WSOY.

Learning Methods

Lectures, exercises and independent assignment

Assessment

Active participation in lessons, independent assignment

Analysis and summary of elderly research, 2 op KFG11B018 (study unit)

Lecturers

Principle lecturer Sirkka-Liisa Palomäki, PhD

Objectives

Students will study various scientific methods for producing knowledge of old age, aging and elderly care. They will analyse the methods used and evaluate their usefulness in elderly care. Students will understand the importance of research pertaining to the elderly, to identify and analyse the various foundations, methods and processes in research, to report on the essential research contents and to reflect on the application of the knowledge.

Content

- Producing utilising and developing research in elderly care
- Reporting about research analyses and summaries
- Various issues concerning the rpoduction of information
- Various research methods and processes
- Familiarisation with the latest research in elderly care

Research and development: 2 cr

Literature / Study Material Various types of research pertaining to elderly care

Learning Methods Independent study and seminar

Assessment

Written assignment and active participation in seminar

Analysis of the profession and professional growth, 4 op KFG11B5 (study entity)

Objectives: Students will gain awareness of the history of gerontology and the factors that have influenced its development. They will become familiar with the theory of analysing professions in the field of health care and social welfare, and acquire readiness in specifying the activities in gerontology according to the goals, professional qualifications, and development of the profession. Students will also be aware of the various types of qualifications needed in gerontology and consider the phase of development they are in as regards their expertise in working with the elderly. They will become familiar with the various other professions involved in multi–professional elderly care.

Job description and professional qualifications of Bachelors of Elderly Care, 2 op KFG11B019 (study unit)

Lecturers

Elina Hietaniemi, MSc (Health Care Science)

Objectives

Students will learn to apply the concepts and theories studied during the course analysis of the profession and become aware of their future job description and personal development challenges. They will explore the duties and professional qualifications of bachelors of elderly care.

Content

- Central concepts in analysing various professions
- Elements and models of describing professions in the field of social welfare and health care
- Dimensions of expertise
- Process of becoming an expert
- Qualifications concerning professions in the field of social welfare and health care
- Professional qualifications of bachelors of elederly care and their areas of expertise in society

Research and development: 1 cr

Literature / Study Material

- Ruohotie. P. 2004. Ammatillinen asiantuntijuus
- Lecture material (autumn 2004). Seinäjoki Üniversity of Applied Sciences
- Salonen K. 2002. Vanhussosiaalityö ammattina (appendices).
- Ministry of Education. Ammattikorkeakoulusta terveydenhuoltoon
- Isoherranen K. 2005. Moniammatillinen yhteistyö
- Vanhustyön koulutusohjelman kompetenssikuvaukset. 2007.
- Other material distributed by the lecturer

Learning Methods

- Lectures
- Discussions
- Analyses of the job descriptions of a person working in geriatric care
- Seminar

Assessment

- Active participation in lectures and seminars
- Approved analysis assignment

Analysis of the student's personal professional qualifications, 2 op KFG11B021 (study unit)

Lecturers Elina Hietaniemi, MSc (Health Science)

Objectives

Students will analyse current and future challenges in elderly care, their future job description, qualifications, personal growth and development challenges. They will become aware of their own strengths and potential for employment.

Content

- Introductory lecture
- Reflection on current and future challenges in elderly care
- Qualifications in relation to the demands set by the field of gerontology
- Analysis of the profession

Literature / Study Material Current literature

Learning Methods Independent assignment: analysis of the profession, seminar

Assessment

Independent assignment: analysis of the profession, active participation in seminar

Ethics in elderly care, 4 op KFG11B6 (study entity)

Objectives: Students will be aware of the ethical challenges involved in elderly care. They will reflect on these challenges and be competent in finding solutions through theories on ethics and various other perspectives. Students will also consider their own ethical issues, on both the professional and personal levels, and write an academic essay related to the topic.

Ethics of elderly care and of Bachelors of Elderly Care, 2 op KFG11B022 (study unit)

Lecturers Sirkka–Liisa Palomäki, PhD

Objectives

Students will be familiar with the ethical nature of elderly care, be conscious of ethical problems and analyse them together with others, in a professional, diverse way. They will be aware of their responsibilities in the promotion of elderly care and the work community, as well as reflect on their own values. Upon completion of the course, students will understand their ethical responsibility in promoting the rights of elderly people, in analysing ethical problems and finding solutions for them by utilising various theories on ethics, the norms of professional ethics, and various other perpsectives.

Content

- Concepts of old age and values as a basis for reflection
- Concepts, theories and morality pertaining to ethics in elderly care
- Legislation, guidelines and principles in professional ethics
- Morality of the work community
- One's own ethical sensitivity and taking responsibility
- Moral conflicts in elderly care and reflecting upon them

Literature / Study Material

- Juujärvi S et al. 2007. Eettinen herkkyys ammatillisessa toiminassa.
- Pietarinen J. 1994. Oikeus itsemääräämiseen. (appl. parts).
- Articles from Seppänen M., Karisto A. & Kröger T. 2007. Vanhuus ja sosiaalityö.
- Gerontologia 3/2007. Ikäetiikan teemanumero.
- Other current articles

Learning Methods

Lectures and case studies as a basis for reflection and discussion

Assessment

Active participation in lessons, examination

Essay and seminar, 2 op KFG11B023 (study unit)

Lecturers

Sirkka-Liisa Palomäki, PhD

Objectives

The students will select a topic and deepen their ethical awareness and reflection by studying relevant literature and writing an essay on a chosen topic pertaining to gerontology. They will practice defining topics, writing academic texts based on literary sources and their own reflection. They will have command of the academic style of essay writing and citation. reflective writing and application of literature. They will exhibit a unique, creative and investigative approach to their writing and act as opponents to their peers.

Content

- In-depth reasoning of ethical issues concerning gerontology
- Academic writing
- Acting as an opponent

Literature / Study Material

- Material for course KFGB11022
- Guidelines for Writing a Thesis at http://intra.seamk.fi/opiskelijat/opinnaytetyo.htm

Learning Methods

Academic essay and seminars

Assessment

- Academic essay
- Active participation in seminars
- Acting as an opponent

Teaching and counselling, 2 op KFG11B024 (study unit)

Lecturers

Elina Hietaniemi, MSc (Health Science)

Objectives

Students will become familiar with the theory of constructive learning. They will possess readiness in guiding and teaching fellow employees as part of the learning and development experience in work and in a work community. Upon completion of the course, students will understand the significance of learning at work as a part of one's development. They will also be familiar with the methods of teaching and guiding adults.

Content

- Theory of constructive learning
- Learning and developing at work and in a work community
- Co-operative and creative methods in adult learning
- Lifelong/continuous learning and development

Literature / Study Material

- Puolimatka T. 2002. Opetuksen teoria. Konstruktivismista realismiin. (appl. parts)
- Repo-Kaarento S.2007. Innostu ryhmästä. Miten ohjata oppivaa yhteisöä.

Learning Methods

- Lectures
- Assignments
- Practical guidance and planning teaching and teaching
- Self–evaluation
- Feedback from the work community

Assessment

• Co-operative learning

- Report concerning teaching and guidance
- Group exam

Supervision of reminiscence, 2 op KFG11B025 (study unit)

Lecturers

Aila Vallejo Medina, lehtori, MSc (Nursing)

Objectives

The students will be introduced to the theoretical background and practical applications of guided reminiscence and become motivated to use it in their work to support and help elderly people. Upon completion of the course, students will identify various approaches to using methods and understand the significance of them. They will have command of various ways to trigger memory and to guide the process. They will know how to guide elderly people in empowered remembering, and in so doing consider the special demands illnesses present in the process.

Content

- Concept of reminiscence and the history of its use and various approaches in work with the elederly
- Constructive and therapeutic nature of memories
- Roles of the counselor
- Activating, supporting and promoting the reminiscence of an elderly person/group
- Methods for triggering reminiscence
- Guiding reminiscence in elderly work
- Demands set by various ways to remember things (people with dementia, depressed elderly people)
- Environments that support and trigger reminiscence
- Relationship of reminiscence to creative activity

Literature / Study Material

- Bonart J.(ed). 1991. Reminiscence reviewed. Open University Press. Buckingham.
- Gibson F. 1991. Reminescence Recall: A Guide to Good Practice. AGE-books. (applicable parts)
- Ihanus J. (ed.). 2002. Koskettavat tarinat. (applicable parts)
- Reinikainen P. 2007. Elämänkaarikirjoitus ja ihmisen vuoden ajat.
- Current articles and material for triggering reminiscence

Learning Methods

- Lectures
- Assignments
- Reminiscence assignment completed during practical training KFG11BE014Active

Assessment

- Active participation in the lectures and assignments
- Report
- Participation in the seminar

Music therapy and creative therapies in elderly care, 3 op KFG11B026 (study unit)

Lecturers

- Eija–Irmeli Lahti, actor/director
- Tiina Kohtamäki, BA
- Specialist in music therapy to be announced

Objectives

The students will understand the theoretical background of creative therapies. They will be familiar with music as a tool and, in their work, they will experience how music can be used to support the health and well-being of elderly people. Students will reflect upon the possibilities of music therapy in work with the elderly through their own experiences with music therapy in the course. They will strengthen their self-expression and artistic abilities and apply it to work with the elderly. Students will learn various types of creative handicrafts to use with the elderly, family care-givers and staff, and understand the significance of artistic resources in bettering interaction with others and the quality of life. Students will be introduced to various materials and how they can be creatively used.

- Foundations and principles of music therapy
- Familiarisation with various working with music therapy
- Applying music therapy to work with the elderly
- The music geriatric care professional and supporting creativity
- Self-expression and finding one's own creativity to use as a tool in elderly care
- Poetry as a sources of strength
- Activities involving self-expression and improvisation
- Experiments with various techniques
- Familiarisation with and production of various handicraft materials

Literature / Study Material

- Andrejev T. & Salomaa V. 2005. Kokemista ja kuvitusta– luovat toiminnalliset menetelmät vanhustyössä. In Noppari E. & Koistinen P. (eds.). 2005. Laatua vanhustyöhön. • Bojner–Horowitz E. & Bojner G. 2007. Mielihyvää musiikista.(appl. parts)
- Levine Madori L. 2006. Therapeutic Thematic Programming for older Adults. (appl. parts)
- Rankanen M., Hentinen M., Mantere M-H. 2007. Taideterapian perusteet. Duodecim.
- Reinikainen P. 2007. Elämänkaarikirjoitus ja ihmisen vuodenajat.(pp. 7–132 and 196–296).

Learning Methods

- Independent study
- Experiential learning and co-operative learning
- Analysis of experiences and assignments in groups

Assessment

- Active participation in lectures and assignments
- Independent study
- Approved journal
- Exam on the above-mentioned literature

Practical training 5: Creative activities in elderly care, 2 op KFG11BE027 (study unit)

Lecturers

- Elina Hietaniemi, MSc (Health Science)
- Aila Vallejo Medina, MSc (Nursing)

Objectives

Students will apply the knowledge and skills learnt during the courses on teaching and counselling and creative therapies to arrange activities for elderly people, family members and elderly care workers.

Content

The students will apply the TTAP method developed by Levine Madori. The contents and implementation of this practical training period partly depend on the needs and interests of the elderly groups and student(s).

Literature / Study Material

Material from courses KGF11B024, KGF11B026, KFG11B25, as well as other relevant material.

Learning Methods

- Planning, implementation and evaluation of group activities
- Report on practical training

Assessment

- Report on practical training
- Feedback from clients
- Clinical supervisor feedback
- Self-evaluation

Prerequisites

Participation in the theoretical studies mentioned above.

Supporting elderly people's functional capacity, 10 op KFG11B8 (study entity)

Objectives: Students will learn to support elderly clients' functional capacity, to meet the basic needs of healthy and ill clients, to promote their health and welfare and to pay special attention to their nutrition.

Meeting the basic needs and supporting the daily activities of the elderly, 3 op KFG11B028 (study unit)

Lecturers

- Kristiina Vaahtera, MSc
- Elina Hietaniemi, MSc (Health Science)

Objectives

Students will learn to assess the basic needs and functional capacity of healthy and ill elderly clients in various situations and environments and to apply methods of nursing to meet the clients' basic needs. Students will gain the knowledge and skills required in the promotion of elderly clients' coping with activities of daily living.

Content

- Identifying and meeting elderly clients' basic needs
- Maintenance of functional capacity
- Central care and nursing methods and asepsis

Literature / Study Material

- Kassara H. et al. 2004. Hoitotyön osaaminen. WSOY.
- Iivanainen A. & Syväoja P. 2008. Hoida ja kirjaa. Tammi (appl. parts)
- Kivelä S–L. 2007. Voimavaroja unesta.
- Vallejo Medina A. et al. 2005. Vanhusten hoito.(pp. 63-78 and 127-147).
- Näyttöön perustuva hoitotyön kirjaaminen.
- Infektioiden torjunta sairaalassa. Latest edition. (appl. parts)
- Lecture material and other material announced by the teacher

Learning Methods Collaborative learning, laboratory work, independent assignment

Assessment

- Written examination (50 %)
- Treatment scheme completed during practical training (50 %)

Elderly people's nutrition and special diets, 2 op KFG11B029 (study unit)

Lecturers Pirkko Tuominen, MSc

Objectives

Students will acquire basic knowledge of the nutrition of elderly people and have command of planning and implementing the diets needed to care for the more common illnesses elderly people may have. Students will undertstand the significance of nutrition in preventing and treating illness in elderly people and be able to evaluate the nutritional and eating disorders in the various living environments and illnesses elderly people may have. Students will become familiar with the evaluation of the nutritional status and undernurishment of elderly people, and the results of that evaluation, and be able to take the necessary steps to rectify the situation.

- Eating habits and nutritional needs of elderly people from the physical, psychological, social and ethical point of view
- Evaluating the nutritional status of elderly people and determining whether or not an elderly person is undernurished
- Nutrition as a part of rehabilitative care, collaboration with various staff groups
- Meal services for the elderly in outpatient care and those in institutions
- Common special diets and current issues in nutrition for the elderly

- Louheranta A. (ed.). 2006. Ravitsemus ja ruokavaliot.
- Association of Clinical and Public Health Nutritionists in Finland. Ikääntyneen ravitsemus ja erityisruokavaliot.
- Guidebook for nursing staff of elderly people
- Other material distributed by the teacher

Learning Methods Lectures, discussions, field trip

Assessment

Active participation in lessons, assignment or examination

Practical training 6: Supporting elderly people's functional capacity at home, 5 op KFG11B030 (study unit)

Lecturers

Anna–Kaarina Koivula, MSSc

Objectives

Students will study multi-professional home-care and the planning, provision and supervision of home services by supporting the daily lives, welfare and functional capacity of the elderly people involved and by learning to supervise home-help personnel.

Content

Students will participate in the planning, implementation and evaluation of home services for elderly people. They will be involved in the creation, evaluation and updating of care and service schemes.

Literature / Study Material

- Heinola R. (ed.). 2007. Asiakaslähtöinen kotihoito.
- Material for the theoretical courses

Learning Methods

- Participation in the provision of home services
- Journal
- Learning contract
- Self–evaluation

Assessment

- Approved practical training
- Journal
- Assignment
- Numerical grading

Nursing sick elderly people, 24 op KFG11B9 (study entity)

Objectives: Students will gain basic qualifications in the prevention of illness, in the planning and implementation of elderly patients' care and nursing and in medical care. They will practice in primary health–care settings and learn to plan, implement and evaluate the services provided for elderly citizens. The students will analyse theoretical nursing models and their applicability in the care and service provision. The students will learn to integrate practical skills with knowledge derived from multiple sources to provide high standard total care, rehabilitation and case management.

Geriatrics, 2 op KFG11B031 (study unit)

Lecturers

- Maria Nuotio, PhD, geriatric specialist
- Heli Ridanpää, BSc (Geriatric Care)

Objectives

Students will study the reasons, background, progress, prevention, treatment and rehabilitation of various diseases and learn to apply their knowledge when planning the comprehensive care of elderly people and when selecting suitable care institutions and counselling the patients' families and voluntary care–givers.

Content Study Descriptions

- Special features of illness and symptoms in the elderly
- Falling and problems with balance
- Pain and pain control
- Acute confusion
- Cardiovascular, pulmonary, gastrointestinal, kidney and urinary diseases
- Osteoporosis, musculoskeletal diseases
- Sensory and neurological disorders
- Mental health problems: depression and paranoia
- Problems with memory and dementing illnesses
- Illnesses and their medical treatment

Literature / Study Material

- Hartikainen S. & Lönnroos, E. 2008. (eds.). Geriatria-arvioinnista kuntoutukseen. Edita.
- Other material distributed by the lecturer(s)

Learning Methods Lectures, independent study

Assessment Active participation, examination

Prerequisites

- Basics of Medicine
- Internal Medicine
- Surgery

Drug care of elderly people and clinical pharmacology, 3 op KFG11B032 (study unit)

Lecturers

- Chemist Tanja Ojanperä
- Kriistiina Vaahtera, MSc (Health Science)

Objectives

Students will become aware of their responsibilities in handling drugs, administering medicines and providing drug guidance. Upon completion of the course, students will understand the basic mechanisms of how drugs work, and they will be familiar with the medical treatment of illnesses of the elderly. Students will also be aware of the special problems in administering drugs to elderly people and of the possible side–effects drugs may have. They will know how to handle drugs correctly and safely through the command of the terminology and mathematical calculations associated with drug administration. Students will also be competent in guiding clients and their family care–givers.

Content

- Basic concepts in pharmacology
- The elderly and drugs
- Absorbtion, distribution, secretion, accumulation, cross-over effects and side effects
- Basic principles in drug treatment
- Drug substance groups and drug treatment for various illnesses of the elderly
- Types of drugs, handling and administering drugs
- Drug mechanisms and interaction
- Calculating dosage
- Special issues in the drug treatment and counselling of elderly people, areas of responsibility in drug treatment
- Unit-specific drug treatment schemes
- Legislation pertaining to drug maintenance and treatment
- Supervision of students' drug treatment expertise and indication of this expertise with the personal drug treatment card

Literature / Study Material

- Veräjänkorva O. et al. 2006. Lääkehoito hoitotyössä.
- Laine K. 2005. Lääkkeiden yhteisvaikutukset. (appl. parts).
- Kivelä S-L. 2003. Vanhuksen lääkehoito. (appl. parts).
- Lääkelaki 395/1987.
- Lääkeasetus, sections 18 and 29
- Lääkintöhallituksen yleiskirje 1929/1987

- Ministry of Social Affairs and Health. 2007. Turvallinen lääkehoito
- Infektioiden torjunta sairaalassa. Latest edition. (appl. parts).
- Geronomien Lääkehoitopassi. 2007.
- Other lecture material
- Drug treatment card

Learning Methods

Co-operative lectures, independent and group assignments, drug dosage calculations

Assessment

- Active participation in lessons
- Exams on the theory of pharmacology and drug treatment for elderly people
- Precisely calculated drug dosages: to be completed before practical training in health-care centres and home nursing

Nursing sick elderly people, 3 op KFG11B033 (study unit)

Lecturers

- Aila Vallejo Medina, MSc (Nursing)
- Simo Ranta, MSc (Nursing)

Objectives

Upon completion of the course, students will understand the prevention of various illnesses and disorders of the elderly, and they will be aware of the various programs involved in prevention. They will be competent in identifying various symptoms of illness and their relationship to various illnesses. They will also be competent in helping elderly people cope with long–term ilnesses, and they will be aware of the more common treatments for illnesses. Students will also know how to plan and implement treatment and rehabilitation for an elderly person with an illness, especially for elderly people living at home or assisted living facilities.

Content

- Special features of illnesses with elderly people and the importance of surveillance in diagnosing and treating their illnesses
- Common symptoms of illness of elderly people (high and low temperature, dizziness, nausea, diarrhea, constipation, shortness of breath, lack of sleep, confusion, partial eyesight, and partial hearing), connection of the symptoms to various illnesses, first-aid and treatment of the symptoms
- Adaptation of an elderly person to a long-term illness
- Model of holistic treatment and rehabilitation
- Examples of treatment and rehabilitation processes for the more important illnesses of elderly peopole (depression and other mental health problems, diabetes, heart problems, frailty, chronic obstructive pulmonary disease, osteoporosis, urinary incontinence, Parkinson's disease, foot ulcers, colon cancer)
- Problems with medical treatment for the elderly

Literature / Study Material

- Kivelä S-L. 2007. Voimavaroja unesta.
- Tideiksaar R. 2005. Vanhusten kaatumiset-Opas hoidosta vastaaville.
- Vallejo Medina, A. et al. 2006. Vanhustenhoito.
- Journal of Gerontological Nursing articles and other material provided by the lecturer

Learning Methods

Lectures, independent study, pair work, exercises in planning treatment for an ill elderly person

Assessment Active participation, examination

Nursing theory and interventions in elderly care, 2 op KFG11B034 (study unit)

Lecturers Aila Vallejo Medina, MSc (Nursing)

Objectives

During the course, students will gain insight into the analysis of various theories and models associated with nursing. They will deepen their knowledge of the theoretical foundations of nursing and practise integrating this theory into the planning and implementation of comprehensive elderly care.

Content

- Introduction to the analysis of models
- Models and theories in health science, their features and areas of emphasis
- The human being, health, illness and the client as featured in nursing models
- Areas of emphasis in the individual's responsibility in nursing
- Analysis of various models

Literature / Study Material

- Marriner-Tomey A. (ed.). Hoitotyön teoreetikot ja heidän työnsä.
- Analyses and summaries of nursing models as pair work

Learning Methods

- Analysis of nursing models in pairs
- Seminars

Assessment

- Approved analyses of models
- Active participation in seminars
- Exam

Terminal care of elderly people, 2 op KFG11B035 (study unit)

Lecturers

Aila Vallejo Medina, MSc (Nursing)

Objectives

Using theoretical information, students will analyse the process of dying and the adaptation of family and friends to the situation. They will learn to plan, arrange and develop the care of dying elderly people. Students will be motivated to follow the latest research and practical development work associated with the process of dying. They will be competent in extensively developing this area of their profession.

Content

- Historical development of palliative care
- Process of dying in the light of theoretical models
- Support during the dying process
- Acute basic needs in palliative care, special features, principles and methods of care
- Relief for special problems during care
- Reminiscing and creative activities in the palliative care of elderly people
- Supporting family and friends
- Theories of grieving and grieving after palliative care
- Role as a nurse and developer in palliative care

Research and development: 1 cr

Literature / Study Material

- Attila M. 1998. Omaisten kokemuksia vanhustensairaaloissa kuolleitten omaistensa hoidosta ja kuolemasta.
- Molander G. 1999. Askel lyhenee maa kutsuu– Yli 80-vuotiaiden kuolema eletyn elämän valossa (pp. 82–231)
- Molander G. 1999. Työnä kuolemaan hoitaminen.
- Poijula S. 2002. Surutyö. (appl.parts).
- Vainio A. & Hietanen P. 2003. Palliatiivinen hoito (appl.parts).
- Articles and research summaries pertaining to the topic

Learning Methods

Lectures and discussions

Assessment

Active participation in lessons and examination

Practical training 7: Nursing sick elderly people in the ward, 6 op KFG11B036 (study unit)

Lecturers

- Kristiina Vaahtera, MSc
- Elina Hietaniemi, MSc (Health Science)

Objectives

Students will be introduced to the multi-professional care of elderly patients in health-care centres. They will learn to observe the patients' vital functions, to meet their basic needs and to analyze, assess and promote the patients' functional capacity. They will also learn to plan, implement and evaluate the nursing process from a patient-centred and theoretical perspective. Students will apply methods of social work and nursing in the care of elderly patients, and reflect and analyze their learning experiences, the connection between theory and practice as well as their own professional development.

Content

- Observing and meeting the basic needs of elderly patients
- Nursing of elderly patients, supporting functional capacity
- Nursing process
- Presuppositions, objectives, interventions and evaluation in nursing
- Nursing principles and their implementation
- Counselling and guidance of elderly patients
- Multi-professional collaboration in the care of elderly patients
- Terminal care in health–care centres
- Quality of nursing and its components

Learning Methods

- Practical training in the ward of a health-care centre or similar unit
- Assignments
- Journal
- Health-care scheme

Assessment

- Approved practical training in a health-care centre ward or similar unit (evaluation criteria: T, H and K)
- Self-evaluation
- Feedback by the supervisor
- Journal and health-care scheme
- Training graded numerically on these various parts

Prerequisites

Successfully complted courses in calculating drug doses

Practical training 8: Home nursing of elderly people, 6 op KFG11B037 (study unit)

Lecturers

Aila Vallejo Medina, MSc (Nursing)

Objectives

Students will learn to support the health and functional capacity of elderly people and to promote the health, care and rehabilitation of elderly people in a multi–professional manner.

- Health-care ans service scheme in the treatment of an ill elderly person
- Participation in the care and rehabilitation of elderly people receiving home nursing
- Familiarisation with various elderly groups and the special features of their treatment and nursing procedures in a home nursing situation
- Issues that are emphasised in home nursing situations
- House-calls as a work procedure
- Multi-professional work in the treatment of an ill elderly person
- Family care–givers in the field of home nursing
- Issues of quality in home nursing

Literature / Study Material

- Literature required in the KFG11B9 module
- Regulating documents pertaining to home nursing
- Ministry of Social Affairs and Health: Asiakaslähtöinen kotihoito-opas ikääntyneen kotihoidon laatuun

Learning Methods

- Discussions with the clinical supervisor and the teacher
- Learning contract
- Participation on service provision
- Theme-based journal
- Interview with a family care-giver

Assessment

- Approved practical training
- Learning contract
- Self-evaluation
- Feedback from clinical supervisor and teacher
- Theme-based journal
- Report of interview with family care-giver
- Numerical grading

Prerequisites

- KGF11B032: Medical Care of the Elderly and Clinical Pharmacology
- KGF11B033: Caring for an Ill Elderly Person

Supporting elderly people by social work interventions, 14 op KFG11B11 (study entity)

Objectives: Students will learn to identify elderly clients' social problems and become aware of the potential of social work interventions in the promotion of the clients' and their significant others' participation. The students will acquire a keen interest in the application of social work methods in elderly care. They will learn about work with families, various generations and groups, networking and the theoretical and practical applications of methods of empowerment. Students will also learn to select appropriate methods for various practical situations.

Family work and networking in elderly care, 2 op KFG11B040 (study unit)

Lecturers

Koivula Anna-Kaarina, MSSc

Objectives

Upon completion of the course, students will have command of the central concepts and theoretical foundations associated with work with families, and they will identify the impacts aging has on relationships with the spouse and family. Students will be familiar with the challenges associated with family care and know how to analyse situation in a diverse way from the viewpoint of the elderly person and his/her family. Students will also develop their professional readiness to work with families of elderly people, and they will be adept in perceiving practical situations where family care and generation work is needed. Students will understand the concept of generation work and know not to create activities that improve the sense of community between different generations. Students will also understand the concept of networking and the central methods used in networking and be perceptive of situations in which the networks of the elderly can be utilied to promote their well-being.

Content

- Concept of family and the impact of aging on the relationships with one's spouse and family
- Being a grandparent in various environments in the light of research
- Concept of family care, theoretical foundations and methods
- Generation work, as a concept and activity
- Concept of social network, significance of networks and their use in supporting the well-being of the elderly

Literature / Study Material

- Seikkuja J. & Arnkil E. 2005. Dialoginen verkostotyö
- Andersson S. 2007. Kahdestaan kotona
- Juhela P. 2006. Missä on isäsi, kuinka voi äitisi? Sukupolvet ikääntymisen muutoksissa

- Marin M. & Hakonen S. 2003. Seniori- ja vanhustyö arjen kulttuurissa. (appl. parts)
- Nolan M. et al. (eds.). 2001. Working with Older People and Their Families.
- Other material distributed by the lecturer

Learning Methods

- Lectures
- Case studies
- Drama exercises
- Group assigments

Assessment

- Active participation in lectures
- Approved group assignment

Group and community work in elderly care, 2 op KFG11B041 (study unit)

Lecturers

Anna–Kaarina Koivula, MSSc

Objectives

The students will learn the theoretical background of community work and learn to identify challenges and potential in the community work with elderly clients. The students will know what group work involves and learn to analyze the group process. They will learn to plan purposeful group activities for groups of elderly clients or workers.

Content

- Community work with elderly clients
- Social pedagogy in elderly care
- · Basics of groupwork
- Supervision of groups in elderly care

Literature / Study Material

- Kurki, L. 2007. Innostava vanhuus.
- Jauhiainen R. & Eskola M. 1994: Ryhmäilmiö.
- Marin M. & Hakonen S. 2003: Seniori- ja vanhustyö arjen kulttuurissa (appl. parts).
- Pitkälä K. (ed.). 2004. Ikääntyneiden yksinäisyys –ryhmäkuntoutuksen kehittäminen ja koulutus.
- Vanhustyön keskusliitto: Geriatrisen kuntouksen tutkimus– ja kehittämishanke: tutkimusraportti 4
- Marjovuo A., Pitkälä K. and Routasalo P. 2004. Ikääntyneiden yksinäisyys: Senioripysäkin ryhmäterapia psykososiaalisena kuntoutuksena. Geriatrisen kuntoutuksen tutkimus-ja kehittämishanke. Research report 8. Central Union for the Welfare of the Aged.
- Other material provided by the lecturer

Learning Methods

Lectures, assignments, groupwork on literature, independent analysis of group work

Assessment Active participation on lessons, independent assignment and groupwork

Empowering interventions in elderly care, 2 op KFG11B042 (study unit)

Lecturers

Anna–Kaarina Koivula, MSSc

Objectives

Students will explore central ideas and challenges in empowering. They will learn to assess elderly clients' environments and everyday services from the perspective of empowerment and to seek potential for practical applications. The students will become familiar with the elderly of various minority groups and learn to promote their welfare and participation in society and to advance interaction between cultures.

- · Theory foundations of empowerment
- Empowerment in elderly care

• Minority groups in elderly care in Finland

Literature / Study Material

- Seppänen M. et al (eds.). 2007. Vanhuus ja sosiaalityö
- Räsänen J. 2006. Voimaantumisen mahdollistaminen ja sen ratkaisut.
- Thursz D. et al (eds.). 1995. Empowering Older People. An International Approach.

Learning Methods Lectures, co-operative exercises, group work, examination

Assessment

Active participation in lessons, examination

Practical training 9: Helping elderly people in social problem situations, 6 op KFG11BE043 (study unit)

Lecturers

Anna-Kaarina Koivula, MSSc

Objectives

Students will learn to apply social work methods in practical elderly care. They will learn to identify the clients' needs, to select and apply procedures and to recognize the challenges involved in the interventions. Students will also learn to set their own learning objectives and to analyse their professional development during the practical training period.

Content

Practical training in a unit that offers an opportunity to practice family or generation work, networking, group or community work or empowering activities with elderly people. The students will select the methods to be applied.

Literature / Study Material Literature and material for the theoretical courses

Learning Methods Practical training, journal

Assessment

- Approved completion of the practical training
- Learning contract and journal
- Numerical grading

Preventive and rehabilitative elderly care, 10 op KFG11B12 (study entity)

Objectives: Students will learn the central principles and methods associated with preventive and rehabilitative elderly care to promote the patients' functional capacity and welfare and to prevent premature need for services or institutional care. Students will also learn to support the autonomy and independent coping of elderly people living at home. They will acquire the ability to support family care–givers to cope and maintain their functional capacity.

Rehabilitation and physiotherapy of elderly people, 2 op KFG11B044 (study unit)

Lecturers Pia Haapala, MSc

Objectives

Students will learn the basic ideas behind client-centred rehabilitation and learn to collaborate with other professionals and families of elderly clients. They will be familiar with the rehabilitation service system and its principles. They will learn to supervise elderly-care staff in the use of rehabilitation services, and they will gain insight into the potential of physiotherapy in supporting functional capacity and in rehabilitating elderly clients with illnesses. Students will also be competent in supervising elderly clients in the use of physiotherapy services and adaptive aids.

- Philosophy of rehabilitation and central concepts
- Rehabilitation legislation
- Elderly clients in rehabilitation
- Rehabilitation needs and potential in elderly care

- Elderly people, exercise and balance
- Promotion of functional capacity by means of physiotherapy
- Adaptive aids in the promotion of functional capacity and related counselling
- Physiotherapy and occupational therapy for common diseases

Literature / Study Material

- Härkäpää K. 2005. Kuntoutuksen perusteet.
 Pitkälä K., Savikko N., Routasalo P. 2006. Kuntoutumisen solmukohtia–Geriatrisen kuntoutuksen tutkimus–ja kehittämishanke. Central Union for the Welfare of the Aged. (appl. parts).
- Suominen M. et al. 2001. Ikääntyvien liikunta, terveys ja toimintakyky. (appl. parts).
- Tideiksaar R. 2005. Vanhusten kaatumiset. Opas hoidosta vastaaville.
- Pitkälä K. (ed.). 2004. Ryhmäkuntoutuksen kehittäminen ja koulutus . (appl. parts).

Learning Methods

Lectures, discussion, demonstrations, practical laboratory studies

Assessment Active participation in lessons, examination

Supporting family care–giving, 2 op KFG11B045 (study unit)

Lecturers

Elina Hietaniemi, MSc (Health Science)

Objectives

Students will study family care-giving from the perspectives of families/significant others and services. They will familiarise themselves extensively with research, reports and guidelines on family care-giving. They will also learn to organize, support and supervise family care-giving.

Content

- Experience of being a family care-giver/other care-giver in the light of research
- Methods and procedures for supprting the family care-giver/other care-giver
- Challenges in the development of family care-giver/other care-giver work

Research and development: 2 cr

Literature / Study Material

- Saarenheimo M. & Pietilä M. 2005. Omaishoidon tukeminen Suomessa
- Geriatrisen kuntouksen tutkimus- ja kehittämishanke (appl. parts)
- Saarenheimo M. 2005. Kaksin kotona. läkkäiden omaishoitoperheiden arjen ulottuvuuksia (appl. parts)
- Voutilainen et al. 2007. Omaishoidon tuki sosiaalipalveluna (appl. parts)
- Research chosen by the lecturer to be summarised

Learning Methods

Lectures, collaborative learning, summaries on research

Assessment Summaries and examination

Practical training 10: Rehabilitation supervision of groups of elderly clients/family care-givers, 3 op KFG11BE046 (study unit)

Lecturers

- Pia Haapala, MSc (Nursing)
- Elina Hietaniemi, MSc (Health Science)

Objectives

Students will learn to apply rehabilitative and creative methods to support the well-being, functional capacity and health of various groups of elderly people or family care-givers. They will possess the readiness needed in planning, implementing and evaluating the rehabilitating process of the elderly and family care-giver groups.

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- Rehabilitating process of the elderly and family care-giver groups: planning, implementation and evaluation
- Research and development: 3 cr

Literature / Study Material

Literature assigned in the theoretical studies for the module

Learning Methods

Co-operative learning project: planning, implementation and evaluation

Assessment

- Active participation on the various phases of the process
- Self– and peer evaluation during the process and after
- Numerical grade given by the supervising teacher

Practical training 11: Preventive house calls and the case management process, 3 op KFG11BE047 (study unit)

Lecturers Anna–Kaarina Koivula, MSSc

Objectives

Students will study preventive house–calls and case management and understand their importance for decision–making in elderly policy–making and for supporting elderly people living at home. Students will learn how preventive house–calls can improve and maintain the functional capacity, health and welfare of elderly people. Together with elderly people, the students will learn to assess physical, mental, cognitive and social function and living conditions. They will see how important it is to inform elderly people of the services available. They will learn what individual case management involves and study its objectives and the case management process in the Finnish service provision system. Students will become aware of how complex a process case management may be and how it calls for responsible action. They will learn to identify case management needs of elderly people.

Content

- Concept of and idea behind preventive house-calls in elderly care
- Concept and process of individual case management
- Interview and assessment forms for hous-calls
- Evaluating the usefulness of the method

Literature / Study Material

Häkkinen H. & Holma T. 2004: Ehkäisevä kotikäynti -tuki vanhuksen kotona asumiselle

Learning Methods

- Introductory lecture
- Preventive house calls
- Case reports
- Seminar

Assessment

- Case report
- Active participation in seminar
- Journal

Care and rehabilitation of dementing elderly people, 9 op KFG11B13 (study entity)

Students will extensively explore the experiential world of elderly people suffering from dementia and study the challenges in their care and rehabilitation. They will be introduced to the current service delivery system, gain experience in dementia work and become aware of its development needs.

Care of dementing elderly people, 2 op KFG11B048 (study unit)

Lecturers Aila Vallejo Medina, MSc (Healthcare)

Objectives

Students will explore the experiential world and behaviour of elderly people suffering from dementia and gain qualifications needed to promote the well-being of the patients. They will possess the readiness to prevent and cope with the behaviourial problems associated with dementia and to plan and implement care that takes into consideration the individual characteristics of a patient with dementia. Students will also have knowledge of obtaining and developing services for the elderly people with dementia of how to support the family caring for a dementia patient.

Content

- Process of caring for an elderly person with dementia
- Experiential world of people suffering from dementia and their care
- Special features of the linguistic expression of people with dementia and supporting communication
- Wandering patients and taking a therapeutic approach
- Problems with nutrition and eating and solutions for them
- Behaviourial problems of patients with dementia, prevention, and coping with them
- Special features to consider when obtaining services for people with dementia
- Quality care environment and community
- Ethical questions concerning work with dementia patients
- Quality of the work with dementia and the development of it
- DCM quality control system
- Caring and professional competence in working with dementia patients

Literature / Study Material

- Kirsi T. 2004. Rakasta, kärsi ja kirjoita: Tutkimus dementoitunutta puolisoaan hoitaneiden naisten ja miesten kertomuksista (59–93, 229–240)
- Mace N. L. & Rabins P. V. 1999. The 36–Hour Day. (5–163).
- Novartis Finland Oy. Kuntotutusratkaisuja dementoituvan arkeen
- Topo P. 2005. Teknologia dementiahoidossa
- Vallejo Medina, A. et al. 2006. Vanhustenhoito (275–302)
- Articles from Gerontological Nursing and Dementiauutiset

Learning Methods

Lectures, discussions, pair and group work

Assessment

Active participation in the contact teaching sessions and an examination

Practical training 12: Care of dementing elderly people and promotion of their functional capacity, 7 op KFG11BE049 (study unit)

Lecturers Aila Vallejo Medina, MSc (Nursing)

Objectives

Upon completion of the course students will

- be competent in approaching elderly people with dementia from a therapeutic point of view, and know how to plan and carry out quality dementia treatment,
- be specialised in supporting the communication of elderly people with dementia and preventing behaviourial problems,
- have knowledge of the entire service system of dementia treatment and be competent in working on the various levels of the service system, and
- be competent in analysing the quality of treatment in dementia treatment communities, and in developing the level of services produced by those communities.

Content

- Learning to use the Cerad Test
- Familiarisation with the service chain for elderly people with dementia
- Familiarisation with the work of a rehabilitation counselor for dementia patients Participation in the service processes for patients in dementia units and small dementia care homes
- Participation in a ward staff meeting to discuss a topic pertaining to the treatment of a patient
- Participation in the mid-term seminar

Jakso toteutuu pääosin normaalissa dementiayksikössä ja voi toteutua osittain myös dementianeuvonnassa tai dementoituneiden kuntouttavassa päivätoiminnaassa.

Literature / Study Material Learning material given during course–work

Learning Methods

- Practical training
- Apprenticeship
- Journal
- Staff meeting about the treatment of a dementia patient

Assessment

- Theme-based journal
- Apprenticeship (aims, self-evaluation, feedback from training supervisor)
- Graded on the basis of these various parts

Prerequisites

KFG11B048: Treatment of an Elderly Person with Dementia

Management and development of elderly care, 32 op KFG11C1 (study entity)

Objectives: Students will reflect on the essential stages of the elderly care process from the perspectives of management and development. They will learn to manage care delivery units and to supervise an elderly care unit. Students will have basic knowledge of the economy, pricing and cost calculations involved in elderly care. They will be introduced to quality control in elderly care, the planning of it, implementation, evaluation and development. Students will be competent in planning and implementing a small–scale projects together with representatives of the working world. They will possess skills in the marketing of services and their own expertise.

Management and economics in elderly care services, 5 op KFG11C001 (study unit)

Lecturers

- Elina Hietaniemi, lehtori, MSc (Health Science)
- Simo Ranta, MSc (Nursing)
- Kari Jokiranta, MSSC

Objectives

Students will acquire the readiness needed to manage elderly care organisation. They will be familiar with the areas of self-management and the management of activities and personnel, and be able to analyse the significance of these areas in the productivity of the organisation. Students will understand the significance of management in the improvement of the quality of client relations and in the development of their own role and identity as a professional. They will also understand the significance of budgeting and will acquire the skills needed to compile budgets and make cost calculations and to price services. Students will be familiar with the more crucial labour legislation.

Content

- Areas of management
- Levels of management
- Duties involved in management
- Roles of management
- Labour legislation
- Concepts and goals of supervision
- Analysis and evaluation of the needs, means, and impacts of management in elderly care
- Structure and compilation of budgets
- Cost calculations for service organisations
- Pricing services

Literature / Study Material

- Laaksonen H., Niskanen J., Ollila S. & Risku A. 2005. Lähijohtamisen perusteet terveydenhuollossa
- Nikkilä J.& Paasivaara L. 2007. Arjen johtajuus. (appl. parts).
- Silvennoinen M. & Kauppinen R. 2006. Onnistu alaisena.
- Molander G. 2003. Työtunteet esimerkkinä vanhustyö (appl. parts).
- Paunonen-Immonen M. 2001. Työnohjaus: toiminnan laadunhallinnan varmistajana.
- Melin T. 2003. Tuotteistuksen ja kustannuslaskennan hyvät käytännöt kuntien sosiaali- ja terveydenhuollossa. (appl. parts).

Learning Methods

- Lectures
- Theme-based journal
- Cost calculations • Case studies + analysis

Assessment

- Active participation in lectures and seminars
- Exams (50 %)
- Journal (50 %)
- Approved cost calculations

Quality management in elderly care, 3 op KFG11C002 (study unit)

Lecturers

Elina Hietaniemi, MSc (Health Science)

Objectives

Students will understand the central role of quality control as an operating model for personnel working in elderly care, and in the development of elderly care and risk management. They will possess the skills needed to use quality control procedures and tools in their own work. Students will also understand the significance of evaluating activities in the development of elderly care. They will be competent in planning and implementing activities that develop elderly care together with other elderly care personnel and in evaluating the quality of services.

Content

- · Quality control
- Prerequisites for successful quality control
- Responsibility for quality
- Basic prerequisites for implementing quality control
- Balanced Score Card
- Quality control systems, e.g. EFQM

Research and development: 1 cr

Literature / Study Material

- Lehtoranta H. et. al. (eds.). 2007. Ikäihmisten laitoshoidon laadun kehittämishanke.
- Heinola R. (ed.). 2007. Asiakaslähtöinen kotihoito. Opas ikääntyneiden kotihoidon laatuun. (appl. parts).
- Outinen M. et al. 1994. Laatu ja asiakas. (appl. parts).
 Ministry of Social Affairs and Health. 1999. Sosiaali– ja terveydenhuollon laadunhallinta 2000– luvulle.
 Niiranen V., Stenvall J. & Lumijärvi I. 2005. Kuntapalvelujen tuloksellisuuden arviointi (BSC).
- Excellence Finland. 2003. EFQM Excellence Model.
- Liimatainen L. & Ryttyläinen (eds.). 2006 Innovoi, vaikuta ja kehitä (IVA). (appl. parts).

Learning Methods

Lectures, assignments, development assignment during the practical training period

Assessment

Active participation in lectures and assignments. The grade is based on two parts: examination (50%) and development assignment (50 %).

Project work as a tool in the development of elderly care, 2 op KFG11C003 (study unit)

Lecturers

Elina Hietaniemi, MSc (Health Science)

Objectives

The students will learn to plan, manage and evaluate projects. They will apply their existing knowledge in the planning and implementation of a project.

Content

• Areas of project work
- Managing a project
- Projects in the development of elderly care

Literature / Study Material

- Ruuska K. 2005. Projekti hallinnassa
- Other material announced by the teacher

Learning Methods

- Lectures
 - Implementation of a project during a practical training period
 - Participation in seminars

Assessment The assessment will be based on the project report, the project process and active participation in seminars.

Entrepreneurship in elderly care, 2 op KFG11C004 (study unit)

Lecturers Elina Hietaniemi, MSc (Health Science)

Objectives

Students will acquire basic qualifications needed in providing and marketing social and health services.

Content

- Internal and external entrepreneurship for service delivery systems
- Productisation of products for the elderly
- Marketing of one's own expertise and the enterprise
- Future visions in the production of services for the elderly

Literature / Study Material To be announced in Moodle.

Learning Methods Online learning with Moodle

Assessment Approved assignments in Moodle

Practical training 13: Management and development of elderly care, 12 op KFG11CE005 (study unit)

Lecturers Elina Hietaniemi, MSc (Health Science)

Objectives

Students will explore management and the role of the supervisor in elderly care institutions and projects. They will apply theoretical knowledge to analyse their personal qualifications and potential as a supervisor and developer of quality.

Content

- Practical training in a service system for elderly care where students learn about management, finances, quality of elderly care and evaluation of quality
- Development task pertaining to quality together with the personnel in the work community

Research and development: 6 cr

Learning Methods

- Learning agreement
- Theme-based journal
- Development task based on quality control work
- Cost calculations

Assessment

Grading for the entire course is based on the evaluation given by the training supervisor (T, H, K), the learning agreement, self–evaluation, evaluation by the teacher, and the theme–based journal. Grading criteria have been set for the course.

Practical training 14: Publicity and influencing elderly policy, 2 op KFG11CE006 (study unit)

Lecturers

Elina Hietaniemi, MSc (Health Science)

Objectives

Students will practise disseminating information in an elderly care unit, increase their qualifications and gain experience of marketing their professional skills.

Content

- Lectures
- Poster
- Writing field-related articles about one's own thesis and marketing them
- Presentation of one's thesis to interest groups

Literature / Study Material

- Material announced by the teacher
- Methods of learning
- Poster and article based on one's thesis

Research and development: 1 cr

Assessment Numerical grade for article and poster

Practical training 15: Elderly care development project, 6 op KFG11CE007 (study unit)

Lecturers

Elina Hietaniemi, MSc (Health Science)

Objectives

Students will apply the theoretical knowledge learnt during the course to quality control and project work and make use of other skills and knowledge acquired during their studies to implement a project together with the personnel of an elderly care unit for the development of elderly care services.

Content

- Compilation of a project plan
- Presentation of the plan in a seminar
- Project report

Research and development: 6 cr

Assessment Numerical grade for the project report and seminar presentation

DIPLOMA WORK, 15 op KFG11D (study entity)

During the thesis process, students are expected to integrate theoretical knowledge, skills acquired through practical training and their personal growth to adopt the role of a professional. Students are also expected to demonstrate that they are qualified to develop elderly care practices further. The thesis writing process includes seminars (seminars on the topic, research plan, methodology and research report), as well as the presentation of the thesis in the final seminar. Students will also sit a Maturity Test in their native language. This involves an essay on the methodology and/or topic of the thesis.

Final thesis and maturity test, 15 op KFG11C008 (study unit)

Lecturers

- Sirkka-Liisa Palomäki, PhD
- Elina Hietaniemi, MSc (Health Science)
- Aila Vallejo Medina, MSc (Nursing)

Objectives

Students will be competent in applying an investigative and development–oriented approach to the practice of elderly care. As their final thesis, they will organize and implement a research or development project. They will formulate a relevant research problem or development project, plan and implement the research/development process and apply their R & D skills. They will know how to apply knowledge derived from practice to their study and the development of elderly care. Students will write a research report in the appropriate academic style and draw conclusions for the development of elderly care. They will also understand the importance of interaction and collaboration in R & D projects involving the working world.

Content

- Defining research problems/development projects
- Approaches to research in and collaboration with the working world
- Research plan for the final thesis
- Implementation and evaluation of the thesis
- Research report
- Acting as an opponent (peer evaluation) and supervision

Literature / Study Material

- Guidelines for Writing a Thesis. Seinäjoki University of Applied Sciences. http://intra.seamk.fi/opiskelijat/opinnaytetyo.htm
- Material for doing research and development work: intra.seamk.fi

Learning Methods

Seminars, individual and group counselling, peer evaluation, Maturity Test

Assessment

- General criteria for final theses
- Self-evaluation,
- Feedback from the collaborative partner,
- · Participation in seminars and supervision
- Maturity Test

FREE CHOICE STUDIES, 8 op KFG11F (study entity)

Objectives: The degree programme includes 15 ECTS (10 credit units) of elective studies, which can be undertaken in other schools of Seinäjoki University of Applied Sciences or in other suitable higher education institutions. It is expected that the courses selected are related to students' professional studies and enhance their professional qualifications.

Degree programme in Hospitality Management (In Finnish)

Head of degree programme: Ms Liisa Nuotio, Tel +358 20 124 5617, Gsm +358 40 830 3953, E-mail: liisa.nuotio@seamk.fi Student councellor: Ms Virpi Antila, Tel +358 20 124 5621, Gsm +358 830 4208, E-mail: virpi.antila@seamk.fi ECTS/International coordinator: Ms Erja Heikkilä, Tel +358 20 124 5633, E-mail: erja.heikkila@seamk.fi

Degree and qualification awarded

The graduates of the degree programme in hospitality will gain the degree title of Bachelor of Hospitality Management (AMK). The extent of the studies is 210 credits.

Access requirements

Please see the Applicant's Guide or the website www.seamk.fi.

Description of the Degree Program

In the program of Hospitality Management the student has opportunity to gain wide range of skills for different kinds of hospitality organizations. Bachelor of Hospitality Management will be a professional in tourism, catering and domestic field, in selling, marketing and supervisory tasks and also as private entrepreneur.

Bachelor of Hospitality Management is an expert who appreciates both local and international values. He is initiative, enterprising and developing. He has good communication skills, he observes the customersŽ needs and is able to take responsibility for his actions. He is also able to exploit all the human senses and as a catering expert able to guide how to make simple food to a great experience. He observes health factors, safety, experiences and economical matters in all his actions and can put the theories of hospitality management into effect.

Objectives of the program

Hospitality Management

Service Cultural skills

- understands hospitality as the most essential value and success factor in the field
- can produce healthy, safe and economical services for the customers
- is able to observe esthetical and ethical standpoints in service operations
- knows the principles of customer behaviour and can exploit them in service development

Service System skills

- can plan, produce and develop services according to the operational environment
- can describe, supervise and assess the service processes
- can develop the services by product development and productisation
- knows the safety requirements and can adapt them into his work

Service Management skills

- knows and understands the strategies of the company and can exploit them as supervisory tool for service operations
- can plan, realize and assess the daily management routines
- can organize the work community operations and utilize the know how of different people, teams and communities

Business Management skills

- can analyze customership from the business developmentŽs point of view
- understands the essential concepts of business management and manages the basics of business thinking
- can pre indicate alternative functions and their affects on economical results and competitiveness
- can adapt theories of entrepreneurship as entrepreneur or employee

• can work in different networks exploiting and developing them

Service Environment skills

- can estimate the effects of purchasing and producing services on customers, environment and on the whole society
- is able to take economical, social, ecological and cultural responsibility
- understands the meaning of internationality, globalisation and different cultures for service culture and the development of the field
- realizes the meaning of his own functions from the areal developmentŽs point of view

Pedagogy and Learning methods

The studies of Hospitality Management in Kauhajoki consist of service operations, projects, work practice, elective courses and thesis work. During the studies the student can deepen his skills by specializing in catering, experience production or business management. The studies are carried out through process– and project learning. The study entities consist of different vocational and theoretical subjects, customer service and projects. The last study periods focus on developing projects for working life.

Service operations

Service operations studies consist of service theory studies, exercises and practical work in different service environments

Service environments:

- 1. Restaurant services (Restaurant Kaarin)
- 2. Staff restaurant services (student restaurant Risetti)
- 3. Café and reservation restaurant services (Sööpäri Services)
- 4. Food service and store services (Sortti Store)

First year service operations studies focus on producing the services, second year studies focus on supervising the services and the last study years on service development.

First year themes:

- 1. Food safety
- 2. Healthy food
- 3. Economical Food
- 4. Food Experiences

Second year themes:

- 1. Marketing
- 2. Personnel management
- 3. Financial management
- 4. Quality management

Project studies

Project studies consist of current catering projects. The most typical project is an occasional development task for working life but the range of different types of projects is very wide.

The student learns through different roles in different projects (for example project coordinator)

The student can choose projects of interest and specialize within a project group (nutrition expert, financial expert etc). Independency and responsibility are emphasized during the project studies.

Degree programme in Hospitality Management (In Finnish), 210 cr (1.9.2008) PALVELUJ 2008

Study Year CR

Name

Code

		1.	2.	3.	4.	
KI15PERAM	PERUS- JA AMMATTIOPINTOJA					155
OR	Orientation		T			8
KI15AORI001	Opiskelu– ja urasuunnittelutaitojen kehittäminen	х				5
KI15AORI002	Projekti onnistuu!	х				3
KI15AKIELI	Kieliopinnot					14
KI15AKIE001	Finnish language and Communication	х				4
KI15AKIE002	Swedish	х				4
KI15AKIE003	English	х				4
KI15AKIE004	Toinen vieras kieli	х				2
KI15BTUOTPE	Palvelujen tuottamisen perusteet					16
KI15BRPT001	Ruokapalvelujen turvallisuus	х				5
KI15BRPT002	Ruokapalvelujen terveellisyys	х				5
KI15BRPT003	Ruokapalvelujen taloudellisuus	х				3
KI15BRPT004	Ruokapalvelujen elämyksellisyys	х				3
KI15BTUOTTA	Palvelujen tuottaminen					20
KI15BRPT005	Henkilöstöravintolapalvelujen tuottaminen	х				5
KI15BRPT006	Ravintolapalvelujen tuottaminen	х				5
KI15BRPT007	Kahvila– ja tilausravintolapalvelujen tuottaminen	x				5
KI15BRPT008	Ruokatuote– ja myymäläpalvelujen tuottaminen	x				5
KI15BJOHTPE	Palveluien iohtamisen perusteet					22
KI15BRPJ001	Marketing		x			4
KI15BRPJ002	Personnel Administration		x			4
KI15BRPJ003	Financial and operational planning		x			4
KI15BRPJ004	Ruokanalvelun laatuketiun johtaminen		x			4
KI15BRPJ005	Ravitsemuksen erityiskysymykset		x			4
KI15BRPJ010	Basics of law		x			2
KI15BJOHTAM	Palveluien johtaminen					12
KI15BRPJ006	Henkilöstöravintolanalveluien johtaminen		x			3
KI15BRPJ007	Ravintolanalveluien johtaminen		x			3
KI15BRPI008	Kahvila– ja tilausravintolanalvelujen johtaminen		x			3
KI15BRPI009	Ruokatuote– ja myymälänalveluien johtaminen		x			3
KI15CLIIKKE	Palveluliiketoiminnan kehittäminen		~			25
KI15CRPK001	Research and development		v			5
KI15CRPK002	Palvelukonsentin kehittäminen		x			5
KI15CRPK003	Esteettisyyden ja vrityskuvan kehittäminen		x			5
KI15CRPK004	Ravitsemuksellisuuden kehittäminen		x			5
KI15CRPK005	Ruoan ja ruokalistojen kehittäminen		л v			5
KI15CRPK006	Laadun ja turvallisuudan kahittöminen		л v			5
KIISCRI KOOO	Projektioninnot		л			22
KI15CPPOI01	Elämystanahtuma	ĺ		v		<u>4</u> 5 5
KIISCERUJUI	Lianystapanuma			X		5
KIISCEROJUZ	Professional Eair Project			X		5
KIISCPROJOA	Possoarch musicat			X		5
KIIJUPKUJU4	Kesearch project		I I	Х	, 1	Э

KI15CPROJ05	Laadun kehittämisprojekti			x		5
KI15CVEPROJ	Vaihtoehtoiset projektit					15
KI15CPROJ06	Ravitsemusprojekti			х		5
KI15CPROJ07	Ruokatuotteen kehittämisprojekti			x		5
KI15CPROJ08	Muu ajankohtainen projekti			x		5
KI15CPROJ09	Production of Food Experience (In English)			x		5
VAVAL	ELECTIVE STUDIES					10
HAR	Practical training				30	
KI15EPEHAR1	Basic training	x				12
KI15EERHAR1	Specialised training			x		18
OPIN	Thesis					15
						1.5

Study Descriptions

Opiskelu– ja urasuunnittelutaitojen kehittäminen, 5 op KI15AORI001 (study unit)

Lecturers

- Liisa Nuotio, MSc
- Eija Putula–Hautala, MSc
- Anu Latva-Reinikka, BBA, BSc
- Sirkka Nieminen, MA

Objectives

Students will be oriented into studying in the School of Food Management affiliated with Seinäjoki University of Applied Sciences, as well as the town of Kauhajoki as a place to study. They will be aware of their status as students and be able to apply various learning methods to their studying. Students will learn to work independently, understand the process of gaining knowledge, be competent in seeking, evaluating and using the information they find. They will become familiar with the opportunities their degree has to offer in preparing them to work as leaders and experts in the hotel and restaurant business. Students will be aware of the various channels that may be used to look for jobs, and they will know how to write up a job application and curriculum vitae. Students will also understand the significance of life–long learning in the development of themselves as individuals and of their professional skills.

Content

- Studying at Seinäjoki University of Applied Sciences in Kauhajoki
- Learning methods and environment
- Instructions for doing written assignments at Seinäjoki UAS
- Library and information services at Seinäjoki UAS, information retrieval, databases and the Internet, main producers of information in the food and hospitality field, evaluation and use of information
- Student organizations and tutor system
- Personal study plan
- Professional awareness
- Seeking jobs and career planning

Literature / Study Material

- Study Guide and Learner's Guide
- Heikkinen, V.A. 2004. Matkalla restonomin ydinosaamiseen. Haaga series. Tutkimuksia 8. Haaga Insitute's University of Applied Sciences.
- Other necessary study material to be announced during the course

Learning Methods

Lecture, group work and assignments, and online learning

Assessment

Active participation, written assignments and exam

Further Information One credit for online learning

Projekti onnistuu!, 3 op KI15AORI002 (study unit)

Lecturers

- Elina Ojala-Wahlroos, MSc (Econ.)
- Sirkka Nieminen, MSc

Objectives

Students will possess the basic knowledge and skills and methods involved in project planning and work. They will develop their skills in team work, management and leadership, problem solving, organising and in withstanding pressure. Students will be competent in working purposefully in a project's various communicative situations. They will be able to consider the receiver and the situation and communicate in an organised, understandable and convincing way.

Content

- Project phases
- Project plan and time schedule
- Group communication, negotiations
- Project management
- Project changes, risks and problems
- Planning a catering project
- Written and oral communication skills needed in projects

Literature / Study Material

- Artto, K., Martinsuo, M., Kujala, J. 2006. Projektiliiketoiminta.
- Kortetjärvi–Nurmi, S., Kuronen, M.-L. & Ollikainen, M. 2002. Yrityksen viestintä.
- Kallio, H. 2006. Point: Tehoa ja taitoa työelämän esiintymistilanteisiin.
- Other study material to be announced at the beginning of the course

Learning Methods Lectures, exercises, online learning, project

Assessment Active participation, exercises, orally presented final report, and examination

Further Information One credit for online learning

Finnish language and Communication, 4 op KI15AKIE001 (study unit)

Lecturers Sirkka Nieminen, MA

Objectives

Students will be competent in communicating appropriately and purposefully in various communicative situations in the working world. They will be considerate of the receiver, and be aware of the situation and the demands of the profession. They will be able to communicate in and organised, clear and convincing manners. Students will also be able to evaluate their own communicative skills.

Content

- Written texts, e.g. various documents needed at work
- Oral texts, e.g. speeches, demonstrations; communication in a group, meetings
- Stylistics, language maintenance
- Puropseful development of communication skills

Literature / Study Material

- Kortetjärvi-Nurmi, S., Kuronen, M.-L. & Ollikainen, M. 2002. Yrityksen viestintä. 3rd edition. Helsinki: Edita.
- Kallio, H. 2006. Point: Tehoa ja taitoa työelämän esiintymistilanteisiin.
- Kielikello 1/2007 (so-called 'Řuokakello')
- Online and other material

Learning Methods Lectures, assignments and independent study

Assessment

- Written and oral assignments
- Examination

Languages of Instruction Finnish

Further Information Two credits for online learning

Swedish, 4 op KI15AKIE002 (study unit)

Lecturers Erja Heikkilä, MA

Objectives

Students will understand the importance of internationality and different cultures in their field and its development. They will also understand the significance of the Swedish language in the field of hospitality. Students will have command of essential hospitality terminology and both written and oral Swedish language skills for various contexts related to studies, work and free time.

Content

- Education and career
- Applying for work, CV
- Basic terminology in the hospitality field (nutrition, tourism)
- Customer service situations in different service environments
- Cultural studies (cuisine, etc.)

Literature / Study Material

- Jokisalo, T., Minni, R. 2006. Flexservice, Svenska för högskolor. Helsinki, Otava.
- Other material to be announced at the beginning of the course
- Online material (Moodle, etc.)

Learning Methods

- Oral and written assignments
- · Exercises in class and in kitchen/restaurant environments
- Online studies

Assessment Oral and written assignments and tests, active participation

Languages of Instruction Finnish and Swedish

Further Information One credit for online studies

English, 4 op KI15AKIE003 (study unit)

Lecturers Erja Heikkilä, MA

Objectives

Students will understand the importance of internationality and different cultures in their field and its development. They will also understand the significance of the English language in the field of hospitality. Students will have command of essential hospitality terminology and both written and oral English language skills for various contexts related to studies, work and free time.

Content

- Education and career
- Applying for work, CV
- Basic terminology in the hospitality field (nutrition, tourism)
- Customer service situations in different service environments
- Cultural studies (cuisine, etc.)

Literature / Study Material

- Koponen, P., Scheinin, M., Yli-Penttilä, K. 2008. Expert, English for Food Professionals. Keuruu: Otava.
- Salo, R., Myles, J.2007. Suitcase. Helsinki: Wsoy.
- Other material to be announced at the beginning of the course
- Online material (Moodle, etc.)

Learning Methods

- Oral and written assignments
- Exercises in class and in kitchen/restaurant environments
- Online studies

Assessment

Written and oral assignments and tests, active participation

Languages of Instruction Finnish and English

Further Information One credit for online studies

Toinen vieras kieli, 2 op KI15AKIE004 (study unit)

Objectives

The objectives for this course are determined according to the levels of skill the students have; if necessary, studies will begin at the beginner level. Upon completion of the course, students will possess basic knowledge of the language in question, i.e. they will be able to use essential vocabulary and structures in oral and written communication situations.

Content

- Me, my family and my profession
- My place of residence
- Situations in the shops, restaurants and when travelling
- Food
- Cuisine in my own country and province

Literature / Study Material To be announced.

Learning Methods Lectures, written and oral assignments

Assessment Assignment and exam

Further Information Possible options according to what is on offer:

- Spanish
- Italian
- French
- German
- English
- Swedish

Palvelujen tuottamisen perusteet, 16 op KI15BTUOTPE (study entity)

Students will produce catering services in various service environments to gain command of the processes involved in production and services in the field of food management. Each period has its own theme in which students deepen their

knowledge of the theory of service, communication and methods. The themes for the first year are: Period 1: Safety (hygiene, cleanliness and self-monitoring, basic knowledge of special diets, occupational safety, basics in customer service the skills in communication and methods associated with it) Period 2: Health (basics in nutrition and special diets, planning menus, knowledge of food stuffs, and skills in communication and methods) Period 3: Economics (basics in business and cost calculations, planning production, and skills in communication and methods) Period 4: Aesthetics (decoration, setting tables, display, serving, atmosphere) General teaching and studying of the various themes involves all students taking the course as a whole, while the practical work in the various learning environments involves small–group work. The module comprises the following courses:

- Safety in Catering
- Health in Catering
- Economics in Catering
- Aesthetics in Catering

Ruokapalvelujen turvallisuus, 5 op KI15BRPT001 (study unit)

Lecturers

- Seija Pihlajaviita, MSc
- Paula Juurakko, BBus (Hos. Man.)
- Kaija-Leena Kristola, MSc
- Elina Ojala–Wahlroos

Objectives

Students will understand the prerequisites for a healthy, safe and progressive working environment. They will take responsibility for ensuring they are able to work and actively work to develop their ways of working and functioning in the work community. Students will have command of the principles of food hygiene and in-house control and apply them to their work. They will be familiar with good hygienic practices and take responsibility for food preservation, cleaning and sanitation in professional kitchens. Students will be competent in sorting waste and know the basics of the sustainable use of energy. Students will also understand the needs for various special diets and the safety issues associated with them.

Content

- Work safety
- Risk assessment
- Basics of ergonomics
- In-house control in professional kitchens
- Various groups of microbes, their living conditions and how to control their growth
- · Food pathogens
- Materials used in food processing facilities
- Hygiene requirements and the related detergents and methods used in cleaning
- Sorting waste and waste treatment
- Sustainable use of energy, water and raw materials
- Special diets and safety issues

Literature / Study Material

- Syyrakki, S. 2008. Hygieniaopas. Elintarvikehygienian perusteet. Elintarvike ja terveys.
- Aro, J. & al. 2005. Puhtaus on puoli ruokaa. Suomen siivousteknisten liiton julkaisu 1:18. AO-paino Mikkeli.
- Heikkilä, P.M. Ekokeittiön valinnat. Ruokapalvelut ympäristöä säästäen, Porvoo: WSOY.
- Online material
- · Learning material is revised annually

Learning Methods

- Lectures, exercises and assignments
- Part of the assignments are integrated into the Production of Food Services module

Assessment

Active participation in lectures, assignments, exam

Further Information One credit for online learning

Ruokapalvelujen terveellisyys, 5 op KI15BRPT002 (study unit)

Lecturers

- Hillevi Eromäki, MSc
- Eija Putula-Hautala, MSc
- Leena Helminen, MA

Objectives

Student will utilise their knowledge of nutrition and the relationship between food and health when choosing ingredients and compiling various types of menus and when considering their own diet. They will be familiar with the Finnish nutrition recommendations and apply them in practice. Students will understand food as the origin of nutrients and consider chemical and physical phenomena in food preparation.

Content

- Food as the origin of nutrients and as a factor in good health
- Nutritional recommendations
- Using food and the nutrition of people in various age groups
- Dietetics
- Special qualities of various food product groups
- Chemical and physical phenomena in food preparation

Literature / Study Material

- Peltosaari, L., Raukola, H. ja Partanen, R. 2002. Ravitsemustieto. Otava.
- Parkkinen, K. ja Sertti, P. 2006. Avain ravitsemukseen.
- Suomalaiset ravitsemussuositukset ravinto ja liikunta tasapainoon. VRNK 2005
- Parkkinen, K. ja Rautavirta, K. 2003. Utelias kokki. Elintarviketietoa ruoanvalmistajalle. Restamark Oy. Vantaa.
- Parkkinen, K. ja Rautavirta, K. 2006. Aspartaamista öljyhappoon. Elintarvike- ja ravitsemustiedon sanasto. Restamark Oy. Vantaa.
- Lampiselkä, J. ym. Kemisti 1. Ihmisen ja elinympäristön kemia. WSOY. (latest edition)
- Other material to be announced during the course

Learning Methods

Lecture, group work and assignments

Assessment

Active participation, assignments, written examinations

Ruokapalvelujen taloudellisuus, 3 op KI15BRPT003 (study unit)

Lecturers

- Kristiina Mutka-Vierula, MSc (Econ. and Bus. Adm.)
- Leena Helminen, MA

Objectives

Students will understand the basic logic behind the hospitality management business. They will be familiar with various business ideas in hospitality management as well as the connection between corporate investments and products. Students will recognize single input and corporate functions as a part of the national economy and sustainable development. They will be competent in working in an economic manner in the various long-term phases of hospitality production, such as raw material acquisition, food production, delivering and serving. Students will have command of basic mathematical calculations needed in their professional field, i.e. modifications, VAT, and loss. They will also be competent in using cash registers, writing receipts and estimating the effects of variation on total costs and outcome.

Content

- Entrepreneurship in society
- Generating business ideas
- Business processes and environments
- Calculating percentages, modifications, loss of weight
- Gross margin, VAT, pricing products and services

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, exercises, assignments

Assessment Assignments and written exams

Ruokapalvelujen elämyksellisyys, 3 op KI15BRPT004 (study unit)

Lecturers

- Kimmo Martiskainen, MSc (Econ. and Bus. Adm.)
- Katja Kulmala, BBus (Hos. Man.)

Objectives

Students will understand tourism and its chracteristics and a form of business and livelihood. They will learn the significance of experience and hospitality as fators of quality in the fields of catering and tourism. Students will also be competent in customer relations and have command of the basics in customer service.

Content

- Tourism as a form of business and livelihood
- Aesthetics and customer experiences in catering
- Food as part of tourist services
- Basics in customer service

Literature / Study Material Literature pertaining to service culture, to be announced at the beginning of the course.

Learning Methods Lectures, practical assignments

Assessment Assignments and exam

Languages of Instruction Finnish

Palvelujen tuottaminen, 20 op KI15BTUOTTA (study entity)

The Service Production Module comprises practical work and the theoretical foundation and assignments that support it. The practical work takes place in four different service and learning environments. Students are divided into four groups and each group at a time will work in one of the service environments for one period after they change to another service environment. In this way, each student and group of students will work in all of the service environments during their first and second years of study. Students will apply the theory related to each period to the given learning environment. In the thrid year of their studies, students will choose one service environment as an area of development. Students will be competent in producing catering and customer services in the service environment according to the environment's service concept, and they will become familiar with the service environment's production and service processes. Students will apply their knowledge of food service safety, health, economics and aesthetics to the service environment. The Service Production Module also comprises basic studies in information technology. Students will understand the significance of IT in their professional field and know how to use it independently in their studies. They will be familiar with the more common IT devices, e-mail, Moodle, and the online learning environment. Students will have command of word processing with Mocrosoft Word and know how to write reports according to the conventions stated in the Instructions for Writing a Thesis. Students will also have command of PowerPoint. Studies in IT may take place in any of the four learning environments and it will be integrated into the assignments given therein. The literature and study material used in the IT studies will be announced during the studies. SERVICE AND LEARNING ENVIRONMENTS Staff Restaurant Services Staff Restaurant Services provides students with a comprehensive understanding of the food production and service processes that take place in a professional kitchen. Students will work in the service and learning environments according to the principles of the service systems and culture and productive business operations in staff restaurants. Students will produce, plan and develop safe, healthy, economic and aesthetic services and products according to the business idea of a staff restaurant utilising various technologies. Students will learn how to plan meals and menus and the importance of standard recipes as part of quality operations. The intuitional, nutritional and hygienic quality, as well as the quality of customer service are emphasised in the production, planning and development of services. Restaurant Services Restaurant Services provides students with a comprehensive understanding of the processes involved in food production and services in a restaurant. Students will work in the service and learning environments according to the principles of the service systems and culture and productive business operations in staff restaurants. Students will produce, plan and develop safe, healthy, economic and aesthetic services and products according to the business idea of a staff restaurant utilising various technologies. Students will learn how to plan meals and menus and the importance of standard recipes as part of quality operations. Students will gain competence in waiting on tables, customer service and serving alcoholic beverages. The intuitional, nutritional and hygienic quality, as well as the quality of customer service are emphasised in the production, planning and development of services. Café and À la Carte Restaurant Services Café and À la Carte Restaurant Services provides students with a comprehensive understanding of the production and service processes involved in cafés and à la carte restaurants. Students will work in the service and learning environments according to the principles of the service systems and culture and productive business operations in cafés and à la carte restaurants. Students will gain competence in waiting on tables, customer service and serving alcoholic beverages. Students will produce, plan and develop quality café and à la carte restaurant services according to the business idea of the operations environment and based on an agreed programme or theme. They will learn the principles of planning a meal and menu based on a certain theme. Additionally, students will gain competence in developing a comprehensive food service that arouses the customers' senses and provides them with a pleasant experience. The experiential aspects of food services, which are shaped by the meal, interaction with the customer, programme and atmosphere, are emphasised in the production, planning and development of servics. Food Product and Shop Services Food Product and Shop Services provides students with a comprehensive understanding of the production and service processes of packaged food products. Students will work in the service and learning environments according to the principles of the service systems and culture and productive business operations. They will produce, plan, and develop quality food product and shop services according to a business idea utilising various technologies. Students will learn about various food stuffs, methods for preparing food, statuatory packaging markings, and the significance of standard recipes as part of quality operations. The intuitional, nutritional and hygienic quality, as well as the quality of customer service are emphasised in the production, planning and development of food services.

Henkilöstöravintolapalvelujen tuottaminen, 5 op KI15BRPT005 (study unit)

Lecturers

Kirta Nieminen, BBus (Hos. Man.)

Objectives

Students will be knowledgeable of the work carried out in staff restaurants, and they will be competent in producing service–orientated catering and customer services. Students will become familiar with production and service processes in the catering field, and they will apply their knowledge of safe, healthy, economical and experiential catering services.

Content

- Catering services in staff restaurants
- Food production and service processes in a professional kitchen
- Food hygiene and in-house control
- Occupational safety and ergonomics
- Nutrition
- Economics of catering services
- Equipment technology
- JAMIX software

Literature / Study Material

- Lehtinen, M., Peltonen, H. & Talvinen, P. 2003. Ruoanvalmistuksen käsikirja. Helsinki: WSOY.
- Mauno, S. & Lipre, E. 2005. Älykäs kokki ammattikeittiössä. Helsinki: WSOY.
- Taskinen, T. 2007. Ammattikeittiön ruokatuotantoprosessit. Mikkeli: Research and reports of the Mikkeli University of Applied Sciences.

Learning Methods

- Production of catering services in service and learning environments
- Report for the Basics of Service Production and Service Production study modules

Assessment

Practical work and active participation, self-assessment, group assessment, customer assessment, exercises and reports

Languages of Instruction Finnish

Ravintolapalvelujen tuottaminen, 5 op KI15BRPT006 (study unit)

Lecturers

Kulmala Katja, BBus (Hos. Man.)

Objectives

Students will produce catering and customer services in accordance with the service concept of restaurant services. They will become familiar with the production and service processes involved in restaurant services, and they will apply their knowledge of safety, health, economics and aesthetics in developing restaurant services.

Content

- Production of restaurant services
- Food production and service process of a restaurant
- Hygiene and self-supervision
- Occupational safety and ergonomics
- Food display and aesthetics
- Cost-effectiveness in catering services
- Kitchen technology
- Jamix software
- Serving alcoholic beverages

Literature / Study Material

- Lehtinen, M., Peltonen, H. & Talvinen, P. 2003. Ruoanvalmistuksen käsikirja. Helsinki: WSOY.
- Mauno, S. & Lipre, E. 2005. Älykäs kokki ammattikeittiössä. Helsinki: WSOY.

Learning Methods

- Production of restaurant services in a service and learning environment
- Report summarizing one's knowledge of the issues discussed in Basics in Service Production and Service Production

Assessment

Practical work and active participation, self-assessment, group assessment, customer assessment, exercises and reports

Kahvila– ja tilausravintolapalvelujen tuottaminen, 5 op KI15BRPT007 (study unit)

Lecturers

- Kulmala Katja, BBus (Hos. Man.)
- Paula Juurakko, BBus (Hos. Man.)

Objectives

Students will manage catering and customer services in accordance with the service concept of café and à la carte restaurant services. They will have command of the production and service processes in cafés and à la carte restaurants. Students will apply their knowledge of safety, health, economics and aesthetics to café and à la carte services.

Content

- Production of café and à la carte restaurant services
- Production and service processes in cafés and à la carte restaurants
- Hygiene and in-house monitoring
- Occupational safety and ergonomics
- · Economics and pricing in cafés and à la carte restaurants
- JAMIX software

Literature / Study Material

- Lehtinen, M., Peltonen, H. & Talvinen, P. 2003. Ruoanvalmistuksen käsikirja. Helsinki: WSOY
- Määttälä, S., Nuuttila, J. & Saranpää, T. 2004. Juhlapalvelu, suunnittele ja toteuta. Helsinki: WSOY.

Learning Methods

- Production of services in cafés and à la carte restaurants in a service and learning environment
- Report summarizing the knowledge acquired in Basics of Service Management and Service Management

Assessment

Practical work and active participation, self-assessment, group assessment, customer assessment, exercises and reports

Languages of Instruction Finnish

Ruokatuote– ja myymäläpalvelujen tuottaminen, 5 op KI15BRPT008 (study unit)

Lecturers

- Kirta Nieminen, BBus (Hos. Man.)
- Paula Juurakko, BBus (Hos. Man.)

Objectives

Students will be competent in producing catering and customer services in accordance with the service concept of café and à la carte restaurant services. They will become familiar with the production and service processes in cafés and à la carte restaurants, and they will apply their knowledge of the safety, health, economics and aesthetics to café and à la carte restaurant services.

Content

- Production of café and à la carte restaurant services
- Production and service processes in cafés and à la carte restaurants
- Hygiene and in-house control
- Occupational safety and ergonomics
- Economics and pricing in cafés and à la carte restaurants
- JAMIX software

Literature / Study Material

- Lehtinen, M., Peltonen, H. & Talvinen, P. 2003. Ruoanvalmistuksen käsikirja. Helsinki: WSOY.
- Määttälä, S., Nuuttila, J. & Saranpää, T. 2004. Juhlapalvelu, suunnittele ja toteuta. Helsinki: WSOY.

Learning Methods

- · Production of café and à la carte restaurant services in a service and learning environment
- Report summarizing one's knowledge acquired in the Basics of Service Production and Service Production courses

Assessment

Practical work and active participation, self-assessment, group assessment, customer assessment, exercises and reports

Languages of Instruction

Finnish

Palvelujen johtamisen perusteet, 22 op KI15BJOHTPE (study entity)

Emphasis during students' second year of studies in the Service Production Module is placed on service management and working as a manager. The Service Management Module comprises various themes and studies in theory, which students apply to practical training situations in various service environments.

- Marketing in the Service Sector
- Personnel Management in the Service Sector
- Financial Administration '
- Managing the Food Service Quality Chain
- Key Issues in Nutrition
- Jurisprudence

Marketing, 4 op KI15BRPJ001 (study unit)

Lecturers Elina Ojala–Wahlroos, MSc (Econ.)

Objectives

Students will become familiar with the significance of customer service and planned marketing in a service-providing

company. They will learn the basics of marketing and the significance to an organisation. Additionally, students will be introduced to the job of a consultant for food products through various projects.

Content

- Significance of marketing in the service sector
- Basics of marketing
- Significance of planning and compilation of a marketing plan
- Participation in a consumer-based online project where students practise their skills in the promotion of sales

Literature / Study Material

- Isoviita, A. & Lahtinen, J. 2004. Markkinoinnin perusteet. Tampere: Avaintulos.
- Other material to be announced at the beginning of the course

Learning Methods

Lectures, marketing plan, online learning, examination, project

Assessment

Active participation, marketing plan, examination, project

Languages of Instruction Finnish

Further Information

- Two credits for online studies
- Two credits for R&D

Personnel Administration, 4 op KI15BRPJ002 (study unit)

Lecturers

- Elina Ojala-Wahlroos, MSc (Econ.)
- Marja–Liisa Salonen, LLM

Objectives

Students will be able to analyze management and understand various concepts and models and apply this knowledge to the work in the service sector. They will be familiar with the entire sphere of duties of a supervisor involved and the significance of leadership in productive operations. Students will learn the basics of management and leadership and be familiar with the various areas of personnel management and legislation.

Content

- Basics of management and organization
- Personnel management
- Employment Contracts Act

Literature / Study Material

- Laurent, Ben. 2006. Päivittäisjohtaminen matkailu- ja ravintola-alalla. Helsinki: WSOY Oppimateriaalit Oy.
- Hyppänen, Riitta. 2007. Esimiesjohtaminen liiketoiminnan menestystekijänä. Helsinki: Edita.
- Other material to be announced at the beginning of the course

Learning Methods Lectures, book examination, exercises, online learning

Assessment Exercises and examinations

Further Information One credit for online studies

Financial and operational planning, 4 op KI15BRPJ003 (study unit)

Lecturers

- Seija Pihlajaviita, MSc
- Raija Kangassalo, MA

Objectives

Students will able to interpret financial reports. They will know ways to develop business activities to be economically profitable. Students will be able to prepare performance and financial budgets. They will be familiar with spreadsheet computation software and know how to utilise spreadsheets in their professional domain.

Content

- External accounting, profit and loss account, balance sheet
- Internal accounting, covering notes, pricing, financial planning
- Financial management in the private and public sectors
- Basics of using spreadsheet computation(Excel 2007)
- Utilizing spreadsheets in managing finances and one's own field

Literature / Study Material

- Selander, K. & Valli, V. 2007. Hinnoittelu ja kannattavuus matkailu– ja ravitsemisalalla. WSOY Oppimateriaalit Oy. Helsinki.
- Hyppönen, Ojala, Joutsi. 2007. Tietokoneen käyttötaito 1 Office 2007-ohjelmille. Docendo.
- Lammi. 2007. Tietokoneen käyttötaito 2 Office 2007-ohjelmille. Docendo.
- Other material to be announced during the course

Learning Methods

Lectures, exercises, assignments, online learning (1 credit). Part of the assignments are integrated into the Food Services Management course.

Assessment Active participation, assignments, written exam

Prerequisites Economics of Food Services

Languages of Instruction Finnish

Further Information One credit for online studies

Ruokapalvelun laatuketjun johtaminen, 4 op KI15BRPJ004 (study unit)

Lecturers

- Pihlajaviita Seija, MSc
- Eija Putula-Hautala, MSc

Objectives

Students will be familiar with the food supply chain. They will also be competent in planning and developing the hygiene and in-house control of professional kitchens according to the legislation. Students will understand the concepts of ecologically, economically and socially sustainable development in theory and in practice as regards their work and the food supply. They will also learn responsibility in developing the purchasing activities of professional kitchens. Also, as a consumer, they will learn to choose products and services that coinside with sustainable development.

Content

- Quality of the food supply chain
- Verification and control of quality
- Food hygiene legislation
- In-house control
- Various food systems
- Environmental impacts of food production, life cycle of products and eco-effectivity
- Responsible purchases based on sustainable development

Literature / Study Material

• Hokkanen, S. & Strömberg, O. 2006. Laatuun johtaminen. Sho Business Development Oy.

- Heikkilä, P.M. Ekokeittiön valinnat. Ruokapalvelut ympäristöä säästäen, Porvoo: WSOY.
- Legislation
- Online material
- Other material to be announced at the beginning of the course

Learning Methods

- Lectures, field trips, assignments (e.g. compilation of an in-house control plan)
- Part of the assignments are integrated into the Food Service Management course

Assessment

Active participation in lectures, assignments, and written exams

Prerequisites Food Service Safety

Languages of Instruction Finnish

Further Information Two credits for online studies

Ravitsemuksen erityiskysymykset, 4 op KI15BRPJ005 (study unit)

Lecturers

- Hillevi Eromäki, MSc
- Kaija Nissinen, LSc (Econ.)
- Eija Putula-Hautala, MSc

Objectives

Students will understand the structures of nutrients and the essential reactions in the body associated with metabolism. They will be familiar with the anatomy and physiology related to food consumption as well as the culture, history and the social and ideological backgrounds of food consumption, and they will use this knowledge in planning meals and menus. Students will also understand the significance of diet in the prevention and treatment of illness, and they will be aware of the recommendations for nutrition and diet among various age groups. They will be able to prepare meals according to various special diets, be familiar with the special food stuffs available in the market and be able to follow the development of the field and apply the latest information to their work.

Content

- Energy nutrients, vitamins, minerals, structures of water and metabolic reactions in the body.
- Digestive system, phases of digestion, absorption of nutrients and regulation of the metabolism
- Factors affecting food consumption, food as a cultural and social phenomenum
- Digestive/ metabolic routes of the energy producing nutrients, vitamins and minerals
- Nutritional goals on the national level, recommendations and programmes
- Special diets
- Special diet products and using them to prepare meals

Literature / Study Material

- Häikiö, I. ym. 2002. KEFY. WSOY.
- Winter & Winter. Ihminen ja molekyylit. WSOY.
- Peltosaari, L., Raukonen, H. & Partanen, R. Ravitsemustieto. Otava. 2002.
- Nienstedt, W., Hänninen, O. & Arstila, A. Ihmisen fysiologia ja anatomia.
- Finnish Nutrition Recommendations 2005. Committee Report. National Nutrition Council. Oy Edita Ab. Helsinki.
- Martikainen, T. Ravitsemus ja ruokavaliot. RTY. Latest edition.
- Aro, A., Mutanen, M. ja Uusitupa, M. (eds.). 2005. Ravitsemustiede. Duodecim.
- Other material to be announced at the beginning of the course

Learning Methods

Lectures, assignments, group work, and online studying

Assessment

• Active participation

- Assignments
- Group work
- Examinations

Languages of Instruction Finnish

Further Information One credit for online studies

Basics of law, 2 op KI15BRPJ010 (study unit)

Lecturers Marja Salonen, LLM

Objectives

Students will gain a basic understanding of the Finnish legal system, the more significant legal concepts, how contracts are created, and the new Act on Public Contracts. Upon completion of the course, students will be competent in solving simple legal issues and in this way will have developed an analytical way of thinking. Additionally, they will be prepared to act as one party in a contract, be competent in compiling contracts, which are not burdened by problems of interpretation.

Content

- Finnish legal system
- Jurisprudent concepts
- Judicial Act
- Sale of Goods Act
- Act on Public Contracts

Literature / Study Material

• Hoppu-Hoppu: Kauppa- ja varallisuusoikeuden pääpiirteet, 2007 edition

Learning Methods Lectures, case studies

Assessment Written examination

Palvelujen johtaminen, 12 op KI15BJOHTAM (study entity)

The aim of the Services Management Module is to provide students with the competency to to manage food and customer services according to the service concepts of the service environment. Students will have command of the production and service processes in the service environment. They will understand the concept of operative management and test their skills in management, problem solving, organisation, as well as their ability to withstand pressure, in the service environment. They will also understand the significance of planning work shifts and purchasing as part of a successful production and service processes. Students will be conscious of the issues concerning safety, health, economics and aesthetics in managing food services. They will learn about the marketing of a service concept in theory and in practice. The module will be carried out in various service environments, such as:

- Managing Staff Restaurant Services (Opiskelijaravintola Risetti)
- Managing Restaurant Services (Ravintola Kaarin)
- Managing Café and À la Carte Restaurant Services (Sööpärin tilauspalvelut)
- Managing Food Product and Shop Services (Myymälä Sortti)

Henkilöstöravintolapalvelujen johtaminen, 3 op KI15BRPJ006 (study unit)

Lecturers

Nieminen Kirta, BBus (Hos. Man.)

Objectives

Students will be competent in managing service–orientated food and customer services in staff restaurants. They will have command of the production and service processes in staff restaurants. Students will gain insight into operative management and will practise their management skills, ability to solve problems, organization skills and ability of work

under immense pressure in a service and learning environment. Students will understand the significance of planning work shifts and purchasing as part of a productive service and production process. They will consider safety, economics, health and aesthetics in food services and will be competent in marketing communication.

Content

- Planning and production of catering services
- Management of staff restaurants
- Purchasing
- Planning work schedules

Literature / Study Material

To be announced at the beginning of course.

Learning Methods

- Management of services in a staff restaurant
- Report of the knowledge gained in Basics of Service Management and Service Management courses

Assessment

- Practical work
- Active participation
- Self-evaluation
- · Peer evaluation, customer evaluation
- Assignments and reports

Languages of Instruction Finnish

Ravintolapalvelujen johtaminen, 3 op KI15BRPJ007 (study unit)

Lecturers

Kulmala Katja, BBus (Hos. Man.)

Objectives

Students will be competent in managing food and customer services in accordance with the service concept of a restaurant, they will have command of the production and service processes in a restaurant. Students will be introduced to operative management and test their skills in management, problem solving and organisation, as well as their ability to withstand stress, in service and learning environments. They will become familiar with the significance of planning work shifts and purchasing as part of a successful production and service process. Students will be conscious of safety, health, economics and aesthetics in the management of restaurant services. They will also be competent in applying appropriate marketing to a service concept.

Content

- Planning and production of restaurant services
- Management of the service concept of a restaurant
- Purchasing
- Work shift planning

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Management of restaurant services in a service and learning environment
- Report summarizing the knowledge gained in the Basics of Service Management and Service Management courses

Assessment

- · Practical work
- Active participation
- Self-assessment
- Group assessment
- Customer assessment

• Exercises and reports

Languages of Instruction Finnish

Kahvila– ja tilausravintolapalvelujen johtaminen, 3 op KI15BRPJ008 (study unit)

Lecturers

- Katja Kulmala, BBus (Hos. Man.)
- Paula Juurakko, BBus (Hos. Man.)

Objectives

Students will be competent in managing food and customer services according to the service concepts of cafés and à la carte restaurants. They will be familiar with the production and service processes in cafés and à la carte restaurants. Students will acquire an understanding of operative management and test their management and organisation skills, as well as their ability to withstand pressure, in the service and learning environments. They will also understand the significance of planning work shifts and purchasing as part of productive service and production processes. Students will consider safety, health, economics and aesthetics in managing café and à la carte restaurant services, and they will be competent in carrying out marketing appropriate to a given service concept.

Content

- Planning and production of café and à la carte restaurant services
- Managing the service concept of a café and à la carte restaurant
- Purchasing
- Planning work shifts

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Production of café and à la carte restaurant services in a service and learning environment
- Report summarizing the knowledge gained in the Basics of Service Production and Service Production courses

Assessment

- Practical work
- Active participation
- Self-assessment
- Group assessment
- Customer assessment
- Exercises and reports

Languages of Instruction Finnish

Ruokatuote– ja myymäläpalvelujen johtaminen, 3 op KI15BRPJ009 (study unit)

Lecturers

Paula Juurakko, BBus (Hos. Man.)

Objectives

Students will be competent in managing food and customer services in accordance with the service concept of food products and shops. They will also have command of the production and service processes in food product and shop services. Students will become familiar with operative management and test their skills in management, problem solving and organisation, as well as their ability to withstand stress, in service and learning environments. Students will understand the significance of planning work shifts and purchasing as part of a successful production and service process. They will be conscious of safety, health, economics and aesthetics in managing food products and shop services. Additionally, students will be competent in carrying out marketing based on a service concept.

Content

- Planning and and production of food product and shop services
- Management of the service concept of food product and shop services

- Purchasing
- Planning work shifts

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

- Management of food product and shop services in a service and learning environment
- Report summarizing the knowledge gained in the Basics of Service Management and Service Management courses

Assessment

- Practical work
- Active participation
- Self-assessment
- Group assessment
- Customer assessment
- Exercises and reports

Languages of Instruction Finnish

Palveluliiketoiminnan kehittäminen, 25 op KI15CLIIKKE (study entity)

The Development of Services Module is offered during students' second– and third–year studies, and it involves the planning of a service concept and the theory associated with it. Students will gain knowledge of how to plan a service concept of their choice and to introduce it. They will expand their knowledge in areas such as health, safety or economics as it pertains to planning. They may specialise in business planning, product development, nutrition, communication or marketing, or in designing facilities or planning production. Courses in the module include:

- Research and Development
- Developing a Service Concept
- Developing Aesthetics and a Business Image
- Deloping Nutrition
- Developing Quality and Safety

Research and development, 5 op KI15CRPK001 (study unit)

Lecturers

- Kaija Nissinen, LSc
- Sirkka Nieminen, MA
- Anu Latva–Reinikka, BSc

Objectives

Students will possess skills in development and research. They shall be familiar with a variety of research methods and concepts, scientific principles and be able to implement them in their own work. Students will understand the principles behind scientific thought and have command of basic research concepts. They will be familiar with various research methods and approaches and know how to apply them. They will also be familiar with the conventions for writing a thesis and apply those conventions in their own texts. Upon completion of the course, students will understand the entire process of information retrieval for various information needs, have command of basic techniques for seeking information, and they will know how to critically evaluate and use the information they find. Students will know the conventions for writing a research report, and they will possess readiness needed in carrying out their own thesis writing process.

Content

- Basics in research and development work
- Methodological and theoretical bases
- Approaches to research and basic methods for obtaining information
- Databases in the field of nutrition and how to use them
- Online information searches
- Evaluation and use of information
- Thesis writing process

• Structure, style and language in a research report, revision, sources and citation

Literature / Study Material

- Seinäjoki UAS's Instructions for Writing a Theis
- Hirsjärvi, S., Remes, P. & Sajavaara, P. 2005. Tutki ja kirjoita. 11th edition. Helsinki: Tammi.
- Vilkka, H. 2005. Tutki ja kehitä.
- Vilkka, H. & Airaksinen T. 2004 Toiminnallinen opinnäytetyö.
- Heikkilä T. 2002. Tilastollinen tutkimus. Helsinki: Edita.
- Online and other material provided by the lecturer

Learning Methods

Lectures and assignments

Assessment

- Information retrieval: Evaluation based on assignments (pass/fail)
- Research communication: Research project report
- Methodology: Exams, topic analysis and research plan

Languages of Instruction Finnish

Further Information Two credits for online studies

Palvelukonseptin kehittäminen, 5 op KI15CRPK002 (study unit)

Lecturers

- Tuija Pitkäkoski, LSc (Econ.)
- Kirta Nieminen, BBus (Hos. Man.)

Objectives

Students will understand the meaning of holistic marketing communication as additional marketing value for a company. They will also understand the principles of producing holistic marketing communication through coherent messages and identifiable visual expressions. Studenta will become familiar with with visual and aesthetical expression through practical exercises, and they will understand the communicative effects of different materials, colours and displays. Students will master the basics in designing spaces, buildings and interiors and understand the principles of development according to the holistic company image.

Content

- Visual and aesthetic character in food services
- Development of controlled company image
- Space lay–outs

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, exercises, and assingments

Assessment Exercises and assignments

Languages of Instruction Finnish

Esteettisyyden ja yrityskuvan kehittäminen, 5 op KI15CRPK003 (study unit)

Lecturers

- Tuija Pitkäkoski, LBus
- Kirta Nieminen, BBus (Hos. Man.)

Objectives

Students will understand the significance of holistic marketing communication as provider of additional value in marketing and competition. Students will know how to create a holistic company image through harmonious communication and identifiable visual expression. Through practical exercises, students will be competent in expressing visual and esthetic communication and learn to understand how various materials, colours and settings communicate with and affect customers. Students will also understand the principals of creating a holistic company image according to set goals.

Content

- Aesthetic character and visual impression in food services
- Holistic company image management
- Planning the lay–out of premises

Literature / Study Material

- Lecturers' handouts
- Other material to be announced at the beginning of the course

Learning Methods Lectures, practical assignments

Assessment Assignments and exercises

Ravitsemuksellisuuden kehittäminen, 5 op KI15CRPK004 (study unit)

Lecturers

- Hillevi Eromäki, MSc
- Kaija Nissinen, LSc
- Eija Putula–Hautala, MSc

Objectives

Students will be competent in developing health–promoting services with the awareness of safety, health and economics in that planning. They will utilise the latest research and methods in their work as a nutritionist.

Content

- · Current issues in nutrition research and methods
- Familiarisation with and utilisation of field-related literature
- Project: improving nutritional quality and nutrition education

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, independent development project

Assessment Active participation, book exam, and project work

Further Information Four credits for R&D

Ruoan ja ruokalistojen kehittäminen, 5 op KI15CRPK005 (study unit)

Lecturers

- Kirta Nieminen, BBus (Hos. Man.)
- Hillevi Eromäki, MSc

Objectives

Students will create high-quality and customer-oriented menus. They will be aware of the food production process at the workplace when planning. Students will be competent in creating menus from an ecological, economical, nutritional, cultural and social point of view. They will also be familiar with the chemical reactions and sensory evaluation test

methods of foodstuffs and food production.

Content

- Analysis of current state of facilities
- Menu planning based on the food production process at the workplace
- Calculations of nutritional values
- Cost calculations
- Experimental cooking
- Methods of intuitive evaluation

Literature / Study Material

- Parkkinen, K. & Rautavirta, K. 2007. Utelias kokki. Elintarviketietoa ruoanvalmistajalle. Helsinki: Restamark Oy.
- Tuorila, H., Parkkinen, K. & Tolonen, K. 2008. Aistit ammattikäyttöön. Helsinki: WSOY.
- Tuorila, H. & Hellemann, U. Elintarvikkeet aistien puntarissa. 1999. Helsinki: Yliopistopaino.
- Latest nutritional recommendations
- Other material to be announced during the course

Learning Methods Creating a menu based on the needs in the working world

Assessment Active participation, book exam, development project

Languages of Instruction Finnish

Further Information Three credits for R&D

Laadun ja turvallisuuden kehittäminen, 5 op KI15CRPK006 (study unit)

Lecturers

- Seija Pihlajaviita, MSc
- Kaija Nissinen, LSc (Healthcare)
- Eija Putula-Hautala, MSc
- Liisa Nuotio, MSc

Objectives

Student will be familiar with the HACCP system as part of in-house control and in-house control as part of quality management. They will be competent in developing hygiene and cleaning as methods for improving quality. Students will be aware the more common toxicological risks of food and how to avoid them. They will be prepared to handle crises in the food supply chain.

Content

- HACCP system
- Quality control systems for food services and the production of food stuffs
- Problems and solutions for production hygiene
- Detergents and disinfectants, service value analyses
- Toxicity of food substances
- Harmful compounds found naturally in food stuffs and those that form during food preparation
- Maintenance support in Finland, preparedness of professional kitchens in the public sector

Literature / Study Material

- Korkeala, H. (ed.). 2007. Elintarvikehygienia, ympäristöhygienia ja elintarvike– ja ympäristötoksikologia. WSOY Oppimateriaalit Oy.
- Online material
- Learning material revised yearly

Learning Methods Lectures, assignments and online studying Assessment Active participation, assignments, book exam

Prerequisites Quality Management of the Food Supply Chain

Languages of Instruction Finnish

Further Information

- Two credits for online studies
- One credit for R&D

Projektiopinnot, 23 op KI15CPROJOP (study entity)

Project Studies involve various current and/or typical projects in the field of nutrition. A typical project is one that has been commissioned by a body/organisation in the working world, usually a single development project, but some of the projects are repeated on a regular basis. The projects vary in quality, duration and topic. The roles of the students and the supervisors in the projects may also vary. Students from several classes may be involved in the same project and therefore the roles of the students from these different classes may vary. Students will practise various project duties, such as project manager and project secretary, during their studies. In some situations, students may take part in projects of their interest and also become part of a project group as the specialist in nutrition or financial administrator. Students' independence and responsibility in managing the project grow as their studies progress. The amount of credits students acquire in the projects may vary from one student to the next depending on the role of the student in the project in question. Students will gain experience in project planning, implementation and reporting. They may concentrate areas of interest in the project, such as nutrition, economy, personnel management, etc. The theme of the project is determined by the current situation and the interest of students. The project work involves not only participation in various occasions, but also independently obtaining information and learning. Examples of projects include: adventure projects, nutrition projects, projects for production planning and development projects, aesthetics projects, fair and exhibition projects, quality development projects, training and consultation projects, recipe development projects, business planning and development projects, statistical research projects, and personnel management projects, etc. Compulsory project studies

- Adventure events
- · Business planning and development project
- Fair project
- · Research project
- Quality development project

Optional projects

- Nutrition project
- Project for developing a food project
- Other current project
- Production of Food Experience

Elämystapahtuma, 5 op KI15CPROJ01 (study unit)

Lecturers

- Tuija Pitkäkoski, LSc (Econ.)
- Kirta Nieminen, BBus (Hos. Man.)

Objectives

Student will be familiar with the principles of producing extraordinary experiences and be able to assess the production of experience from the customer's point of view. Students will be competent in planning and organising experiential food events, taking into consideration resources, standards of quality, and various experience themes. Students will also consider the perspectives associated with the food product, atmosphere, interaction with the customer and management.

Content

- Experiential food
- Experiential space and atmosphere
- Experiential customer interaction
- Auxiliary programmes in an experiential event
- Planning and organizing an event

Literature / Study Material To be announced at the beginning of course.

To be announced at the beginning of course

Learning Methods Planning and implementing an experiential event

Assessment

Self-assessment and supervisor's assessment in the practical implementations of the project

Languages of Instruction Finnish

Liiketoiminnan suunnittelun ja kehittämisen projektit, 5 op KI15CPROJ02 (study unit)

Lecturers

- Hanne Vuorenmaa, LBus
- Seija Pihlajaviita, MSc

Objectives

Students will be competent in planning, developing, implementing and reporting business concepts in tourism and catering. They will understand field–related terminology and be able to apply various methods of development in a project. Additionally, students will also know how to budget an planned project or a project already being carried out.

Content

- Business concepts
- Methods of development in business
- Financial planning and financing

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Planning and implementing development projects in business

Assessment Self-assessment and assessment by teachers

Prerequisites Developing Service Concepts

Languages of Instruction Finnish

Further Information

- Five credits for R&D
- Two credits for online learning

Professional Fair Project, 6 op KI15CPROJ03 (study unit)

Lecturers

- Tuija Pitkäkoski, LBus
- Sirkka Nieminen, MA

Objectives

Students will understand the opportunities fairs and exhibitions offer to marketing and promotion. Students will be able to carry out the practical aspects of the three–phase process of fairs and exhibitions: planning, implementation and follow–up. Students will also understand how to plan and implement a functional and visually attractive stand to fulfil marketing objectives and, in the long run, become an economically profitable investment.

Content

• Marketing communication theory with special emphasis on fairs as a means of marketing

- Marketing communication is divided into three parts: communication before, during and after the fairs
- All means of marketing communication
- Practical planning and implementation of fair participation

Literature / Study Material

- Markkinointiviestintä: Vuokko Pirjo (WSOY), Menesty messuilla, Yrityksen opas
- Siukosaari, Anssi 2002. Yhteisöviestinnän opas.
- Keinonen Susa and Koponen Pirjo (Fintra)
- Online and other material

Learning Methods

Lectures and projects

Assessment Project implementation and written assignments associated with it

Further Information One credit for online studies

Research project, 5 op KI15CPROJ04 (study unit)

Lecturers

- Raija Kangassalo, MA
- Sirkka Nieminen, MA
- Kaija Nissinen, LSc
- Other supervising teachers

Objectives

Students will understand the principles of scientfic thought and be able to implement them in their own work. They will be familiar with a variety of research methods and concepts, scientific principles and be able to utilse them to develop the work community. Students will have command of statistics and be able to evaluate and interpret statistical research. They will know how to carry out quantitative research, and describe and analyse data using the SPSS programme, and report their findings. Students will complement their knowledge of information retrieval and familiarise themselves with field–related sources of information. They will possess readiness to carry out thesis work based on statistics.

Content

- Basics in statistical mathematics
- SPSS programme
- Doing statistical research (gathering data, describing and analysing)
- Writing a research report

Literature / Study Material

- Heikkilä, Tarja, 2008. Tilastollinen tutkimus. Edita
- Vilkka H. 2005. Tutki ja kehitä.
- Seinäjoki UAS's Instructions for Writing a Thesis
- Other material to be announced at the beginning of the course

Learning Methods Lectures, exercises, project work

Assessment

The process and report of research project, self-assessment

Languages of Instruction Finnish

Further Information R&D credits: 5

Laadun kehittämisprojekti, 5 op KI15CPROJ05 (study unit)

Lecturers

- Kaija Nissinen, LSc
- Sirkka Nieminen, MA
- Other teachers as supervisors

Objectives

Students will possess skills in development and research and be able to implement them in development work. They will be familiar with scientific principles and be able to implement them in their own work. Students will recognize and analyze developmental needs and make proposals for development. They will be competent in applying operational and scientific methods for developing the work community. Students will also complement their knowledge of information retrieval and familiarise themselves with field-related information sources. They will be competent in carrying out an active thesis writing process.

Content

- Compilation of a development plan
- Implementation of a development project and reporting about it
- Structure, style and language of a project report, revision, sources and citation

Literature / Study Material

- Seinäjoki UAS's Instructions for Writing a Thesis
- Hirsjärvi, S., Remes, P. & Sajavaara, P. 2005. Tutki ja kirjoita. 11th edition. Helsinki: Tammi.
- Heikkilä T. 2002. Tilastollinen tutkimus. Helsinki: Edita.
- Vilkka H. & Airaksinen T. Latest edition. Toiminnallinen opinnäytetyö. Helsinki: Tammi.

Learning Methods Lectures, assignments and project work

Assessment Process and reporting on the development project, self-evaluation

Languages of Instruction Finnish

Further Information Five credits for R&D

Ravitsemusprojekti, 5 op KI15CPROJ06 (study unit)

Lecturers

- Kaija Nissinen, LSc
- Sirkka Nieminen, MSc

Objectives

Students will become familiar with the realm of the media with emphasis on the use of newspapers as a communication channel for nutritional issues, and they will be competent in writing about field-related topics in the media. Students will also be competent in planning and independently carrying out counseling and guidance about nutritional issues, and have command of a number of methods and material for teaching.

Content

- Planning and producing a newspaper article related to nutrition
- Planning and carrying out nutrition education project

Literature / Study Material

- Kotilainen, L. 2003. Parempi lehtijuttu. Helsinki: Inforviestintä.
- Mykkänen, P. 1998. Yhteisölehti. Tekijän opas. Helsinki: Inforviestintä.
- Wiio O. Terveysviestinnän opas. Latest edition.
- Curry, K. & Jaffe, A. (latest edition). Nutrition Counselling & Communication Skills.
- Fogelholm, M. 2001. Ratkaisuja ravitsemukseen. Palmenia-kustanus.
- Vertio, H. 2003. Terveyden edistäminen.
 Torkkola (ed.). 2002. Terveysviestintä.
- Additional material to be announced at the beginning of the course.

Learning Methods

Lectures, exercises, workshops, planning and writing a newspaper article, planning and carrying out nutrition education events

Assessment

- Newspaper article
- Carrying out and reporting on a nutrition education event

Further Information

- One credit for online studies
- Two credits for R&D

Ruokatuotteen kehittämisprojekti, 5 op KI15CPROJ07 (study unit)

Lecturers

Kirta Nieminen, BBus (Hos. Man)

Objectives

Students will understand the product development process and productisation in theory. They will be competent in planning, carrying out and managing customer–oriented, cost–effective, nutritional and innovative food product development and productisation. Students will be aware of the factors involved in planning recipes, testing and standarising recipes. They will have command of food chemistry and sensory evaluation research methods in the food product development process.

Content

· Product development and productisation in the working world

Literature / Study Material

- Tuorila, H. & Appeldye, U. Elintarvikkeiden aistinvaraiset tutkimusmenetelmät. Helsinki: Yliopistopaino.
- Other material to be announced

Learning Methods Development project in the working world

Assessment Process of a development project, reporting and self-evaluation

Languages of Instruction Finnish

Further Information Three credits for R&D

Muu ajankohtainen projekti, 5 op KI15CPROJ08 (study unit)

Lecturers

- Hanne Vuorenmaa, LBus
- Kaija Nissinen, LSc

Objectives

Students will learn to plan, implement and report on topical projects. They may specialise in nutrition, economics, personnel management, etc., according to their interests. The themes of the projects are determined according to the needs of the working world, the current situation and students' own interests. Implementation of a project, the literature required and basis for evaluation are determined for each project separately.

Further Information Five credits for R&D

Production of Food Experience, 5 cr KI15CPROJ09 (study unit)

Lecturers

- Tuija Pitkäkoski, LSc
- Päivi Saarimäki, BSc (Food Management)

Objectives

Students will acquire insight to food, making meals and the holistic principals involved in creating food experiences. They will develop their knowledge of how to create a customer–oriented experience and understand the principals of creating holistic and harmonized impressions around food experiences.

Content

The choice, processing and preparation of food and food service displays are discussed and assessed. Special focus is placed on cuisine and customer experiences. Students learn the balanced use of colour, composition and choice of materials that create a pleasant atmosphere. Students will complete exercises that promote their expertise in table settings and food displays.

Literature / Study Material Lecturers' handouts

Learning Methods Lectures, practical assignments

Assessment Practical assignments, written assignments

ELECTIVE STUDIES, 10 op VAVAL (study entity)

Students are required to complete 10 credits worth of elective studies chosen either from those on offer at Seinäjoki University of Applied Sciences or other universities of applied sciences. Students complete their elective studies first and foremost in their second and third years of study. The head of degree programme must have the elective studies chosen elsewhere than in Seinäjoki UAS approved by the head of degree programme. If a student wishes to complete online UAS studies, (s)he must receive permission from the degree programme; otherwise (s)he takes them at his/her own expense. The same is true for other courses taken in other educational institutions. Students may choose elective courses at Seinäjoki UAS at http://ops.seamk.fi. The elective courses offered at the School of Food Management vary somewhat each year. Examples of elective courses on offer (not necessarily every year):

- Language courses (Spanish, Italian, French, English Conversation) (2 op)
- Family and Succession (2 op)
- Tutoring (2 op)
- First-aid (2op)
- Experience Production (2op)
- Challenges of Being a Manager (20p)
- Confectionery Baking (20p)
- Serving Alcoholic Beverages (20p)
- Practising for and participating in the RESTO competition

Basic training, 12 op KI15EPEHAR1 (study unit)

Lecturers

- Katja Kulmala, BBus (Hos. Man.) (training in Finland)
- Erja Heikkilä, MSc (international training)

Objectives

Upon completion of the Basic Training, students will be developed in their professional skills in catering services. They will have a clear picture of the jobs, job descriptions and responsibilities in the catering business. Students will have participated in a diverse range of activities in food production while considering profitability, technology, safety and customer service. They will have adept communication skills, and they will be competent in evaluating their own progress and in developing as the member of a work community. Doing the practical training either completely or in part abroad is recommended.

Content

Students are responsible for choosing their practical training place according to set goals. It may be a public or private

organisation that offers meal services. Students will compile their own goals for the training and work according to those goals. They will keep a journal of their learning progress and write up a report about their training, which contains the tasks they performed during their training.

Learning Methods

Practical work in food production according the policies and schedule of the catering business (including evenings and weekends), assignments associated with the work place, journal and self–evaluation

Assessment Report and employer's assessment

Prerequisites

- Basics in Service Production
- Service Production

Specialised training, 18 op KI15EERHAR1 (study unit)

Lecturers

- Eija Putula-Hautala, MSc (training in Finland)
- Erja Heikkilä, MA (international training)

Objectives

Upon completion of the practical training, students will possess an understanding of the duties in their chosen professional field and the future visions of the field. They will critically reflect upon their progress in the field and as a member of a work coimmunity. Doing the practical training either completely or in part abroad is recommended.

Content

- Choosing a place of training according to one's career plans
- Training plan (content and duties), approved by the training supervisor
- Duties: managing, consultation, marketing, product development, etc.
- Report about training

Learning Methods Working as a member of work community, journal

Assessment Report and employer's evaluation

Prerequisites

- Basic Training
- Service Management Training
- Service Management

Thesis, 15 op KI15FTU0001 (study unit)

Lecturers

- Kaija Nissinen, LSc
- Hanne Vuorenmaa, LBus
- Sirkka Nieminen, MA
- Other supervising teachers

Objectives

Students will be competent in planning and implementing a research or development project, which combines the essential body of knowledge gained in preceeding studies and the needs of the working world. Students will develop and provide indication of their readiness and apply their knowledge and skills in practical specialist tasks associated with their professional studies. They will be competent in compiling a research plan, presenting the plan, and preparing their work for the thesis seminar. Students sit a Maturity Test in which they indicate their knowledge of Finnish or Swedish and the contents of their thesis.

Content

- Planning, producing and reporting of a thesis
- Topic analysis
- Planning seminar
- Present the results in the thesis seminar and poster
- Maturity Test

Literature / Study Material

- SeAMK:n opinnäytetyöohjeisto
- Hirsjärvi, S., Remes, P. & Sajavaara, P. 2005. Tutki ja kirjoita. 11th edition. Helsinki: Tammi.
 Heikkilä, T. 2002. Tilastollinen tutkimus. Helsinki. Edita.
- Vilkka, H. 2005. Tutki ja kehitä. Keuruu: Tammi.

Learning Methods

- Goal-oriented, organised and purposeful seeking and processing of information, utilising methods, practical implementation and reporting
- Nominated supervisor for each phase

Assessment

- Graded on a scale of 1–5
- Maturity Test after the final copy of the thesis has been submitted for grading (pass/fail)
- More detailed information about evaluation: Seinäjoki UAS's Instructions for Writing a Thesis and the school's Maturity Test Bulletin

Prerequisites

The thesis writing process begins at the end of students' studies.

Degree Programme in Information Technology (In Finnish)

Degree Programme in Information Technology (In Finnish), 240 cr (1.9.2008) TITE 2008

Code	ame		Study Year				
		1. 2					
KL04AT20	BASIC STUDIES 60						
KL04AT11	Supporting studies		1	1		3	
KL04AT10011	Introduction to technical studies	X				1	
KL04AT10101	Research methods			х		2	
KL04AT21	Languages and communication	·	1	1		18	
KL04AT10050	English 1	x				3	
KL04AT10060	English 2		x			3	
KL04AT10070	English 3				x	3	
KL04AT10040	Swedish	x				3	
KL04AT10020	Communication and negotiation skills 1	х				3	
KL04AT10030	Communication and negotiation skills 2			x		3	
KL04AT30	Mathematics					18	
KL04AT30000	Algebra and Trigonometry	x				4	
KL04AT30100	Vectors and analytic geometry	x				3	
KL04AT10135	Differential and integral calculation	x				3	
KL04AT30300	Computer aided mathematics		x			4	
KL04AT30400	Tietotekniikan matematiikka			x		4	
KL04AT35	Physics					15	
KL04AT35000	Mechanics	х				3	
KL04AT35100	Electricity and magnetism	х				3	
KL04AT35200	Thermophysics		х			3	
KL04AT35300	Physics laboratory works		х			3	
KL04AT35400	Wave motion and modern physics		х			3	
KL04AT41	Information technology		T			6	
KL04AT10300	Micro computer technology	х				3	
KL04AT10311	Office applications	х				3	
KL04BT	PROFESSIONAL STUDIES					126	
KL04BT10	COMMON PROFESSIONAL STUDIES					86	
KL04BT100	Software engineering		T			27	
KL04BT20051	Basics of programming 1	x				3	
KL04BT20052	Basics of programming 2	x				3	
KL04BT40060	C Programming language	x				4	
KL04BT50070	Object oriented programming		x			4	
KL04BT51040	C++ programming			x		4	
KL04BT51010	Data structures and algorithms		х			4	

KL04BT50010	Operating systems		x			3	
KL04BT50011	Linux Operating system		x			2	
KL04BT200	Embedded systems 1						
KL04BT40010	Embedded systems	x				4	
KL04BT32031	Embedded systems programming		x			4	
KL04BT40032	Project in embedded systems			x		5	
KL04BT300	Data communication	communication					
KL04BT53011	Data communication		x			4	
KL04BT50052	Computer networks			x		4	
KL04BT42041	Wireless data transmission			x		4	
KL04BT50060	Navigation technologies			x		3	
KL04BT400	Electrical engineering and electronics				-	19	
KL04BT20010	Electrical engineering	x				5	
KL04BT20220	Electrical safety	x				2	
KL04BT40110	Printed circuit board design	x				3	
KL04BT40120	Basics of digital technology		x			3	
KL04BT40122	Special project in embedded systems	x				3	
KL04BT40131	Basics of electronic		x			3	
KL04BT500	Automation engineering						
KL04BT20230	Basics of automation		x			3	
KL04BT20240	PLC programming		x			3	
KL04BT600	Economy and management					6	
KL04BT20300	Industrial economics	x				3	
KL04BT20301	Human resources management				x	3	
KL04BTOHTE	SOFTWARE ENGINEERING PROFESSIONAL STUDIES					40	
KL04BTIJÄ	Information systems module					16	
KL04BT50020	Databases		x			3	
KL04BT50040	Application development		х			3	
KL04BT52010	Basics of software production			x		3	
KL04BT51081	Computer graphics			x		4	
KL04BT51051	Windows systems programming			x		3	
KL04VEMO	Information systems module 24						
KL04BT52030	Software project			х		5	
KL04BT50180	Basics of mobile programming		х			5	
KL04BT50181	Symbian C++				x	3	
KL04BT53040				х		5	
KL04BT40040	Network programming						
ILLO ID I 100 10	Embedded PC systems			x		3	
KL04BT40042	Embedded PC systems Server programming 1			x x		3 3	
KL04BT40042 KL04BTSUJÄ	Network programming Embedded PC systems Server programming 1 EMBEDDED SYSTEMS PROFESSIONAL STUDIES			X X		3 3 40	
KL04BT40042 KL04BTSUJÄ KL04BTELEK	Network programming Embedded PC systems Server programming 1 EMBEDDED SYSTEMS PROFESSIONAL STUDIES Electronics			X X		3 3 40 17	
KL04BT40042 KL04BTSUJÄ KL04BTELEK KL04BT41011	Network programming Embedded PC systems Server programming 1 EMBEDDED SYSTEMS PROFESSIONAL STUDIES Electronics Elektroniikan mittaustekniikka		X	X X		3 3 40 17 3	
KL04BT40042 KL04BTSUJÄ KL04BTELEK KL04BT41011 KL04BT41041	Network programming Embedded PC systems Server programming 1 EMBEDDED SYSTEMS PROFESSIONAL STUDIES Electronics Elektroniikan mittaustekniikka Elektroniikan sovellukset		X X	X X		3 3 40 17 3 3	
KL04BT41050	Electronic production engineering			x		3	
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KL04BT41042	Elektroniikan projektityö			x		4	
KL04BTDIGI	Digital technology				13		
KL04BT42010	Digital technology		x			3	
KL04BT42030	Signal processing			x		3	
KL04BT42020	Circuit design			x		3	
KL04BT40121	Networks and Bus interfaces			х		4	
KL04BTAUTI	Automaation tietotekniikka					10	
KL04BT43031	Process automation		x			3	
KL04BT40041	Embedded PC systems			x		3	
KL04BT43021	Basics of control engineering			x		4	
KL04BTTIVE	COMPUTER NETWORK TECHNOLOGY PROFESSIONAL STUDIES					40	
KL04BTTDIGI	Digital technology					13	
KL04BT32010	Digital technology	x				3	
KL04BT33040	Laboratory assignements in electronics	x				3	
KL04BT42031	Signal processing	х				3	
KL04BT40123	Networks and Bus interfaces		x			4	
KL04BTTTIJÄ	Information systems					9	
KC04BT50020	Databases	х				3	
KL04BT50041	Application development		x			3	
KL04BT40043	Server programming 1			x		3	
KL04BTTPAAR	Server architectures					8	
KL04BT50012	Linux server			x		4	
KL04BT50014	Windows – Server			x		4	
KL04BTTTITI	Data communication and information networks					10	
KL04BT53030	Telecommunication laboratories	х				3	
KL04BT53031	Networking, routers and routing basics	x				4	
KL04BT53032	WAN technologies	х				3	
KL04DT90	FREE-CHOICE STUDIES				10		
KL04ET21	PRACTICAL TRAINING				30		
KL04FT30 THESIS					15		

Study Descriptions

BASIC STUDIES, 60 op KL04AT20 (study entity)

The aim of the Basic Studies is to provide students with a foundation of knowledge and methodology for reasoning in the natural sciences and to provide them with readiness to acquire field–related professional skills and to complete their Professional Studies.

Research methods, 2 op KL04AT10101 (study unit)

Lecturers Jorma Mettälä, LSc (Eng.)

Objectives

Students will acquire skills necessary in data acquisition for their thesis. They will be familiar with various research methods and be able to apply them in their thesis writing process.

Content

The course involves the use of the Internet, and library and university databases. Students will be familiar with scientific research methods and how to apply them to their own thesis.

Literature / Study Material To be announced.

Learning Methods Lectures and assignments

Assessment Assignments and exam

English 1, 3 op KL04AT10050 (study unit)

Lecturers Anne Vuokila, MA

Objectives

Students will advance their skills in language learning and be competent in finding information in dictionaries, research articles, and on the Internet and in this way become familiar with terminology used in their field. Upon completion of the course, students will be competent in telling others about their education, country and its industry. They will be aware of the differences in communicative situations in Finnish and in English, and they will be competent in communicating in everyday situations and at work using Enlish. They will also be familiar with field–related terminology.

Content

- Telling about oneself and one's education
- Finnish industry and facts about Finland
- Product descriptions
- Basic hydraulic and material related terminology (integration)
- Basic IT terminology and components
- Basic mathematical terms and shapes in English
- How to search for and process information (Internet article)

Literature / Study Material Mustonen F. & Rautelin J: English Booster for Engineering St

Mustonen E. & Rautelin J: English Booster for Engineering Students. WSOY

Learning Methods Oral exercises, such as dialogues, discussions and presentations, written assignments

Assessment

Using English actively (oral presentations and dialogues), completion of written assignments and exercises, exam. All parts of the course must be completed successfully to receive a grade for the course.

Prerequisites Command of the basic structures of English

Languages of Instruction Finnish and English

English 2, 3 op KL04AT10060 (study unit)

Lecturers Anne Vuokila, MA

Objectives

Students will have command of basic field–related terminology and be competent in using it when speaking and writing. Upon completion of the course, students will

- understand the different stages of business correspondence and know how to write a quotation in English,
- be familiar with typical field-related communications by phone or e-mail,

ops.seamk.fi - Study Guide - Seinäjoki University of Applied Sciences

- know how to tell about a company's operations in English give a presentation about it,
- be familiar with the vocabulary related to trade fairs,
- be able to describe industrial processes in English,
- be familiar with basic vocabulary and forms for mathematics, and
- know how to write a CV.

Content

- Business correspondence
- Business communication by e-mail and phone
- Company presentations
- Trade fairs
- Describing processes
- Mathematical terms

Literature / Study Material To be announced.

To be announced.

Learning Methods

Oral exercises such as dialogues, discussions and presentations, and written assignments

Assessment

Using English actively (oral presentations and dialogues), completion of written assignments and exercises, exam. All parts of the course must be completed successfully to receive a grade for the course.

Languages of Instruction Finnish and English

English 3, 3 op KL04AT10070 (study unit)

Lecturers Anne Vuokila MA

Objectives

Upon completion of the course, students will

- be familiar with the various phases of applying for a job in English,
- understand the basics and conditions for technical reading and writing,
- have command of the procedures involved in meetings,
- be familiar with advanced technical terminology, and
- be able to prepare a thesis abstract in English.

Content

- Applying for a job
- Technical reading and writing
- Meetings and negotiations

Literature / Study Material

To be announced.

Learning Methods

Oral exercises such as dialogues, discussions and presentations, and written assignments

Assessment

Using English actively (oral presentations and dialogues), completion of written assignments and exercises, exam. All parts of the course must be completed successfully to receive a grade for the course.

Languages of Instruction Finnish and English

Swedish, 3 op KL04AT10040 (study unit)

Objectives

Upon completion of the course, students will be competent in communicating in Swedish at work. They will be able to participate actively in interactive communication, and they will know how to acquire and use field-related information.

Content

- Education, applying for a job, working
- Work environment and society
- Customer contacts
- General purpose texts
- Basic field-related terminology

Literature / Study Material To be announced.

Learning Methods Lectures, listening comprehension and oral exercises, written assignments in groups and independently.

Assessment Active participation in lectures, mid-term and final exam

Languages of Instruction Finnish and Swedish

Communication and negotiation skills 1, 3 op KL04AT10020 (study unit)

Lecturers Pia–Mari Riihilahti, MSc

Objectives

Upon completion of the course, students will

- understand the structures of the communication process, the various factors affecting the process and apply this knowledge to communicative situations in the working world,
- use proper language in writing documents needed at work,
- be able to create a standardized document and knows the phases involved in business correspondence,
- know how to conduct themselves when looking for a job and to compile a job application and CV,
- know how to speak in public and give good presentations,
- understand how cultural differences affect the communication process, and
- be competent in writing summaries of research texts.

Content

- Structure and significance of communication in the working world
- Team work
- Everyday communication at the workplace
- Standards
- Business correspondence
- Job applications, job interviews, and CVs
- Non-verbal communication and the significance of it in various situations
- · Book report
- Cultures and communication
- Grammar

Literature / Study Material

Kauppinen, A., Nummi, J. & Savola, T: Tekniikan viestintä. Edita.

Learning Methods

Group work, presentations, oral presentations, and written assignments

Assessment

Active participation in the classroom, completion of written assignments, exam. All part must be approved to receive a grade for the course.

Languages of Instruction Finnish

Communication and negotiation skills 2, 3 op KL04AT10030 (study unit)

Lecturers Pia–Mari Riihilahti, MA

Objectives

Upon completion of the course, students will

- be familiar with the concept of process writing and its advantages,
- be competent in producing formal written material,
- be able to write clear instructions and specifications,
- know how to write scientific reports and create a bibliography,
- have skill in reasoning and debating,
- have command of various communicative situations, e.g. presentations, discussions, and
- have knowledge of negotiation procedures and meetings.

Content

- Writing instructions and specifications
- Proposals
- Reports
- Analyzing texts and critical evaluation of sources
- Academic writing
- Argumentation
- Presentations
- Negotiations and meetings
- Grammar

Literature / Study Material Kauppinen A., Nummi J. & Savola T: Tekniikan viestintä. Edita.

Learning Methods Group work, oral presentations, and written assignments

Assessment

Active participation in class, completion of written assignments and exercises, and exam. All parts of the course must be approved to receive a grade for the course.

Languages of Instruction Finnish

Algebra and Trigonometry, 4 op KL04AT30000 (study unit)

Lecturers

- Pasi Mikkonen, PhD
- Jyri Lamp, PhD

Objectives

Students will understand mathematical concepts (see Contents) and methods, and they will be able to use them to solve the problems in technology.

Content

- Simplification of algebraic expressions
- Equations
- Trigonometry
- Vectors

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, calculations and independent study

Assessment Exam + calculations

Vectors and analytic geometry, 3 op KL04AT30100 (study unit)

Lecturers

- Pasi Mikkonen, PhD
- Jyri Lamp, PhD

Objectives

Students will understand mathematical concepts and methods and be able to use them to solve problems in the field of technology.

Content Vectors and analytical geometry

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, calculations and independent studying

Assessment Calculations and an examination

Prerequisites

- Algebra
- Trigonometry

Differential and integral calculation, 3 op KL04AT10135 (study unit)

Lecturers

- Jyri Lamp, PhD
- Pasi Mikkonen, PhD

Objectives

Students will understand mathematical concepts and methods (see Contents) discussed during the course, and they will be able to use them to solve the problems in technology.

Content Differential and integral calculus

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, calculaitons and independent study

Assessment Exam + calculations

Prerequisites First-year mathematics courses

Languages of Instruction Finnish

Computer aided mathematics, 4 op KL04AT30300 (study unit)

Lecturers Pasi Mikkonen, PhD

Objectives Students will have command of MatLab software in solving mathematical. They will also understand its advantages and limitations.

Content

- Using MatLab: solving equations, drawing diagrams, matrices and vectors, processing data, derivation and integration
- Examples and exercises for Professional Studies

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures and computer exercises

Assessment Exam and exercises

Prerequisites

- First-year mathematics courses
- Differential and Integral Calculus

Tietotekniikan matematiikka, 4 op KL04AT30400 (study unit)

Lecturers Pasi Mikkonen, PhD

Objectives

Students will understand the mathematical concepts and methods stated in the Contents. They will know how to apply them in solving problems in the field of technology.

Content

- Discrete mathematics
- Encryption and security
- Algorithms

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, calculations and independent study

Assessment Exam and calculations

Mechanics, 3 op KL04AT35000 (study unit)

Lecturers Jouni Björkman, PhD

Objectives

Students will acquire basic knowledge of technology–based physics in the areas stated in the Contents and be prepared to use that knowledge in further studies and the working world. Students will be competent in solving problems in physics using models and in presenting their results in an appropriate manner.

Content

Mechanics of a rigid object: kinematics of a progressive and rotaitng object, dynamics and gravitation

Literature / Study Material

- Hautala et al. (latest edition). Insinöörin (AMK) Fysiikka, osa 1, Lahden teho-opetus.
- Tekniikan kaavasto. Tammertekniikka.

Learning Methods

The course comprises 40 h of contact teaching: lectures and calculations. Eighty-percent attendance is required in the calculation exercises.

Assessment

To complete the course, students sit a final exam. Also, students must complete at least 30 % of the calculations to receive a grade for the course. Participation in the course and the requirements for the calculations are a prerequisite for participating in the re–take exam. The calculations requirement is not applied to students who have completed advanced physics in upper secondary school (8 courses), and they are entitled to take the final exam directly.

Prerequisites

Knowledge of physics equivalent to one compulsory course in upper secondary school in addition to the physics learned in secondary school.

Electricity and magnetism, 3 op KL04AT35100 (study unit)

Lecturers

Jouni Björkman, PhD

Objectives

Students will acquire basic knowledge of technology–based physics in the areas stated in the Contents and be prepared to use that knowledge in further studies and the working world. Students will be competent in solving problems in physics using models and in presenting their results in an appropriate manner.

Content

Electrostatics, electrodynamics and magnetism

Literature / Study Material

- Hautala et al. (latest edition). Insinöörin (AMK) Fysiikka, osa 1.
- Peltonen et al. (latest edition). Insinöörin (AMK) Fysiikka, osa 2 Lahden teho-opetus.
- Tekniikan kaavasto. Tammertekniikka.

Learning Methods

The course comprises 48 h of contact teaching: lectures and calculations. Eighty-percent attendance is required in the calculation exercises.

Assessment

To complete the course, students sit a final exam. Also, students must complete at least 30 % of the calculations to receive a grade for the course. The calculations requirement is not applied to students who have completed advanced physics in upper secondary school (8 courses), and they are entitled to take the final exam directly.

Prerequisites

Knowledge of physics equivalent to one compulsory course in upper secondary school in addition to the physics learned in secondary school.

Thermophysics, 3 op KL04AT35200 (study unit)

Lecturers

- Jouni Björkman, PhD
- Jyri Lamp, PhD

Objectives

Students will acquire basic knowledge of technology–based physics in the areas stated in the Contents and be prepared to use that knowledge in further studies and the working world. Students will be competent in solving problems in physics using models and in presenting their results in an appropriate manner.

Content

- Hydrostatics
- Hydrodynamics
- Mechanics of solids and fluids
- Thermophysics
- Thermodynamics

Literature / Study Material

- Hautala et al. (latest edition). Insinöörin (AMK) Fysiikka, osa 1. Lahden teho-opetus.
- Tekniikan kaavasto. Tammertekniikka.

Learning Methods

The course comprises 48 h of contact teaching: lectures and calculations. Eighty-percent attendance is required in the calculation exercises.

Assessment

To complete the course, students sit a final exam. Also, students must complete at least 30 % of the calculations to receive a grade for the course. The calculations requirement is not applied to students who have completed advanced physics in upper secondary school (8 courses), and they are entitled to take the final exam directly.

Prerequisites Mechanics

Physics laboratory works, 3 op KL04AT35300 (study unit)

Lecturers

- Jouni Björkman, PhD
- Jyri Lamp, PhD

Objectives

Students will acquire basic knowledge of experimental measurements in physics, processing and reporting results, and the benefits of experiential physics in the various areas of technology. Work in the laboratory will develop students' skills in information technology, language skills and readiness to work on teams. Laboratory work complements the theory students learn in the classroom.

Content

Work in the physics laboratory

Literature / Study Material

Guidelines for working in the physics laboratory (Seinäjoki UAS, School of ICT)

Learning Methods

As members of a team, students will make observations and measurements on the technical aspects of central phenomena in physics. They will analyse results and compile technical reports.

Assessment Laboratory work, reports, and final exam

Prerequisites

- Mechanics
- Theory of Electricity and Magnetism
- Thermodynamics

Wave motion and modern physics, 3 op KL04AT35400 (study unit)

Lecturers Jouni Björkman, PhD

Objectives

Students will acquire basic knowledge of the theory of wave motion and modern physics needed for the working world and further education. Students will be competent in solving problems in physics using models (equations) and presenting results in a proper manner.

Content

- Theory of wave motion
- Modern physics

Literature / Study Material

- Peltonen et al. (latest edition). Insinöörin (AMK) Fysiikka, osa 2. Lahden teho-opetus.
- Tekniikan kaavasto. Tammertekniikka.

Learning Methods

The course comprises 40 h of contact teaching: lectures and calculations

Assessment Final exam

Micro computer technology, 3 op KL04AT10300 (study unit)

Lecturers

Alpo Anttonen, MSc (Eng.)

Objectives

Upon completion of the course, students will be competent in taking the necessary measures to maintenance and expand personal computers.

Content

- PC structure
- Structures and functions of peripheral devices
- Processors and basic connections
- Magnetic and optic memory
- Monitors, voice cards, scanners and printers

Literature / Study Material

- Lähteinen–Pietikäinen: PC–tekniikan käsikirja. Helsinki Media.
- Inside PC–laitetekniikka. Reima Flyktman IT Press.

Learning Methods Lectures, exercises and laboratory work

Assessment Exercises, completion of laboratory assignments and an examination

Languages of Instruction Finnish

Office applications, 3 op KL04AT10311 (study unit)

Lecturers Jukka Mäntylä

Objectives

Students will be familiar with the software and computer systems used at Seinäjoki UAS, and they will be competent in using that software. Upon completion of the course, students will be familiar with basic IT terminology, understand the role of IT in society and understand how IT can be applied to their chosen field.

Content

- Exercises pertaining to Seinäjoki UAS's data processing systems (Intranet, Student Register, online learning, equipment)
- Online services (Internet and email)
- Word processing, spreadsheets, graphics, mathematics software
- Creating a home page

Literature / Study Material

- Juha Paananen, Tietotekniikan peruskirja. Docendo.
- Software guidebooks
- Lecture notes

Learning Methods Lectures, exercises and independent study

Assessment Written exam and approved exercises

Basics of programming 1, 3 op KL04BT20051 (study unit)

Lecturers Hilkka Niemelä, MA

Objectives

Students will have command of the basics in programming and structured program design. They will learn to design, code, document and test small-scale console applications.

Content

Basics language structures: types, statements, input/output, selection, looping, branching, methods

Literature / Study Material To be announced.

Learning Methods Lectures and exercises

Assessment Assessment is based on completed exercises and an exam.

Basics of programming 2, 3 op KL04BT20052 (study unit)

Lecturers

- Hilkka Niemelä, MA
- Jukka Mäntylä, MA

Objectives

The course provides in-depth knowledge of structured program design. Students will also learn to use the components of a graphical user-interface. They will be competent in designing, coding, documenting and testing small-scale interface applications.

Content

- User-interface components
- · Layouts and connecting transactions to components
- Using objects

Literature / Study Material To be announced.

Learning Methods Lectures and exercises

Assessment Assessment is based on completed exercises and an exam.

Prerequisites Basics of Programming I

C Programming language, 4 op KL04BT40060 (study unit)

Lecturers Seppo Stenberg

Objectives

Students will acquire basic knowledge of the co-operative use of computers and embedded devices and of simple methods of control and monitoring. They will also be introduced to solutions for gathering information and saving it. They will learn about C-programming in a hardware-oriented environment.

- C–programming tools
- Connecting embedded devices to a computer

• Gathering gauging data with a separate memory card or an embedded device appropriate for the purpose

Literature / Study Material

- Online material
- Kernighan & Ritchie: The C Programming Language

Learning Methods Lectures and exercises

Assessment Exam and exercises

Prerequisites

- Basics of Programming
- Basics of Electronics

Languages of Instruction Finnish

Object oriented programming, 4 op KL04BT50070 (study unit)

Lecturers Petteri Mäkelä, MSc

Objectives Students will acquire insight into object–oriented programming, its concepts and principles.

Content

- Class and object
- Encapsulation
- Inheritance and polymorphism
- Java syntax
- Classification
- Abstract classes
- Class libraries

Literature / Study Material Vesterholm, M., Kyppö, J. Uusin painos. Java-ohjelmointi. Talentum Media Oy. ISBN 952-14-0849-9

Learning Methods Lectures and exercises

Assessment Exam and exercises

Prerequisites Basics in Programming

Languages of Instruction Finnish

C++ programming, 4 op KL04BT51040 (study unit)

Lecturers Petteri Mäkelä, MSc (Eng.)

Objectives

Students will become familiar with the fundamentals of C++ language programming development and advance their knowledge of object-oriented programming. They will also acquire knowledge of basic data structures and how to utilise the C++ Standard Template Library.

- Differences between C++ language and C and Java programming languages
- Class types and encapsulating
- Class member variables
- Object-oriented and class-specific methods
- Automatic and dynamic memory residency
- C++ Standard Template Library

Literature / Study Material Hietanen, P. 2001. C++ ja olio–ohjelmointi. Docendo Finland Oy. Jyväskylä. ISBN 951–846–000–0.

Learning Methods Lectures and assignments

Assessment Exam and assignments

Prerequisites

- Object–oriented programming
- Hardware–oriented programming

Data structures and algorithms, 4 op KL04BT51010 (study unit)

Lecturers Petteri Mäkelä, MSc

Objectives

Students will learn to apply advanced data structures and algorithms in programme designing. They will also learn to use data structure classes and the algorithms associated with them in object–oriented programming.

Content

- Charts, ring buffers, linked lists, pushup lists, push-down lists, and tree structures
- Sorting and search algorithms
- Java language
- Threads and synchronization methods

Literature / Study Material Vesterholm M. and Kyppö J. 2004. Java–ohjelmointi. Talentum Media Oy. ISBN 952–14–0849–9

Learning Methods Lectures and exercises

Assessment Exercises, assignment and an examination

Prerequisites Object-oriented Programming

Languages of Instruction Finnish

Operating systems, 3 op KL04BT50010 (study unit)

Lecturers Alpo Anttonen, MSc (Eng.)

Objectives

Students will learn the concepts associated with operating systems and will be introduced to memory management and filing systems.

- Concepts associated with operating systems
- Process management
- Sychronization and communication

- Memory control and hierarchy
- Control of peripheral devices
- Basics of Linux

Literature / Study Material

- Haikala: Käyttöjärjestelmät, Modeemi Ry.
- Ernvall: Käyttöjärjestelmien perusteet. Opintomoniste, Jyväskylän yliopisto.
- Lecture notes

Learning Methods Lectures, practical exercises on the computer

Assessment Exercises and examination

Prerequisites Information Technology

Languages of Instruction Finnish

Linux Operating system, 2 op KL04BT50011 (study unit)

Objectives

Student will learn how to use and maintain a Linux workstation.

Content

- Linux operating system
- Practising basic commands
- Installing the Linux system into KDE and Gnome workstation environments
- Maintaining a workstation

Literature / Study Material

Material provided by the teacher.

Learning Methods

Lectures and assignments completed in the laboratory or at home

Assessment Classroom work and an exam

Embedded systems, 4 op KL04BT40010 (study unit)

Lecturers

- Seppo Stenberg, MSC (Eng.)
- Heikki Palomäki, MSC (Eng.)

Objectives

Students will learn the basic structures and function of micro–controllers and how to create a embedded system using a micro–controller. Additionally, students will learn about hardware–oriented programming in Assembly and C language. Students will become faqmiliar with hardware–oriented programming through various applications and exercises. Students will be competent in creating a programme and electronics for a small embedded system.

Content

- Hardware-oriented C language and, if necessary, Assembly language
- C translator
- Programming programme and simulator + use and maintenance
- 8- bite micro-controller and peripheral devices for it

Literature / Study Material

• Online material

• Manuals for micro-controllers

Learning Methods Lectures and assignments

Assessment Exam and assignments

Prerequisites Basics in Programming I

Embedded systems programming, 4 op KL04BT32031 (study unit)

Lecturers Seppo Stenberg

Objectives

Students will learn about the user-interfaces and bus interfaces for embedded systems. They will also become familiar with how to connect various peripheral circuits, displays and keyboards to micro-controllers, as well as how to programme them in C language. Students learn how to carry out a software project as a modular and hierarchical structure.

Content

Programming will involve the use of hardware–oriented C language and the programmes will be carried out in projects. The working environment will involved the use of the C translator, programming program and simulator. Students will use the ATmega series micro–controller and the program libraries and peripheral devices associated with it.

Literature / Study Material

- Online material
- Manuals for micro-controllers

Learning Methods Lectures and projects

Assessment Project work

Prerequisites Embedded Systems

Languages of Instruction Finnish

Project in embedded systems, 5 op KL04BT40032 (study unit)

Lecturers Heikki Palomäki

Objectives

Students will have command of how to carry out a project development project, from beginning to end, involving embedded systems. They will learn to work as a group member and understand the significance of working with other groups when defining the areas of co-operation.

Content

The themes for the project vary each year, but it usually involves electronics, software design, and possibly mechanics design. Topics for the work include various applications for intelligent technology, such as robotics, automation systems, data transfer, sensor technology, or modern methods of programming.

Literature / Study Material

- Online material
- Independent information acquisition

Learning Methods Guided project work in groups Assessment Approved project results and report

Prerequisites Programming Embedded Systems

Languages of Instruction Finnish

Data communication, 4 op KL04BT53011 (study unit)

Lecturers Alpo Anttonen, MSc (Eng.)

Objectives

Students will become familiar with data communications protocols and how they work. They will understand the principles of data transfer and data communications systems. They will also be familiar with the latest communications network and application solutions.

Content

Students will gain general understanding of the entire realm of data communications and of various data communications netowrks and their features, concepts and various relationships. They will understand the principles behind IP addresses and subnetworking, TCP/IP protocols and how they work. Students will also be familiar with the OSI and TCP/IP structure and functions of stratified system models as well as the configuration of routers.

Learning Methods Lectures and laboratory exercises

Assessment Exam and assignment

Languages of Instruction Finnish

Computer networks, 4 op KL04BT50052 (study unit)

Lecturers Alpo anttonen MSc (Eng.)

Objectives

Students will become familiar with LAN network toplogy according to universal cabling standards and how to create a safe network. They will do this through theoretical and practical exercises. Upon completion of the course, students will know how to choose network tecnology appropriate to a given situation, calibrate network connections and control devices.

Content

Students will understand the purposes for using and functions of the following network expansion components: repeater, bridge, switch, and router. The data security part of the course involves discussion of logical security methods, such as user identification, data encryption, surveillance, security protocol, and data security of open systems. Upon completion of the course, students will be competent in designing a specified local network.

Literature / Study Material

- Vainio M. and Hakala M. 2003. Tietoverkon rakentaminen. Docendo.
- Järvinen P. 2002. Tietoturva & yksityisyys. Docendo.
- Lecture notes

Learning Methods Lectures and practical exercises in the laboratory

Assessment Exam and assignment

Languages of Instruction Finnish

Wireless data transmission, 4 op KL04BT42041 (study unit)

Lecturers

Alpo Anttonen MSc (Eng.)

Objectives

Students will acquire knowledge about the possibilities and limitations of wireless data transmission.

Content

- Basics of radio technology and uses in data transmission
- Theory of radio frequency
- Radio frequency modulation
- Radio modems
- Spread spectrum techniques such as IEEE 802.11
- Bluetooth
- Radio legislation
- Infrared
- Laser
- Microwaves
- GSM and UMTS networks
- Communications and GPS satellites

Literature / Study Material

- Kaj Granlund (2001 or later edition). Langaton tiedonsiirto
- Lecture notes

Learning Methods Lectures and laboratory work where students construct and test wireless networks

Assessment Exam and assignment

Prerequisites Communications

Languages of Instruction Finnish

Navigation technologies, 3 op KL04BT50060 (study unit)

Lecturers Petteri Mäkelä, MSc (Eng.)

Objectives Students will gain insight into navigation technologies and know how to utilise them in various systems.

Content

- GPS and Galileo
- Coordinate systems
- Satellite navigation using sensors
- Indoor navigation
- Navigation in the mobile phone network
- Location–based systems

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises

Assessment Assignment and examination

Prerequisites

- Analytic geometry
- Matrix Calculus
- Mathematics for Information Technology
- Data Structures
- Algorithms

Languages of Instruction Finnish

Electrical engineering, 5 op KL04BT20010 (study unit)

Lecturers Ismo Tupamäki

Objectives

Upon completion of the course, students will understand the phenomena associated with electricity. They will be competent in mathematically solving basic problems in direct and alternating currents. They will have command of electric quantity measurements using various measuring devices known in the field.

Content

- Electrodynamics
- Direct and alternating currents
- Solutions for electric circuits
- Three–phase systems
- Types of electric motors
- Use of measuring devices and other apparatuses for measuring electric quantities

Literature / Study Material

- Aura & Tonteri: Teoreettinen sähkötekniikka ja sähkökoneiden perusteet. WSOY.
- Lecture notes
- Measuring devices in the laboratory

Learning Methods

Lectures, calculations, and measurements

Assessment

- Exam (mid-term exams)
- Calculations

Prerequisites Theory of Electricity and Magnetism

Languages of Instruction Finnish

Electrical safety, 2 op KL04BT20220 (study unit)

Objectives

Students will be familiar with the general qualifications for working with electricity, and they will possess the necessary knowledge and skill for working safely with electricity. They will also understand the dangers associated with handling electricity and know how to protect themselves properly.

- Dangers of electricity
- Act and decree on electric safety
- Protection from electric shock
- Safety in working with electricity
- Installation conditions and space categories
- First-aid for accidents with electricity
- Code of conduct for the laboratory

• Basic rules for working with electricity

Literature / Study Material

- Regulations pertaining to safety and electricity
- D1 manual concerning the installation of electricity in buildings
- Field-related standards
- Lecture material
- www.tukes.fi

Learning Methods Lectures

Assessment Exam

Languages of Instruction Finnish

Printed circuit board design, 3 op KL04BT40110 (study unit)

Lecturers Seppo Stenberg

Objectives

Students will learn the fundamentals of designing circuit boards including the designing of circuit diagrams and circuit board layouts, as well as the modelling of the components for them. Students will have command of a designing programme and know how to create documents needed in producing circuit boards.

Content

- PADS, Eagle, etc. designing programmes
- Personal design and documentation
- Creation of a circuit board either by cutting or etching

Literature / Study Material

- Online material
- Manuals for the designing programme

Learning Methods Lectures and exercises

Assessment Exercises

Prerequisites Basics in Electronics

Languages of Instruction Finnish

Basics of digital technology, 3 op KL04BT40120 (study unit)

Objectives

Students will be competent in processing digital data and how to use it in designing and programming logical circuits.

- Number systems
- Binary arithmetic
- Codes
- Gate circuits
- Karnaugh map
- Flip-flops
- Registers

- Calculators
- A/D conversions

Literature / Study Material To be announced.

Learning Methods Lectures, assignments and computer-aided simulations

Assessment Assignments and an examination

Languages of Instruction Finnish

Basics of electronic, 3 op KL04BT40131 (study unit)

Objectives

Students will acquire knowledge of basic electronic components and know how to make simple connections with filters and amplifiers. They will understand how they work and how to measurement their properties.

Content

- Basic properties of passive components, independent semi-conductors, operational amplifiers and optical components
- Common connections
- Making test connections
- Gauging and analysing connections
- Writing gauging reports

Learning Methods

- Lectures: 15 h
- Assignments and reports: 21 h

Assessment Gauging reports and work reports

Basics of automation, 3 op KL04BT20230 (study unit)

Objectives

Students will understand the prerequisites for the functions of automated systems, and learn to identify functional areas and their interdependency.

Content

- Control systems
- Programming
- Equipment
- Sensors
- Control and adjustment
- Feedback
- Control components

Literature / Study Material To be announced.

Learning Methods Lectures, assignments and exam

Assessment Completion of the assignments and an examination

Prerequisites Electrical Engineering Languages of Instruction Finnish

PLC programming, 3 op KL04BT20240 (study unit)

Lecturers

- Hannu Reinilä, MSc (Eng.)
- Niko Ristimäki, BSc (Eng.)

Objectives

Students will become familiar with the structure and functions of programmable logic commonly used in mechanical and production automation and the logics needed in programming. They will know how to compile sequence–based programmes. Students will learn to make simple user–interfaces using touch screens.

Content

- Structure of programmable logic
- Use of programming programmes
- Storage areas for logics
- Common byte commands
- Timers, calculators, bytes, words and processing them
- Holding circuits and trigger elements
- Sequence-based programming
- Designing and programming a user-interface

Literature / Study Material

- Lecture material
- Examples given during lectures
- Exercises
- Programming and product manuals

Learning Methods Lectures, examples, exercises, and group work

Assessment Exercises and an examination

Languages of Instruction Finnish

Industrial economics, 3 op KL04BT20300 (study unit)

Lecturers Jorma Mettälä, LSc (Tech.)

Objectives

Students will gain insight into the national economy, structure of the industry, domestic competitive advantage, the main concepts of economic, concepts of marketing and production operations, and core issues pertaining to quality management.

Content

- Industrial strategy and policies, types of enterprises, procedures for establishing a company, and management
- Financial requirements for maintaining an enterprise
- Growth, profitability, liquidity, solvency
- Basic concepts of marketing, human resources and quality management

Literature / Study Material

- Uusi–Rauva, E., Haverila, M. & Kouri, I. 1999. Teollisuustalous. Tammerpaino. Tampere. ISBN 951–96765–2–X.
- Lecture material and other material distributed by the lecturer

Learning Methods Lectures, exercises and small group work

Assessment Class exercises and an examination

Languages of Instruction Finnish

Human resources management, 3 op KL04BT20301 (study unit)

Objectives

Students will be familiar with the basic issues involved in managing people and matters. Upon completion of the course, students will understand various organisation models, management styles, and know how to utilise various creative methods.

Content

- Organisations
- Management skills
- Management models
- Occupational psychology
- Basics of personnel management
- · Evaluation of students' management profile and creativity

Literature / Study Material To be announced.

Learning Methods Lectures, assignments and seminars

Assessment Participation in classroom assignments and exam

Databases, 3 op KL04BT50020 (study unit)

Lecturers Mikko Auranen, MA

Objectives

Students will become familiar with relational models and designing processes for database applications. They will be competent in creating a small database application, and they will have command of SQL language and know how to make inserted SQL inquiries using JDBC.

Content

- Relational models
- ER diagram
- SQL language
- JDBC
- Inserted SQL

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises

Assessment Class exercises and an examination

Languages of Instruction Finnish

Application development, 3 op KL04BT50040 (study unit)

Lecturers

Petteri Mäkelä, MSc (Eng.)

Objectives

Students will learn to create an application that comprises a graphic user-interface. The application may be linked to a database, or it may resemble data gathered through multiple channels from a measuring device.

Content

- Graphic user-interface
- Inserted SQL
- Threads
- Multiple channel communication

Literature / Study Material Vesterholm M. & Kyppö J. 2004. Java–ohjelmointi. Talentum Media Oy. ISBN 952–14–0849–9.

Learning Methods Lectures and assignment

Assessment Exercises

Prerequisites

- Object Programming
- Databases

Languages of Instruction Finnish

Basics of software production, 3 op KL04BT52010 (study unit)

Lecturers Tuomo Hirvonenm MSc (Eng.)

Objectives

Students will acquire knowledge of the main structures and elements of software production processes. They will gain insight into the practices of describing the software production process and the methods used in its various phases. Students will be able to produce specifications as required by a software project using basic elements and description types when explaining minor problems.

Content

- Specifications
- Types of descriptions
- Production process
- Product management
- Testing
- Documentation
- Document management

Literature / Study Material Haikala & Märijärvi: Ohjelmistotuotanto. IT–kirjat. Talentum 2003.

Learning Methods Lectures, exercises, and group assignment

Assessment Active participation, assignment and an examination

Languages of Instruction Finnish

Computer graphics, 4 op KL04BT51081 (study unit)

Lecturers

Petteri Mäkelä, MSc (Eng.)

Objectives

Students will gain general understanding of computer graphics devices and methods. They will also learn to create interactive applications that utilise 2– and 3–dimensional graphics.

Content

- Open GL programming
- Principles of modelling
- Picture projection
- Lighting models and using color
- Graphic interactive techniques
- CAVE

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and assignment

Assessment Exam and assignment

Prerequisites

- C++ Programming
- Object Definition and Design
- Data Structures
- Algorithms

Languages of Instruction Finnish

Windows systems programming, 3 op KL04BT51051 (study unit)

Lecturers Petteri Mäkelä, MSc (Eng.)

Objectives

Students will learn to create system programmes and graphic user-interfaces in the WIN32 environment using C++ programming language.

Content

- WIN32API
- Memory management
- Multitasking
- Processes
- Threads and synchronizing between threads
- Socket programming
- Dynamically downloadable libraries

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises

Assessment Exam and assignment Languages of Instruction Finnish

Software project, 5 op KL04BT52030 (study unit)

Lecturers Pottori Mökolö MS

Petteri Mäkelä, MSc (Eng.)

Objectives

Students will become familiar with the various phases of a software development process by taking part in the specification, designing and creation of software.

Content

- Product development process
- Project management
- Product management
- Version management
- Various phases of a software development process
- Cataract model and swift software processes
- Managing a software project

Literature / Study Material

To be annunced at the beginning of the course.

Learning Methods Lectures and software project in groups

Assessment Software project

Prerequisites

- Windows System Programming
- Network Programming

Languages of Instruction Finnish

Basics of mobile programming, 5 op KL04BT50180 (study unit)

Lecturers Petteri Mäkelä, MSc (Eng.)

Objectives Students will learn to design and implement mobile solutions using J2ME technology.

Content

- Intelligent phones
- M2M
- Java MIDP
- MIDlet
- IMlet
- Progarmming interfaces
- SMS messaging
- http and socket communication
- Bluetooth
- GPS

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and assignments Assessment Exam and assignment

Prerequisites

- Object-oriented Programming
- Data structures and algorithms

Languages of Instruction Finnish

Symbian C++, 3 op KL04BT50181 (study unit)

Lecturers Petteri Mäkelä, MSC (Eng.)

Objectives

Students learn the basics of programming intelligent phones in the Symbian OS C++ environment.

Content

- Special characteristics of mobile programming
- Memory management and exceptions
- Graphic user-interfaces
- Resources
- Files
- Customer-server models

Literature / Study Material Harrison R. 2003. Symbian OS C++ for Mobile Phones. John Wiley & Sons Ltd. ISBN 0-470-85611-4.

Learning Methods Lectures and exercises

Assessment Exam and exercises

Prerequisites

- C++ Programming
- Network Programming
- Windows System Programming

Network programming, 5 op KL04BT53040 (study unit)

Lecturers Petteri Mäkelä, MSc (Eng.)

Objectives

Students will gain insight into client-server programming. They will learn to create random applications using various techniques.

Content

- Customer–server models
- Socket programming
- http protocol
- Remote method calls
- Parallelism
- Thread synchronization

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises Assessment Assignments and an examination

Prerequisites

- Object Specifications and Designing
- Data Structures
- Algorithms

Languages of Instruction Finnish

Embedded PC systems, 3 op KL04BT40040 (study unit)

Lecturers Heikki Palomäki

Objectives

Students will learn the structure, composition and the usage possibilities of a PC–compatible, embedded system. They will also become familiar with the installations involved in the Windows and Linux operating systems, as well as the use of the I/O card in C–programming.

Content

Students will create a PC104–based embedded calibration and control system. They will install the Windows and Linux operating systems on it and construct a simple calibration/control application with C–programming using analogue and digital I/O linkages. Students will work in groups.

Literature / Study Material

- Online material
- Independent information acquisition

Learning Methods Lectures, assignments and reports

Assessment Report

Prerequisites

- Embedded Systems
- Basics in Programming

Languages of Instruction Finnish

Server programming 1, 3 op KL04BT40042 (study unit)

Lecturers Markku Lahti, MA

Objectives

Students will be familiar with browser-independent, web-based user-interface applications and ASP.NET technology. They will also know how to utilise the services ASP.NET technology offers.

Content

- Principles of ASP.NET architecture
- Functions of a web form
- Web controls
- Space management
- User identification and rights
- Database programming (ADO.NET)

Literature / Study Material To be announced.

Learning Methods Lectures and exercises

Assessment Assignment and exercises

Prerequisites

- Basics in Programming I and II
- Databases
- Application Development

Elektroniikan mittaustekniikka, 3 op KL04BT41011 (study unit)

Objectives

Students will learn to use measuring devices and software. They will understand how gauging sensors work and how to handle gauging signals. They will also know how to apply various gauging methods.

Content

- Various sensor circuits: temperature, moisture, light, force, etc.
- How sensors work
- Signal amplifiers
- Gauging methods
- Sensor module connections
- Analysing measurements
- Post-processing with LabView software

Learning Methods Guided laboratory work

Assessment Assignment and reports

Elektroniikan sovellukset, 3 op KL04BT41041 (study unit)

Objectives

Students will learn to design and construct connections with IC circuits and to gauge and analyse how they work.

Content

- Connections with operational amplifiers: various amplifier connections and active filters, regulators and oscillators
- Making test connections, gauging and analysing them
- Writing gauging reports

Learning Methods

- Lectures: 15 h
- Assignments and reports: 21 h

Assessment Gauging reports and work reports

Power electronics, 4 op KL04BT41020 (study unit)

Lecturers Seppo Stenberg

Objectives

Students will become familiar with the components of power electronics and connections and learn about the topologies associated with chopper circuit sources as well as measurement. They will also be introduced to the principles behind motor drives in power electronics and batery technology, as well as heat design in power electronics. EMC and regulations concerning safety and electricity will also be discussed.

Content

Teaching will involve the use of guidebooks and brochures for power electronics components and component manufacturers. Students will write summaries about them, do exercises and calculations. Students will familiarise themselves with the structure of power electronics devices, and they will perform simulations and trial connections.

Literature / Study Material Online material

Learning Methods Lectures and exercises

Assessment Exercises and an examination

Prerequisites Basics in Electronics

Languages of Instruction Finnish

Electronic production engineering, 3 op KL04BT41050 (study unit)

Lecturers Heikki Palomäki

Objectives

Students will acquire knowledge of the various phases in the production of electronics with automatic surface mounting lines and manually operated production equipment. They will also understand the significance of considering reliability in designing circuit boards.

Content

- Use of production equipment
- Entire production process of an electronic circuit with an automatic surface mounting line: proportioning the pasta, loading the components, using the oven, and controlling the conveyor
- Production of circuit boards and techniques for repair
- Reliability of electronics
- EMC properties

Literature / Study Material Online material, databooks, and students' own information acquisition

Learning Methods Lectures and using the prodcution machinery

Assessment Examination and an approved report

Prerequisites Designing Circuit Boards

Languages of Instruction Finnish

Digital technology, 3 op KL04BT42010 (study unit)

Objectives

Students will learn to design and make digital connections using logic circuits, memory techniques and programmable circuits. They will become familiar with new semi-conductor technologies.

- Digital electronics
- Combination logic
- Programmable logic circuits
- Memory techniques

- Structure and function of processors
- Basics of data transfer

Literature / Study Material To be announced.

Learning Methods Lectures, exercises and computer-aided simulation

Assessment Exercises and an xamination

Prerequisites Basics of Digital Technology

Languages of Instruction Finnish

Signal processing, 3 op KL04BT42030 (study unit)

Lecturers Alpo Anttonen, MSc (Eng.)

Objectives Students will learn about the analysis and processing of signals, as well as data transmission.

Content

- Signal frequency, filtering and modulation
- Digital processing of audio frequency signals
- Applications pertaining to signal processing: adaptive filtering, modification of sampling frequencies, compression of sound signals
- Brief discussion of the more common applications, e.g. speech processing, image processing and image coding

Literature / Study Material Lecture material

Learning Methods Lectures and exercises in the laboratory

Assessment Examination and laboratory exercises

Prerequisites Basics in Digital Technology

Languages of Instruction Finnish

Circuit design, 3 op KL04BT42020 (study unit)

Lecturers Heikki Palomäki

Objectives

Students will understand the various phases involved in the production process of semiconductors. They will also learn about the principles associated with programming system circuits.

- Production process of semiconductors: from silicon wafer to IC circuit
- Structure of a processor
- Programmable logic circuits
- Features of and tools for designing FPGA and ASIC circuits
- MEMS circuits
- Latest semiconductor technologies

Literature / Study Material

- Online material
- Data books
- Independent information acquisition

Learning Methods Lectures and exercises

Assessment Approved assignment and an examination

Prerequisites Digital Technology

Languages of Instruction Finnish

Networks and Bus interfaces, 4 op KL04BT40121 (study unit)

Lecturers Heikki Palomäki

Objectives

Students will gain the ability to design the different sequential data transmission forms of embedded systems, including physical data transmission and the realization of a transfer connection.

Content

- Principles of serial data transmission, physical and data link layer: SPI, synchronous and asynchronous data transmission
- Internal networks of an embedded system: One-wire, Two-wire and SPI
- External data transmission networks: RS232, RS485 and CAN
- Data transmission protocols for transfer connections

Literature / Study Material

- Online material
- Data books
- Independent information acquisition

Learning Methods Lectures and exercises

Assessment Approved assignment and an examination

Prerequisites Embedded Systems

Languages of Instruction Finnish

Process automation, 3 op KL04BT43031 (study unit)

Lecturers Heikki Palomäki

Objectives

Students wull acquire the readiness needed to design and implement a simple PC-based process control room where measurment and control activities are managed through a channel.

- Features and use of LabView or InTouch software
- Control room solutions for various types of processes

- Controls
- Modelling processes
- Simulation of measurements/control
- Connecting a control room to a logic network

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and guided exercises

Assessment Approved assignment

Prerequisites Basics of Control Engineering

Languages of Instruction Finnish

Embedded PC systems, 3 op KL04BT40041 (study unit)

Lecturers Heikki Palomäki

Objectives

Students will learn about the structure, composition, and possibilities for using PC–compatible embedded systems. They will also become familiar with the installation Windows and Linux operating systems, as well as the way to use the I/O card in C–programming.

Content

Students will create a PC104–based embedded calibration and control system. They will install the Windows and Linux operating systems on it and construct a simple calibration/control application with C–programming using analogue and digital I/O linkages. Students will work in groups.

Literature / Study Material

- Online material
- Independent information searches

Learning Methods Lectures, assignment and reports

Assessment Report

Prerequisites

- Embedded Systems
- Basics in Programming

Languages of Instruction Finnish

Basics of control engineering, 4 op KL04BT43021 (study unit)

Objectives

Students will be introduced to control system engineering and know how to apply the theory of regulation to control systems.

- Principles of control system engineering
- Transfer functions
- Control blocks in time and frequency domains
- Control circuit adjustments

- Structure and types of controls
- Electric motor technology
- Electric servo-systems
- Kinetic control

Literature / Study Material

- Savolainen-Vaittinen: Säätötekniikan perusteita.
- Handouts

Learning Methods Lectures and exercises

Assessment Examination and assignment

Prerequisites Basics in Automation

Languages of Instruction Finnish

Digital technology, 3 op KL04BT32010 (study unit)

Objectives

Students will learn to design and make digital connections using logic circuits, memory techniques and programmable circuits. They will become familiar with new semi-conductor technologies.

Content

- Digital electronics
- Combination logic
- Programmable logic circuitsMemory techniques
- Structure and function of processors
- Basics of data transfer

Literature / Study Material To be announced.

Learning Methods Lectures, assignments and computer-aided simulation

Assessment Assignments and an exam

Prereauisites Basics of Digital Technology

Languages of Instruction Finnish

Laboratory assignements in electronics, 3 op KL04BT33040 (study unit)

Lecturers Tuomo Hirvonen, MSc (Eng.)

Objectives Students will acquire knowledge in gauging electronic switches and how they work.

- Semi-conductor components
- Digital components
- Amplifier connections
- Digital logic circuits

Literature / Study Material To be announced.

Learning Methods Independent learning in a computer laboratory

Assessment Completion of the required amount of laboratory work

Languages of Instruction Finnish

Signal processing, 3 op KL04BT42031 (study unit)

Lecturers Alpo Anttonen, MSc (Eng.)

Objectives

Students will have command of the analysis, processing and data transmission of digital signals.

Content

- Signal frequencies, filtering, and modulation
- Digital processing of a sound frequency signal
- Applications for signal processing: adaptive filtering, modification of sampling frequencies, compression of sound signals
- Brief discussion of speech processing, image processing and image coding

Literature / Study Material Lecture material

Learning Methods Lectures and practical work in the laboratory

Assessment Exam and laboratory work

Prerequisites Basics in Digital Technology

Networks and Bus interfaces, 4 op KL04BT40123 (study unit)

Lecturers Heikki Palomäki, MSc (Eng.)

Objectives

Students will acquire readiness in designing different serial data transfer options for embedded systems including the realization of a physical data transfer and data links.

Content

- Principles of serial data transfer
- Physical and data link layers: SPI, asynchronous and synchronous data transmission
- Internal networks of embedded systems: One-wire, Two-wire and SPI
- External data transmission networks: RS232, RS485 and CAN
- Data transmission protocols for data links

Literature / Study Material

- Online material
- Data books
- Independent information searches

Learning Methods Lectures and exercises Assessment Approved assignment and an examination

Prerequisites Embedded Systems

Databases, 3 op KC04BT50020 (study unit)

Lecturers Mikko Auranen, MA

Objectives

Students get into the basic concepts of data management and databases and learn to design and implement a small database system.

Content

Database system components, relational model and file layout. Relational model implementation, database manipulation and languages.

Literature / Study Material Ari Hovi: SQL-ohjelmointi PRO TRAINING, Satku 1999; Elmasri&Navathe: Fundamentals of Database Systems

Learning Methods Lectures and exercises

Assessment Active participation in the lectures, exercises and an examination

Languages of Instruction Finnish

Application development, 3 op KL04BT50041 (study unit)

Lecturers

- Hilkka Niemelä, MA
- Petteri Mäkelä, MSc (Eng.)

Objectives

Students will learn to create an application that involves a graphic user-interface. The application may be connected to a database or it may be data gathered from a measuring device through a series channel.

Content

- Graphic user-interface
- Inserted SQL
- Threads
- Series channel communication

Literature / Study Material Vesterholm M. & Kyppö J. 2004. Java–ohjelmointi. Talentum Media Oy. ISBN 952–14–0849–9.

Learning Methods Lectures and assignment

Assessment Assignments

Prerequisites

- Object-oriented Programming
- Databases

Server programming 1, 3 op KL04BT40043 (study unit)

Objectives

Students will gain insight into the technologies and tools needed to create www-server applications.

Content

- HTTP-protocol
- ASP.NÊT
- ADO.NET
- Javascript

Linux server, 4 op KL04BT50012 (study unit)

Objectives

Students will learn how to maintain common Linux servers.

Content

- Network and server of the Linux system
- Practising basic commands
- Installing and maintaining various servers

Windows – Server, 4 op KL04BT50014 (study unit)

Objectives Students learns how to use and administrate Windows servers

Networking, routers and routing basics, 4 op KL04BT53031 (study unit)

Lecturers Alpo Anttonen, MSc (Eng.)

Objectives

Students will have command of the basic configuration of routers and understand the principles behind routing.

Content

- Router configuration
- Router protocols and protocols to be routed
- Distance vector and Link state protocols
- Features, maintenance and use of an IOS operating system
- Static and dynamic routing
- Access lists
- HSRP protocol
- Error messages for TCP/IP addresses
- Troubleshooting

Literature / Study Material Lecture material

Learning Methods Exercises

Assessment Exam and exercises

WAN technologies, 3 op KL04BT53032 (study unit)

Lecturers Alpo Anttonen, MSc (Eng.)
Objectives

Students will have command of the principles, technology and designing of wide networks.

Content

- WAN technologiesPPP

- Frame RelayISDN and DDRFault diagnosis on networks
- Kinetic tunneling and bridging
- Network management
- Troubleshooting

Literature / Study Material Lecture material

Learning Methods Laboratory work and exam

Degree Programme in International Business

• Table of competences: Degree Programme in International Business (*.xls)

Head of degree programme: Ms Ritva Leppänen, Tel. +358 20 124 5420, E-mail: ritva.leppanen@seamk.fi ECTS/International coordinator: Ms Ritva Leppänen, Tel. +358 20 124 5420, E-mail: ritva.leppanen@seamk.fi

Degree and qualification awarded

Bachelor of Business Administration (BBA)

Access requirements

Please see the Applicant's Guide or the website www.seamk.fi.

General description of the degree programme

The aim of the Degree Programme in International Business, which is taught in English, is to prepare the students for

specialised tasks in international business and marketing. The programme gives an overall picture of business management and focuses on the international operations of companies and organisations. The operational environment of today's enterprises is based on international networks to an increasing extent. Having completed their studies the students master international business operations, marketing and managerial issues. There is practical training for these issues during different stages of the studies.

The study programme is based on a good understanding of entrepreneurship and small and medium-sized enterprises. An important aim is to acquire good practical language skills, achieved through working and studying abroad during an international period of one academic year. At the final stage of their studies the students are given an opportunity to deepen their knowledge of the business and culture of a target area of their choice in connection with their practical training and thesis work.

The implementation of the curriculum aims at a learning-based and student-centered approach. The objective is to emphasise learning methods in which the student is an active participant, such as project learning, problem-based learning and case learning. Special attention is paid to increasing project activities, also in international context, which provide plentiful opportunities for learning. Courses can also be completed in the simulation environment in multicultural groups.

Subject specific competences

International Business Awareness

- Ability to outline and evaluate the key patterns and trends in international business activity, the different approaches to internationalisation, the influence of increasing globalisation, international trade systems and financial relations and the role of several principal institutions (e.g. WTO, EU, IMF, World Bank) in international business.
- Ability to assess the impact of these trends of the international business environment on his own activities as well on the business policy.

Intercultural Adaptability

- Ability to assess the differences between national, organisational and occupational cultures and to outline strategies for adapting to these differences in e.g. human resources management, marketing and intercultural communication.
- Identification of the relevant dimensions of cultures and development of self-awareness of his own cultural background.
- Ability to adapt his behaviour to the standards in other cultures and can maintain an international network essential to his tasks.

International Operations Management

• Ability to assess processes and make decisions involved in developing international, i.e. export/import operations, focussing on supply chain management and to explain the meaning and application of key logistical concepts.

International Marketing Management

- Ability to perform a country–analysis on macro, industry and micro level, to conduct an international market survey in order to assess foreign market opportunities and competition.
- Ability to formulate market–entry strategies, to draft an international marketing plan and to implement, co–ordinate and control the international marketing (and sales) programme and projects.
- Ability to create, develop and maintain profitable customer relationships.

International Strategic Management

- Ability to use the conceptual and visionary skills to contribute to the development, evaluation and implementation of the internationalisation strategy of a company.
- Ability to pro-actively seek and commercially evaluate business opportunities for both new and existing products.
- Risk-taking ability in order to optimise business profit.
- Ability to write and defend a business plan for a (start-up) company.
- Ability to perform a variety of cost and revenue calculations and to transform these data into information needed for decision making and the budgeting process.
- Ability to contribute to and evaluate key accounting summaries and investment opportunities.

Organisational Development

• Ability to research and analyse relevant international business problems, to propose policy goals and objectives and to prepare alternative solutions in order to optimise business and human resources processes in order to strengthen the synergy between strategic, structural and cultural aspects of the organisation.

Access to further studies

Eligible for second-cycle higher education studies. For second-cycle studies in Finland, three years' work experience is also required. (Ammattikorkeakoululaki 351/2003).

Course structure diagram with credits

60 per year

Degree Programme in International Business, 210 cr (1.9.2008) INBUS 2008

Code	Name	S	Study Year		CR	
		1.	2.	3.	4.	
BBS	BASICS OF BUSINESS STUDIES					61
BASICSOPER	R BASICS OF BUSINESS OPERATIONS					20
KD07DVHO123	Introduction to Business Operations	х				4
KD19APMA010	Basics of marketing	х				4
KD19APLA010	Basics of accounting	x				4
KD19APOI010	Basics of law	х				4
KD19APKT010	Basics of economics	х				4
SKILLS	Study skills and professional development					3
KD19APOP021	Study skills and professional development 1	х				1
KD19APOP022	Study skills and professional development 2		x			1

KD19APOP023	Study skills and professional development 2				x	1
MS	Methodological studies					14
KD19APMT010	Basics of business mathematics	x				4
KD19APTT010	Basics of business information technology	x				4
KD19APTO010	Word processing and office skills	x				3
KD19APTI010	Basics of statistics	x				3
LANGUAGE	LANGUAGE STUDIES					24
KD07DVEN240	English	x				6
KD19ASWE	Swedish	x				6
KD19AFOLAFI	Finnish as a foreign language	x				6
KD19AFOLA2	Foreign language 2	x				8
KD19APKV01	Intercultural communication	x				2
KD19APSU001	Business communication in Finnish	x				2
KD19AFOLA3	Finnish as a foreign language	x				2
PROF	PROFESSIONAL STUDIES					96
INBUSMARKET	International business and marketing courses					30
KD06BNMA630	International business operations		x			5
KD06BNMA650	Cross-cultural business		x			5
KD06BNMA640	Internationalisation of the firm		x			5
KD06BNMA620	Business to business marketing		x			3
KD06BNMA011	Marketing communication in a multicultural environment		x			3
KD06CNMA731	Intopia		x			6
KD06BNMA160	Marketing management		x			3
MANAG	Management courses		-			16
KD07DVUL103	Strategic management		x			4
KD06BNMA660	International human resources		x			3
KD19DVLA22	Financial management		x			3
IMPC	Course from the International Management Programme				x	6
ECMARMAN	Elective courses in marketing or management					11
KD19TARGET	Intenational business studies in the target area					30
KD19BNMA151	International Business Studes in the Target Area			х		25
KD19BNMA150	Europe			x		25
KD19BNMA151	Gateway			x		25
KD19BNMA152	Japan			x		25
KD19BNMA153	Latin America			x		25
KD19BNMA154	North–America			x		25
KD19BKV2002	Elective studies			х		5
RESEWORK	Research work					9
KD19APTU020	Research and information retrieval 1		x			2
KD19BRW001	Introduction to research		x			2
KD19BRW002	Research methods				x	3
KD19BRW003	Thesis seminar				x	2
WORKPLACE	WORK PLACEMENT			_		30

KD19HYTH200	International work placement		х		30
KD19ELESTUD	ELECTIVE STUDIES				8
THESIS	THESIS				15
KD19FYOT200	Bachelor's thesis			х	15
KD19FYOT100	Maturity test			x	

Study Descriptions

BASICS OF BUSINESS STUDIES, 61 cr BBS (study entity)

Objectives: Student shall be acquainted with the establishment of a company and its operations. They shall understand how the company is connected to its various interest groups on the regional, national and international levels. Students shall also understand the basics of accounting and bookkeeping. Upon completion of this study module, students shall master the basic aspects of business, marketing, accounting, law and economics.

Introduction to Business Operations, 4 cr KD07DVHO123 (study unit)

Lecturers Ritva Leppänen M.Sc. (Econ.), visiting professor

Objectives Student is familiar with entrepreneurship, business operations and the basics of administration.

Content

- organisation and administration;
- entrepreneurship and characteristics of an entrepreneur;
- operational process
- working environment of a company

Literature / Study Material To be announced at a later date.

Learning Methods

Lectures, exercises, group assignments, written examination. A major part of the course may take place in a simulated environment.

Assessment To be announced at a later date.

Languages of Instruction English

Further Information The course consist of two parts:

- Basics of administration and organization, 1cu, lectured by Ritva Leppänen
- Business operations and entrepreneurship, 3cu, lectured by visiting professor

Basics of marketing, 4 cr KD19APMA010 (study unit)

Lecturers Sirkku Rantalainen, M.S. (Econ.)

Objectives

Students know the basic terms, theories and tools of marketing and can apply them when planning marketing.

Content

• analyzing the marketing environment,

- positioning and differentiating,
- segmenting markets and defining target groups,
- marketing mix.

Literature / Study Material Kotler, P., Armstrong, G., Saunders, J. & Wong, V. (2008). Principles of Marketing; and other course material

Learning Methods Lectures and group exercises (during lessons), report and presentation

Assessment Report and presentation, examination

Languages of Instruction English

Basics of accounting, 4 cr KD19APLA010 (study unit)

Lecturers Tuulia Potka–Soininen, M.Sc.(Econ.)

Objectives

Students shall acquire knowledge of the concepts, tasks and methods of financial accounting. Students get an overall picture of accounting and its implementation in a company.

Content

- basic concepts of accounting,
- accounting periods,
- auditing reports.

Literature / Study Material To be announced at a later date

Learning Methods Lectures and exercises

Assessment Written examination and exercises

Languages of Instruction English

Basics of law, 4 cr KD19APOI010 (study unit)

Lecturers Marja Salonen, Master of Laws

Objectives

The students will learn about the Finnish judicial system and the legal concepts associated with it. Students will become familiar with the various types of companies in Finland, contractual law and civil procedure. Upon completion of the course, students will master the essential legal concepts, know how to draw up a contract, master the main aspects of the various types of companies in Finland, and understand the civil procedure in Finland.

Content

- the Finnish judicial system,
- the most important legal concepts,
- main aspects of company law,
- laws pertaining to contracts,
- the main aspects of procedural code.

Literature / Study Material Aapo Surakka: Access to Finnish Law, 2005 *Learning Methods* Lectures and exercises

Assessment Written exam

Languages of Instruction English

Basics of economics, 4 cr KD19APKT010 (study unit)

Lecturers Jorma Imppola, DI

Objectives

The student is familiar with the basic concepts of national economics and economic systems as well as with economic thinking and interdependencies. On completing the course the student knows the central concepts of national economics, knows how to use economic statistics, is familiar with different forms of competition, understands economic growth, inflation and monetary policy, interdependencies between interests and currency rates in the long run and knows the causes and effects of economic cycles.

Content

- Basics of microeconomics: demand, supply, consumer, enterprise, market, competition.
- Concepts connected with national income: formation of national income, consumption, investments, saving, money, banks and financial institutions, economic cycles, economic growth, economic systems.

Literature / Study Material To be announced later

Learning Methods

Lectures and exercises (individual tasks and group assignments)

Assessment

The course grade consists of two parts: examination 70 % and exercises 30 %. Both parts must be passed acceptably.

Languages of Instruction English

Study skills and professional development 1, 1 cr KD19APOP021 (study unit)

Lecturers

Head of programme and tutoring teachers

Objectives

The student knows the learning environment and community, degree programmes, learning methods and course regulations. The student is able to plan his/own curriculum and develop his/her own learning methods.

Content

- UAS as a learning environment
- student support services such as health care, student office, library..
- · learning methods and assessment of one's own learning
- planning one's own personal curriculum
- adjusting to multicultural learning environment

Literature / Study Material

Study guides and other material provided by the teacher.

Learning Methods Active participation and assignments

Assessment Pass/fail Languages of Instruction English

Study skills and professional development 2, 1 cr KD19APOP022 (study unit)

Lecturers

Head of programme and tutoring teachers

Objectives

The student can develop his/her personal curriculum on the basis of his/her own professional orientation. He/she is aware of his/her responsibility as a learner and later as an active and influential member of a work community. The student is able to plan her/his third year studies abroad; select the study place/country and is prepared to find a work placement that is relevant from the viewpoint of his/her professional growth. The student is able to find a possible topic for his/her thesis during his/her practical training.

Content

- development of a personal curriculum
- work placement training
- becoming familiar with tasks and professional characteristics of the field
- becoming familiar with research and development

Learning Methods Active participation and assignments

Assessment Pass/fail

Languages of Instruction English

Study skills and professional development 2, 1 cr KD19APOP023 (study unit)

Lecturers

Head of the programme, tutoring teachers and international coordinator

Objectives

The student is able to find, preferably on the basis of the practical training period, a topic for his/her thesis that supports his/her professional development. The student can assess the implementation of his/her personal curriculum. He/she has the knowledge and skills to seek different positions in working life both locally and globally. He/she knows, also in intercultural context, how to show his/her know-how when applying for a job.

Content

- assessment of the implementation of the personal curriculum
- job application training / intercultural aspects included
- qualifications and job titles in the field of international business

Literature / Study Material Material provided by the teacher

Learning Methods Active participation and assignments

Assessment Pass/fail

Languages of Instruction English

Basics of business mathematics, 4 cr KD19APMT010 (study unit)

Lecturers to be announced later

Objectives

The student shall be capable of solving business mathematical problems.

Content

- percentage calculation and its applications,
- indexes, interest calculation and its applications,
- compound interest calculations,
- currencies, credits,
- investment calculations

Literature / Study Material

To be announced at a later date.

Learning Methods Independent practice, lectures and exercises

Assessment Examination Scale 1–5

Languages of Instruction English

Basics of business information technology, 4 cr KD19APTT010 (study unit)

Lecturers Osmo Mäkiniemi, M.Sc.

Objectives

The student shall understand the basic concepts of information technology, know the structure, operations and peripherals of a computer as well as the various uses of a computer especially in small and medium–sized enterprises (SME). They shall master the operating system of a microcomputer and know how to make a use of different tool programs and the Internet.

Content

- impact of information technology
- information systems in SME
- data presentation
- hardware and software
- local area networks and the Internet
- operating systems
- tool programs
- computer security

Literature / Study Material Teacher´s material.

Learning Methods Lectures, exercises on a computer, an assignment.

Assessment

- examination and an assignment
- grades 1–5

Languages of Instruction English

Word processing and office skills, 3 cr KD19APTO010 (study unit)

Lecturers Osmo Mäkiniemi, M.Sc.

Objectives Students shall acquire the necessary word processing and presentation skills for writing assignments, reports and graphical presentations in standard format. They will also understand the overall idea of office work.

Content

- keyboard skills
- word processing with standard business letters
- graphical presentations
- content and organization of office work
- office ergonomics

Literature / Study Material Material provided by the teacher

Learning Methods Lectures and exercises on a computer

Assessment

- examination and exercises
- grades 1–5

Languages of Instruction English

Basics of statistics, 3 cr KD19APTI010 (study unit)

Lecturers Päivi Borisov, M.Sc. (Econ.)

Objectives

Students shall acquire knowledge in the concepts of statistics and how to collect, process, analyze and present information.

Content

The course comprises basic concepts;

- collecting information, sampling methods,
- scales of measurement,
- frequency distributions, graphic presentation, parameters,
- correlation and regression.

Literature / Study Material To be announced at a later date.

Learning Methods Lectures, exercises (also on a computer, SPSS and Excel) and independent practice

Assessment Written examination and exercises

Languages of Instruction English

LANGUAGE STUDIES, 24 cr LANGUAGE (study entity)

Finnish students are required to study a minimum of:

- English, 6 credits
- Swedish, 6 credits
- Finnish, 2 credits (Suomenkielinen liikeviestintä)
- Other language studies 2credits (Intercultural communication)
- Foreign language 2, 8 credits

Electice studies may also include language studies. Foreign students are required to study Finnish instead of the Swedish language, 8 credits.

English, 6 cr KD07DVEN240 (study unit)

Further Information Please see language studies (LITAKI 2008)

Swedish, 6 cr KD19ASWE (study unit)

Further Information Please see language studies (LITAKI 2008).

Finnish as a foreign language, 6 cr KD19AFOLAFI (study unit)

Further Information Please see language studies (LITAKI 2008).

Foreign language 2, 8 cr KD19AFOLA2 (study unit)

Further Information Please see language studies (LITAKI 2008).

Intercultural communication, 2 cr KD19APKV01 (study unit)

Lecturers Ritva Leppänen M.Sc. (Econ.)

Objectives

Having completed the course, students understand and adjust to a multicultural environment. Students are able to compare and analyze different cultures and understand communication as part of culture. Students have a broad and general understanding of intercultural communication when networking globally.

Content

- cultural identity
- cultural comparisons
- adjusting to a culture
- verbal and non-verbal communication
- networking through intercultural communication

Literature / Study Material Kevin Gore, Networking Cultural Knowledge, WSOY

Learning Methods Lectures, group assignments, presentation, learning diary

Assessment Participation, presentation, learning diary, scale 1–5

Languages of Instruction English

Business communication in Finnish, 2 cr KD19APSU001 (study unit)

Further Information To be announced later.

Finnish as a foreign language, 2 cr KD19AFOLA3 (study unit)

Further Information Please see language studies (LITAKI 2008).

PROFESSIONAL STUDIES, 96 cr PROF (study entity)

Objectives: Students shall become acquainted with the international business environment. This includes the cultural environment and operational modes of international business, as well as issues pertaining to management and marketing. Upon the completion of this study module, students shall be competent in planning, executing and evaluating business operations in the international business environment with special expertise in chosen fields of management and/or marketing.

International business operations, 5 cr KD06BNMA630 (study unit)

Lecturers

Anu Kohtamäki, MSc (Econ. & Bus. Adm.)

Objectives

Students will be familiar with the various forms and modes of international business operations, their advantages and disadvantages particularly from the viewpoint of small and medium–sized companies.

Content

- Exporting, licensing, franchising
- Direct foreign investments
- Pros and cons of mentioned modes

Literature / Study Material To be announced at a later date.

Learning Methods Lectures and groupwork

Assessment To be announced at a later date.

Prerequisites Introduction to Business

Languages of Instruction English

Cross-cultural business, 5 cr KD06BNMA650 (study unit)

Lecturers Cory Isaacs, MSc (Econ. & Bus. Adm.)

Objectives

Students will understand the dynamics of cross-cultural interaction in business contexts and acquire skills in confronting various cultures and culture shock in professional environments.

Content

- Business etiquette
- Export marketing
- Intercultural communication
- Negotiation in business
- National characteristics

Literature / Study Material

Gesteland Richard R. Cross-Cultural Business Behavior Copenhagen Business School Press. Online EBRARY book, 374 pages

Learning Methods Lectures and group work

Assessment Scale 1–5 *Prerequisites* Intercultural Communication 2 cr

Languages of Instruction English

Internationalisation of the firm, 5 cr KD06BNMA640 (study unit)

Lecturers Jukka–Pekka Luostarinen, MSc (Econ. & Bus. Adm.)

Objectives

Students will understand the dynamics and strategies of internationalizing a company, particularly from the viewpoint of an SME.

Content

The course involves discussion of the strategies for internationalising companies.

Literature / Study Material To be announced at a later date.

Learning Methods Lectures and groupwork

Assessment To be announced at a later date.

Prerequisites Introduction to Business

Business to business marketing, 3 cr KD06BNMA620 (study unit)

Lecturers Ville–Pekka Mäkeläinen, LSc (Tech.)

Objectives

Students will be familiar with the dynamics of buyer-seller interactions and inter-company networks and their significance in business-to-business marketing.

Content

- Relations marketing and its role in B-to-B marketing
- Formation of competitive advantage in B-to-B markets
- Organizational purchasing behaviour
- Diffusion process of innovations
- Segmentation in B-to-B markets

Literature / Study Material Material distributed by the lecturer

Learning Methods Lectures and groupwork

Assessment To be announced at a later date.

Prerequisites Introduction to Business

Languages of Instruction English

Marketing communication in a multicultural environment, 3 cr KD06BNMA011 (study unit)

Objectives

Students will be aware of how cultural aspects change marketing communications. They will know how to avoid major mistakes in multicultural marketing communications and how to select the best possible promotion mix with regard to cultural differences. Students will also acquire knowledge on how processes are conducted and how an organization works in multicultural marketing.

Content

- Impacts of culture on segmentation, product positioning, target group definitions and marketing campaign planning
- Limits of a multicultural environment on marketing communications, planning marketing communications and a marketing campaign for multicultural markets

Literature / Study Material To be announced.

Learning Methods

Lectures and report to be completed in small groups. Supervision for small-group work is provided.

Assessment Report and presentation

Prerequisites Introduction to Business

Languages of Instruction English

Intopia, 6 cr KD06CNMA731 (study unit)

Lecturers

- Ville–Pekka Mäkeläinen, LSc (Tech.)
- Sirkku Rantalainen, MSc (Econ. & Bus. Adm.)
- Tuulia Potka–Soininen MSc(Econ. & Bus. Adm.)

Objectives

Students will understand the practical, strategic management issues pertaining to a multinational company via a computerized business simulation program. Students will receive a comprehensive and integrated view of various management disciplines such as marketing, finance, production, administration and logistics.

Content

The course involves discussions of international business in the following areas:

- Marketing
- Finance
- Production
- Administration
- Logistics

Literature / Study Material Literature and instructions for the Intopia business simulation

Learning Methods Lectures and groupwork in the simulation environment

Assessment Tests, reports, Intopia simulation process and presentations

Prerequisites Introduction to Business

Languages of Instruction English

Marketing management, 3 cr KD06BNMA160 (study unit)

Lecturers

Cory Isaacs, MSc (Econ. & Bus. Adm.)

Objectives

Students will learn about practical strategic marketing management and theoretical tools for strategy and marketing planning.

Content

- Building customer satisfaction, analyzing marketing opportunities, market information and demand, consumer markets and buying behaviour
- Business markets and buying behavior, analyzing industries and competitors, identifying market segments, selecting target markets, differentiating and positioning the market offering
- Managing life-cycle strategies

Literature / Study Material Kotler & Keller: Marketing Management, 13th edition.

Learning Methods Lectures and group exercises (during lessons), as well as a report and presentation

Assessment Report, presentation and evaluation, as well as group exercises during lessons

Prerequisites Introduction to Business

Languages of Instruction English

Management courses, 16 cr MANAG (study entity)

Extent: 12 ECTS credits

Strategic management, 4 cr KD07DVUL103 (study unit)

Lecturers

Prof. Dr. Thomas Lauer, (Hochschule Aschaffenburg)

Objectives

Students understand the strategic planning process and the most important methodologies used. They also will execute the methodologies using case studies.

Content

- The lecture shows how to use the most important methodologies of strategic management a long the typical steps of the strategic process chain: strategic analysis, conceptualisation and strategic control.
- Instruments like environmental scan, early warning systems, core competence analysis, SWOT, portfolio analysis, lifecycle analysis, blue ocean methodology or balanced scorecard are shown in theory as well as in practice.
- For the practical exemplification a set of international case studies is used.

Learning Methods Lecture with case studies

Assessment Written test of about 3 hours. Questions on base of a case study.

Languages of Instruction English

International human resources, 3 cr KD06BNMA660 (study unit)

Lecturers

Cory Isaacs, MSc (Econ. & Bus. Adm.)

Objectives

Students will acquire knowledge of the challenges of international human resource management and of the ways of creating a successful human resource policy for an international company.

Content

- Challenges of international human resource management
- Recruitment, selection, training, compensation, performance appraisal
- Adjustment and repatriation of international employees
- Internationalisation process of companies, and human resource issues

Literature / Study Material Harzing A–W. & Ruysseveldt J–V. 2004. International Human Resource Management.

Learning Methods Lectures and group exercises during lessons, report and presentation

Assessment Report, presentation and evaluation, as well as group exercises during lessons

Prerequisites Introduction to Business

Languages of Instruction English

Financial management, 3 cr KD19DVLA22 (study unit)

Lecturers To be announced later

Objectives

After completing the course the student has understanding of management accounting theory and practice. The student is able to use accounting information as a tool in decision–making and in managing the performance of an organization.

Content

The primary emphasis of the course is on

• the identification, measurement and analysis of information used by management to plan, evaluate and control within an entity.

Literature / Study Material To be announced at a later date

Assessment Written examination and homework.

Languages of Instruction English

Course from the International Management Programme, 6 cr IMPC (study unit)

Further Information

The students choose one advanced course among the Degree Programme in International Business courses.

Elective courses in marketing or management, 11 cr ECMARMAN (study entity)

Students select courses from IP-programme of from fourth-semester courses e.g.

- Japanese Economy, 2cu
- Japanese Management, 2cu
- Chinese Business Course, 2cu
- Seminar on Business in Baltic Area, 3cu
- Seminar on Business in Mercosur Area, 3cu
- German Business Seminar, 4-6cu
- Distribution Channel Management,2cu
- Operations Management, 3cu
- Management of Information Systems,5cu
- Teams and interaction skills, 3cu

Please, notice that the courses may chance depending on visiting professors

Intenational business studies in the target area, 30 cr KD19TARGET (study entity)

Consists of studies abroad (at least one semester). Studies should include:

- professional studies (marketing, management)
- studies, related to research work
- language and cultural studies are also advisable.

Elective studies, 5 cr KD19BKV2002 (study unit)

Further Information Language and culture or research studies in the target area.

Research and information retrieval 1, 2 cr KD19APTU020 (study unit)

Lecturers Jaana Latvanen, M.Pol.Sc. and Ville–Pekka Mäkeläinen, Lic.Tech.

Objectives

After completing the course the student

- understands the meaning of information retrieval skills and the variety of information sources
- knows how to make use of library services and other information sources of business economics
- introduction to research and development work

Content

- information retrieval process from analysing the information needs to assessing the search results
- channels of retrieving professional information and research information
- literature and article databases in the field of business economics
- domestic online services and information providers in the field of business economics

Literature / Study Material Material provided by the teacher

Learning Methods Lectures and exercises

Assessment Assessment is based on completed assignments. Pass/fail

Languages of Instruction English

Introduction to research, 2 cr KD19BRW001 (study unit)

Lecturers To be announced later

Objectives

Students shall possess knowledge of the fundamentals of research work and research processes. They shall be able to report the results of their research or development project

Content

- Introduction to research and development work: research topic, research process, principal methods
- Requirements of scientific presentation, academic style, correctness, use of sources and references, appearance of the thesis

Learning Methods Lectures and exercises

Assessment Assessment based on participation and an exam. Pass/Fail

Languages of Instruction English

Further Information

The implementation of the course is combined with the course: Research and information retrieval 1.

Research methods, 3 cr KD19BRW002 (study unit)

Lecturers To be announced later.

Objectives

Students know the basics of research methods.Students know how to process research material using statistical applications, how to interpret the output data and how to report the results. Students are competent in compiling a qualitative research plan, gathering the required material and analyzing it using various techniques. Students understand the difference between research work and a development project. They will be familiar with the objectives and methods involved in development work.

Content

- repetition of the use of SPSS software, statistical methods suitable for the research material of the students participating in the course
- special features of qualitative research, the qualitative research process and methods.
- purpose of development work, methods for the implementation of a development project, and reporting and evaluation of the project.

Literature / Study Material To be announced by the teacher

Learning Methods Lectures, exercises and assignment

Assessment Participation in lectures, exercises and assignment Pass/Fail

Languages of Instruction English

Thesis seminar, 2 cr KD19BRW003 (study unit)

Lecturers To be announced later

Objectives

Students shall present their research topic and research results and learn to assess the research process of other students.

Content

Seminar work: discussion of research topics and research results in a group

Assessment Pass/Fail

Languages of Instruction English

International work placement, 30 cr KD19HYTH200 (study unit)

Lecturers

Practical training advisor or head of degree program

Objectives

Students shall become familiar with the tasks, practices and culture(s) of their professional field in the working life in international working environment. Students learn to apply what they have learned to situations in practice. Students shall obtain an overall picture of the activities of the organization or business where they are placed. The practical training provides students with the opportunity to obtain ideas and/or topics for their final thesis.

Content

- Application for placement
- Practical training in international context
- Reporting (before, during, and after the training period)
- Seminar

Learning Methods Learning-by-doing and compiling reports

Assessment Pass/Fail

Languages of Instruction English

ELECTIVE STUDIES, 8 cr KD19ELESTUD (study entity)

The student can choose free elective professional or language studies (e.g.VVO).

Bachelor's thesis, 15 cr KD19FYOT200 (study unit)

Objectives

The bachelor's thesis can be done individually or as a part of a larger research or development project. The aim of the thesis is to determine how well students apply the theoretical knowledge they have acquired during their studies. During the thesis process, students practice problem–solving skills, acquire knowledge of project work, utilize scientific thinking skills, carry out independent information retrieval, and report research results. Student must present the results of their research logically using correct language and professional terminology. The thesis process also allows students to be creative, to experiment and use innovative applications.

Content

Students are responsible for the choice of topic, which they often find during their practical training. Students discuss their choice of topic with their advisor for approval. Students must keep in touch with their advisor throughout the thesis process. Students present their research plan (and the completed work) at a seminar. The thesis is accompanied by a Maturity Test, in which students must demonstrate their command of the subject and their ability to use language clearly and consistently.

Literature / Study Material

Material associated with research and the students' own topic. The choice of material must be discussed with the supervisor.

Assessment

According to the criteria set for the assessment of theses at the Seinäjoki University of Applied Sciences

Languages of Instruction English *Further Information* Research work and thesis process, instructions.

Maturity test KD19FYOT100 (study unit)

Lecturers Thesis advisor

Objectives

Students are required to sit a Maturity Test to receive their university of applied sciences degree. Students shall write about a topic related to the thesis, which indicates their knowledge of the topic and language skills. If a student has received his/her previous education in a language other than Finnish or Swedish, the student takes the Maturity Test in English.

Content

Students must demonstrate that they master the content of their thesis, and produce a clear and consistent written presentation.

Assessment

The content and use of language in the Maturity Test is evaluated on a pass/fail basis. The thesis advisor evaluates the Maturity Test.

Prerequisites

Students may register for the Maturity Test after they have submitted their thesis for final assessment.

Further Information

More information concerning registration for the Maturity Test and writing instructions is available on the Business School's web-site.

Degree Programme in Library and Information Services (In Finnish)

Degree Programme in Library and Information Services (In Finnish), 210 cr (1.9.2008) KIKO 2008

Code	Name		udy	Year		CR
		1.	2.	3.	4.	
PERUS18	BASIC STUDIES					48
KD18AITP003	Study skills and professional growth	х				3
KH18AITP001	Libraries in the society	x				5
KH18AITP002	The environment of libraries	x				2
KH18AITP003	Professional information of library services	x				2
KH13PHP1050	Customer service	x				3
KH13APE1410	Native language and communication	x				5
KH18AITP004	Computer as a tool	x				5
KH13PHT0300	Cultural policy			х		3
KH13PHP0200	Introduction to project management	x				3
KH18AITP005	Entrepreneurship			x		3
KH18KIELET	Kieliopinnot					14
KH18AYRU001	Svenska för arbetslivet	x				4
KH18AYEN001	Working life communications skills	х				4
KD18CYEN001	English for librarians		x			3
KD07CYRU120	Library Swedish		x			3
AMMATTI18	PROFESSIONAL STUDIES					105
KH18BYAO	Kaikille yhteiset ammattiopinnot					93
KH18BITP001	Publication production	х				4
KD07BITP115	Collection work	x				4
KH18BITP002	Knowledge of literature	x				5
KH18BITP003	World literature (In English)		x			4
KD07BITP117	Methods of information storage	x				6
KD18BITP119	Information sources		x			4
KH18BITP004	Basics of information retrieval	x				3
ED18BITP009	Information retrieval and search				x	7
KH18BITP005	Web production	x				5
KH18BITP006	Computer networks		x			6
KH18BITP007	Databases		x			4
KD18BIHA001	Personnel management in public organisations			х		5
KH13PHP1150	Introduction to marketing			x		4
KH18BITP008	Irformation justice		x			4
KH18BITP009	Financial and operational planning			x		4
KH18BITP010	Library pedagogics		x			5
KH18BITP011	Developing library services			х		5
KH18BITP012	Media education				x	4

KD18BITI010	Basics of statistics		x			4	
KH18BITP013	Research methods			x		4	
KH18CPTU020	Thesis seminar		x			2	
KH18CITP	Vaihtoehtoiset ammattiopinnot					12	
KD18CIEL001	Basics of film art					4	
KH18CITP001	Children's and youth literature					4	
KD18DVKI010	Children's librarianship					4	
KH18CITP002	Courses of the business operations						
KH18CITP005	Courses from the programme of culture management						
KH18CITP006	Studies according to the personal curriculum						
VAPVAL18	EE-CHOICE STUDIES						
	The head of degree programme must approve the module of elective courses.						
TYOHARJ18	PRACTICAL TRAINING 30						
KH18HYTH120	Practical training			х		30	
OPINKYPS18	THESIS AND MATURITY EXAMINATION					15	
KH18FYOT200	Thesis				x	15	
KH18FYOT100	Maturity examination				x		

Study Descriptions

BASIC STUDIES, 48 op PERUS18 (study entity)

Upon completion of the Basic Studies, students will have a general understanding of the significance of different libraries in society as part of cultural policy, and they will know the type of personnel that produces library services. Students will possess the basic knowledge and skills needed in customer service situations, and they will be competent in assisting others in libraries. Students will also be competent in Swedish and another foreign language as required in the working world.

Study skills and professional growth, 3 op KD18AITP003 (study unit)

Lecturers

Head of degree programme and guidance counselor

Objectives

Students will become familiar with the activities within the university of applied sciences, the learning environment and community, as well as with the degree programmes and learning methods. They will analyze their own learning skills and know how to develop them. They will be aware of their responsibility as a learner and later as a colleague. Students will be competent in presenting their knowledge and skills when applying for a job. They will develop a strong professional profile and possess the ability to seek various positions in the working world.

Content

- University of applied sciences as a study environment
- Support services: healthcare, financial aid, library services, etc.
- Various learning methods and the development of one's learning skills
- Compilation of a personal study plan and assessment each year of how well the objectives in it have been achieved
- Preparation for practical training
- Familiarisation with the duties in one's professional field, job descriptions, and qualification requirements
- Preparation for job hunting

Literature / Study Material

Study Guides and other material distributed by the teachers

Learning Methods

- Active participation
- Completion of assignments pertaining to study plans, practical training and job hunting
- Field trips

Assessment

The course is graded on a pass/fail basis.

Libraries in the society, 5 op KH18AITP001 (study unit)

Lecturers Pirkko Vuorela, MSSc

Objectives

The aim of the course is to provide students with a general picture of the Finnish library netowrk, in particular, as part of the society's information management, its development, current situation and future visions. Upon completion of the course, students will be familiar with the forms of activity and services in library and information service organisations. They will also have knowledge of the associations in the library field and the services offered by the libraries.fi service.

Content

- General history of libraries in the Western world, briefly
- The developmental phases of libraries in Finland from a societal persepctive
- Different libraries and information service organisations, how they work and the services they offer
- Future outlooks in the library field
- Contents of the libraries.fi website

Literature / Study Material

- Lovio, Maisa & Tiihonen, Vuokko. 2005. Kirjaston asiakaspalvelu.
- Karppinen, Iris & Piukkula, Juha. 2005. Kirjastot it-ympäristössä.
- Alameri–Sajama, Raisa (ed.). 2007. Nuortenkirjastotyön käsikirja.
- Korpisaari, Jaakko & Saarti, Jarmo (eds.). 2007. Kirjastonhoitaja tulevaisuudessa, millaista osaamista kirjastot tarvitsevat.
- Material pertaining to the history of libraries will be announced at a later date.

Learning Methods

- Lectures and working in small groups (ca. 45 h)
- Group exam which requires independent studying

Assessment

Assessment for the course is based on active participation in the lectures, groupwork, exam and students' own evaluation.

Further Information

The course involves seeking information independently and online studying.

The environment of libraries, 2 op KH18AITP002 (study unit)

Lecturers Ulla Autio, PhL (Education)

Objectives

Students will understand the decision-making processes and fundamentals of the activities in libraries and information service organisations. The main emphasis in the course is placed on the activities in public libraries.

Content

- Public organisations: legislational bases, duties of public organisations, forms of activity and organisational structure of public organisations, forms of guidance and leadership in public organisations, developing the activities of public organisations
- Library funding

Literature / Study Material

- Vahermo, M. (ed.). 2004. Toimiva kunta
- Other material indicated by the teacher

Learning Methods Lectures and assignments

Assessment The course is graded on a scale of 1–5 depending on how it is carried out.

Professional information of library services, 2 op KH18AITP003 (study unit)

Lecturers Jaana Latvanen, MSSc

Objectives

Students will be familiar with the more prominent producers and sources of informations in the library field, and they will know how to seek professional and academic information associated with their field.

Content

- Library and information services at Seinäjoki UAS
- Professional and academic information pertaining to the library field: information producers, databases, online sources
- Sources of cultural information: libraries, magazines/journals and online sources

Literature / Study Material

Material distributed by the teacher.

Learning Methods

- Lecture and assignments: some of the assignments will be done during class
- Two more extensive assignments, one of which is done alone and one is done as groupwork

Assessment Assessment for the course is based on the assignments: pass/fail.

Prerequisites Basics in Information Retrieval

Further Information The course renders 2 R&D study points and 2 online learning study points.

Customer service, 3 op KH13PHP1050 (study unit)

Objectives

Students will be familiar with the characteristics of services when designing marketing programs. They will be competent in marketing services while considering the customer as part of the production and consumption process, as well as the development process of the quality of the service. Students will understand the role of marketing from the viewpoint of relational marketing.

Content

- Characteristics of service
- Customer as part of the production and consumption process
- Development of service quality
- Service situations and managing them
- Role of marketing services as a way to maintain customer relations
- Personal behavior in customer service

Literature / Study Material

Pesonen, H-L., Lehtonen, J. & Toskala, A. 2002. Asiakaspalvelu vuorovaikutuksena.

Learning Methods

Lectures, exercises, assignments, attendance and test

Assessment 1–5

Languages of Instruction Finnish and English

Further Information The course involves some online studying.

Native language and communication, 5 op KH13APE1410 (study unit)

Lecturers Riikka Järvelä, MA

Objectives

Students will be competent in writing various types of texts and understand in which context they can be used (written communication). They will also renew their view of themselves as communicators via constructive feedback and self–evaluation. Students will also acquire competence in interacting and analyzing various contexts of communication, and understand central theories (oral communication). They will be able to identify the means of communication and their own role within a group. Students will take part in small–group communication, develop the ability to give feedback, become familiar with small–group communication theories, and possess the ability to use these in their studies and future careers (small–group communication).

Content

- Written communication: Command of linguistic norms and the correct usage of the Finnish language, familiarisation with scientific and professional language and texts, process writing and the standards of scientific communication language
- Oral communication: Practical course concentrating on individual ways of communicating while renewing and analyzing the view of themselves as a communicator in public speaking situations. Central communication theories and models will be introduced during lectures.
- Small-group communication: Considers the behaviour of groups from a communicative perspective. Central theories will be discussed, as well as the practice and analysis of various group communication situations.

Literature / Study Material

Handouts provided, including field-specific articles

Learning Methods

Lectures, discussion, assignments to be completed in class and at home, and group work

Assessment

Scale 1–5: 80 % attendance required. Assessment discussed during the first lesson. Sixty per cent of the grade is based on participation and assignments and 40 % is based on the exam.

Computer as a tool, 5 op KH18AITP004 (study unit)

Lecturers Esa Leikkari

Objectives

The main aim of the course is to teach students to understand the significance of information processing in education and in the working world. During the course, students will become familiar with the institution's IT equipment, the basics of finance management, and acquire basic skills in word processing, using spreadsheets and graphics. Upon completion of the course, students will be able to illustrate what they know using information technology.

Content

- Basics in information processing: presenting information and equipment
- Basics in the operating system and utility programmes: Windows XP/Vista, Excel, Word, PowerPoint, and Outlook MS Office programmes

Learning Methods

Lectures, guided exercises, exercises completed independently, and an independent assignment

Assessment

Completed exercises, exam, assignment. Grading is based on a scale of 1 to 5 or on a pass/fail basis.

Cultural policy, 3 op KH13PHT0300 (study unit)

Lecturers Arto Juurakko, MA

Objectives

Students will gain an overview of the structure and mechanisms of cultural policy.

Content

- Cultural policy and the structure of cultural administration in Finland
- Forms of governmental support
- Role of arts councils, civil organizations, foundations and funds
- Nordic cultural policy and decision-making
- Nordic cultural organizations and institutions
- Role of the Nordic Council for Ministers in the cultural field
- Cultural policy in the EU
- Structure of the EU and decision-making in the field of media
- Organs and funds in the fields of culture and media

Literature / Study Material To be announced during the first lesson.

Learning Methods Lectures, assignments

Assessment 1–5

Introduction to project management, 3 op KH13PHP0200 (study unit)

Lecturers Kari Salo, PhD, MSSc, MA (Edu.)

Objectives

Students will understand the fundamentals of project work and and how to use project work as a pedagogical tool in the production of cultural services.

Content

The course involves the basic concepts of project work and creating a project plan.

Literature / Study Material

Silfverberg, Paul. 2001. Ideasta projektiksi. Projektisuunnittelun käsikirja. Hallinnon kehittämiskeskus. Edita. 5th edition or newer.

Learning Methods Lectures and independent study

Assessment 1–5

Languages of Instruction

- Finnish
- English

Further Information kari.salo@seamk.fi

Entrepreneurship, 3 op KH18AITP005 (study unit)

Lecturers Merja Juppo

Objectives

Students will become familiar with the concepts associated with entrepreneurship and their significance in the operation of an organisation. Such concepts include entrepreneurship, internal entrepreneurship, values, vision, mission, business or service ideas, etc. Students will also be familiar with the processes involved in establishing their own business.

Content

- Entrepreneurship and internal entrepreneurship
- Business ideas, service ideas, values, vision, mission
- Business environment and analysis of one's own business
- From strategic planning to implementation
- Business monitoring systems

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures and assignments

Assessment Written exam and assignments

Kieliopinnot, 14 op KH18KIELET (study entity)

The aim of the language and communication studies is to provide students with the required language skills in Swedish and at least another foreign language needed in the working world. Students will be able to acquire information in the target language and express their message in the proper way. They will be aware of how cultural differences may affect communication, and they will know how to relate to people from different cultural backgrounds. Students will also know how to use learning strategies suitable to their way of learning and, through self–evaluation, they will be able to form a realistic picture of their language skills.

Svenska för arbetslivet, 4 op KH18AYRU001 (study unit)

Lecturers Päivi Seppälä, MA (Education)

Objectives

Students will be competent in communicating both in writing and orally in Swedish in everyday situations and on the job. They will know how to acquire and utilise information associated with their field and know how to use the basic terminology used in their field. They will have a positive attitude toward developing their language skills. Upon completion of the course, students will:

- be able to tell about themselves, their education and job experience,
- be able to tell about the jobs in their field,
- be familiar with the basic terminology use in the library field,
- know how to act and give advice and instructions in job-related situations, and
- be competent in writing and speaking.

Content

- Telling about oneself and one's education, as well as CVs
- Work environments, duties, activities associated with the job
- Small talk
- Telephone and electronic communication
- Giving advice and instructions in job-related situations
- Texts associated with the library field

Literature / Study Material To be announced at a later date.

To be announced at a fater

Learning Methods

- Oral exercises such as discussions in pairs and in groups
- Presentations
- Written assignments
- Computer assisted exercises

Assessment

- Active participation in the lessons as well as in the oral and written exercises
- Written and oral exam

All parts must be approved to receive a grade for the course.

Working life communications skills, 4 op KH18AYEN001 (study unit)

Lecturers Mari Heinonen, MA

Objectives

Students will understand the basic concepts and vocabulary of business language. They will be competent in talking about their education, job, and businesses. They will also be competent in managing everyday language situations using approriate language skills. Students will have command of telephone communication and writing business letters, and they will be familiar with the differences in various texts used in the working world. In addition, students will know how to talk about their education and apply for jobs in English, and tell others about Finland. They will be competent in various social situations.

Content

- Education
- Working world
- Job hunting
- Written and oral business communication
- Basic vocabulary for business

Literature / Study Material Niskanen, Vetter, & Urbom. 2008. Business Express. WSOY.

Learning Methods Oral and written exercises, lectures, and group work

Assessment Continuous indication of competency, written assignments and written final exam

English for librarians, 3 op KD18CYEN001 (study unit)

Lecturers Mari Heinonen

Objectives

Students will be familiar with the central vocabulary used in the library and information services fields. They will be competent in communicating both orally and in written form in various situations in the fields.

Content

The course comprises the following topics:

- Language used with library patrons
- Library facilities and their services, collections, information retrieval, library organization and personnel

Literature / Study Material To be provided by the lecturer; online material

Learning Methods Lectures, independent work on the Internet, and oral presentation

Assessment Oral and written assignments and a written final exam

Languages of Instruction English and Finnish

Library Swedish, 3 op KD07CYRU120 (study unit)

Lecturers

Päivi Seppälä, MA (Education)

Objectives

Students will master the basic concepts associated with library and information services. They will understand the spoken and written language within their field and be able to cope both orally and in writing in customer service situations and other situations in their field.

Content

The course comprises the following topics:

- Library websites
- Vocabulary and texts on the library field
- Library networks
- Library materials, facilities and functions, personnel and tasks
- Customer service and other such situations

Literature / Study Material

Library websites and material distributed by the lecturer

Learning Methods

Lectures, oral and written exercises, independent information retrieval, working in pairs and groups. Most of the written assignments are done online.

Assessment

Active participation in lectures and exercises, oral and written assignments, presentation, and written examination

Prerequisites Swedish for the Working World

Languages of Instruction Finnish and Swedish

PROFESSIONAL STUDIES, 105 op AMMATTI18 (study entity)

The aim of the Professional Studies is to familiarise students with the central activities in the library and information services fields such that students are able to independently work in customer service and development and consultation duties. The primary issues involved in library and information service work are central parts of the Professional Studies. These include:

- Working with collections
- Making information and publications available to patrons
- Information processing skills
- Familiarisation with various activities in the library field

During the practical training, students are familiarised with the practical aspects of library work. Studies that prepare students for writing their thesis are common to all students. Students may reinforce their professional direction with alternative studies.

Kaikille yhteiset ammattiopinnot, 93 op KH18BYAO (study entity)

The aim of the Common Professional Studies course is to teach students to

- organise information for patrons to use,
- acquire the right information for patrons,
- use IT tools and information systems,
- use proper social skills when serving patrons,
- be aware of various types of information and methods for creating and improving collections, and
- apply what they have learned in practice.

Publication production, 4 op KH18BITP001 (study unit)

Lecturers

Pirkko Vuorela and Leena Elenius

Objectives

Students will gain knowledge of the publishing business and the (production) and distribution network. Students will also become familiar with libraries' own publishing activities.

Content

- Publishing activities
- Production of publications and distribution netowrks: book material, magazines, sound recording and image documents, electronic publications

Literature / Study Material

Students' own information retrieval. Other material will be announced when the course begins.

Learning Methods Lectures and assignments

Assessment Assessment is based on assignments.

Further Information Part of this course is carried out online.

Collection work, 4 op KD07BITP115 (study unit)

Lecturers Pirkko Vuorela, MSSc

Objectives

Students will be familiar with the various phases involved in working with collections, from studying the demands for information to the evaluation methods used for collections. Students will be able to apply this knowledge in practice.

Content

- Phases involved in working with collections, especially ways and tools used to evaluate collections
- Bibliometric methods in brief
- Organising material for patrons to use

Literature / Study Material

- Wilen, R. & Kortelainen, T. 2007. Kirjastokokoelmien kehittämisen ja arvioinnin perusteet: teoria, menetelmät ja käytäntö.
- G.E. Evans. 1995 (or newer edition). Developing library and information center collections.
- Other material to be announced at the beginning of the course

Learning Methods

Introductory lectures, assignments, exam based on written material. The assignment and exam may be replaced by a project in a library, which pertains to collections.

Assessment Exam and assignment

Prerequisites Publications Production

Further Information Research and development assignment: 2–3 cr

Knowledge of literature, 5 op KH18BITP002 (study unit)

Lecturers Merja Koski–Aho, MA

Objectives

Upon completion of the course, students will be competent in differentiating between various genres of literature, such as novels, causeries, short stories, etc. and be familiar with the boundaries between fiction and non–fiction. They will know how to assign key words to fictional works using Verkko–Kaunokki, i.e. a thesaurus for fictional material and utilise key words when seeking material for library patrons. Students will possess basic knowledge in the history of Finnish literature and know the more well–known authors and works.

Content

- Literary genres and the various areas of non-fiction literature
- Literary material from the point of view of the patron: key words for fiction and the categorisation of the library shelves
- Introduction to the history of Finnish literature

Literature / Study Material

- Hypén, Kaisa (ed.). 2006. Fiktiota!: levottomat genret ja kirjaston arki.
- Material provided by the teacher

Learning Methods

Lectures, guided and independent assignments

Assessment Written exam, assignments and essay

World literature, 4 cr KH18BITP003 (study unit)

Lecturers Mari Heinonen, MA

Objectives

The course introduces various types of literature from around the world. Beginning with the origins of literature in English from the Middle Ages to modern literature, the course presents different genres and periods in literature around the world. The course has lectures and a tutorial lesson for each theme. Students are required to attend lectures and read samples of literature. The tutorials are spent discussing the theme in light of the reading.

Content

The themes are as follows:

- European literature 1: Middle Ages to 1900 with focus on literature in English
- European literatures 2: Modern literature from 1900 to present day with focus on literature in English
- French, Italian and Spanish literature
- Slavic literature
- Asian literature (China, Japan, India)
- North American literature: past and present
- South American literature: languages and authors, South American themes

Literature / Study Material

A list of required reading, which may be read in any language, will be handed out at the beginning of the course.

Learning Methods

- Lectures, tutorials
- Study journals for the lectures and tutorials in English
- Discussion during the course will be in English

Assessment

Attendance and participation, journal

Languages of Instruction English

Methods of information storage, 6 op KD07BITP117 (study unit)

Lecturers

- Pirkko Vuorela
- Silja Saarikoski

Objectives

The aim of the course is to familiarize students with the principles and practices, tools and future opportunities for electronically saving publication information.

Content

- Methods and tools for describing the contents and outward appearance of various publications (classification, catalogueing, and indexing), especially Finnish applications
- Practical exercises with the data system in the Seinäjoki UAS library

Literature / Study Material

- Universal Decimal Classification (UDC)
- Finnish public libraries classification system and Verkko–Vesa
- Finnish classification rules, esp. as regards the description of monographs
- Marc 21 format: http://www.lib.helsinki.fi/kirjastoala/formaatti/MARC21/index.htm

Learning Methods

Lectures, exercises, and possible exam to be agreed upon separately

Information sources, 4 op KD18BITP119 (study unit)

Lecturers

Information Specialist Jaana Latvanen, MSSc

Objectives

Students will be familiar with the various types of information sources, priciples for evaluating sources of information and the more significant sources of information needed at information desks and in information service work in libraries. Students will be able to select appropriate sources of information for various information needs and information retrieval situations and know how to use those sources.

Content

- Types of information sources and evaluation of sources
- Printed sources of information
- Datbases and web services
- Sources of information for special fields: statistics, standards, patents, entrepreneurship and business

Literature / Study Material

Material distributed by the teacher Complementary literature:

- Haasio, A. 2005. Tiedon lähteillä, part 1
- Haasio, A. 2006. Tiedon lähteillä, part 2
- Other complementary literature to be announced at the beginning of the course

Learning Methods

- Lectures and guided assignments
- Independent assignments and group work

Assessment

Grades are based on a scale of 1 to 5. The assignments account for 50 % of the grade and the exam for the other 50 %.

Prerequisites Professional Information Retrieval in the Library Field

Languages of Instruction Finnish

Further Information

The course renders 2 credits for online studying.

Basics of information retrieval, 3 op KH18BITP004 (study unit)

Objectives

Students will have command of the basic concepts and methods associated with information retrieval, and they will be familiar with the structure and operating principles of information retrieval systems. Students will be able to apply fundamental principles in various user interfaces for information retrieval. Students will be aware of the phases of the information retrieval process and understand the significance of critical evaluation.

Content

- Information retrieval as part of information behaviour
- Process of creating databases
- Structure and search methods of databases
- User interfaces for information retrieval
- Features of online information retrieval
- Types of databases
- Planning, implementing and evaluating information retrieval

Literature / Study Material

- Alaterä, Anu & Halttunen, Kai. 2002. Tiedohaun perusteet, osa lukutaitoa.
- Heikkinen, Risto et al. 2005. Tiedonhakijan teho-opas, 6th edition.

Learning Methods

- Lectures
- Demonstrations
- Guided and independent assignments

Assessment Exam and assignments

Information retrieval and search, 7 op ED18BITP009 (study unit)

Objectives

Students will be familiarised with carrying out and evaluating the patron–oriented information retrieval process and the basic analyses of information retrieval research. They will learn to carry out and document a information retrieval process for a real patron.

Content

- Determining information needs
- Interaction with patrons and patron interviews
- Choosing and evaluating information retrieval services in relation to the information needs of the patron
- · Professional and everyday analyses of information searches
- Task–oriented information searches and retrieval
- Evaluating relevance

Literature / Study Material

- Haasio A. & Savolainen R. 2004. Tiedonhankintatutkimuksen perusteet
- Articles distributed during the course

Learning Methods

Project work that alternates between introductory lectures, assignments, work with patrons, reflection on one's work, reporting, and familiarisation with literature. The course also involves co-operative learning methods.

Assessment

Assessment is based on a portfolio of material gathered by students, which is indicative of their work.

• Portfolio evaluation

Web production, 5 op KH18BITP005 (study unit)

Lecturers

Osmo Mäkiniemi, MA

Objectives

Students will understand the significance of functional network communication to libraries and other information services organisations. They will be competent in designing and implementing a functional, standarized network service (network website). They will know how to publish a network service on the Internet.

Content

- Significance of network communication to libraries and other information services organisations
- Techniques for creating network services: XHTML language, CSS language
- Web publishing programme
- Publishing a network service on the www server
- Basics of XML language

Literature / Study Material Material provided by the teacher.

Learning Methods Lectures, guided exercises, and assignment

Assessment Assessment and other forms of assessment Grading is based on a scale of 1 to 5.

Prerequisites Computers as Tools

Computer networks, 6 op KH18BITP006 (study unit)

Objectives

Students will be familiar with the structure, operating principles and standards associated with information networks from the viewpoint of libraries and information services. They will be able to use local netowrks and Internet applications. Students will also be familiar with the operating principles of the library system and the more common features of library systems in Finland such as the standards required for the information systems services in libraries. Students will be familiar with the various areas of data security. They will be competent in identifying the data security risks associated with the information environment, in particular, and in finding ways to solve the more common problems with data security. Finally, students will be familiar with the phases involved in the acquisition process of data systems, and will be able to work as a member of acquisition and development projects.

Content

- Basics in telecommunications
- Telecommunications netowrks (data networks, telenetworks, wireless data transfer), local netowrks, data network services (Internet)
- Libraries and telecommunications, data systems in libraries
- Library systems used in Finland
- Overview of various standards in information technology
- Developmental and acquisition processes involved in the data systems in libraries
- Concepts associated with data security and the various areas of data security
- Data security for businesses and public services, data security solutions for organisations

Literature / Study Material

- Saarti, Jarmo, (ed.). 2002. Kirjastojärjestelmän hankkijan opas. BTJ Kirjastopalvelu Oy, Helsinki.
- Material provided by the teacher

Learning Methods

Lectures, guided assignments, group work, and exercises done independently

Assessment

Independent exercises and exam, other forms of assessment Grading is based on a scale of 1 to 5.

Prerequisites Computers as Tools (Basic Studies)

Databases, 4 op KH18BITP007 (study unit)

Objectives

The course familiarises students with the design process and functions of document databases in multi-professional project groups.

Content

- Analysing database users
- Determining the structure of a database
- Methods for describing content and designing databases
- Choosing, describing and saving material
- Designing and implementing supporting tools for search engines (thesaurus, grouping topics, instructions and guides)
- Publishing a database on the web
- Methods and roles in project work

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Designing and implmenting tools for a database and search engine on a project team
- Documentation of the project activities and evaluation of the work
- Introductory lectures and exercises

Assessment

- · Active participation in the project work
- Peer evaluation
- Exercises and project documentation

Personnel management in public organisations, 5 op KD18BIHA001 (study unit)

Lecturers

Merja Juppo

Objectives

Upon completion of the course, students will be familiar with the principles of team work and social skill and identify the areas in which they need to improve their skills in customer service and team work. They will be capable of demonstrating their knowledge of personnel management and possess the readiness needed in supervsing others.

Content

- Communication skills: significance of personality, listening and communication, encountering challenging customers
- Team skills: team work, team roles, leadership in teams, the development of teams
- Personnel management: the concept of personnel management, leadership, the legal premises of employment, basics of law pertaining to civil servants and labour

Literature / Study Material

- Viitala, R. Henkilöstöjohtaminen. 2007. Edita.
- Other material provided by the lecturer.

Learning Methods

Lectures, exercises, and applications

Assessment

Assessment is based on a scale of 1 to 5 depending on how the course is carried out.

Prerequisites Operational Environments in Libraries Languages of Instruction Finnish

Introduction to marketing, 4 op KH13PHP1150 (study unit)

Lecturers Merja Juppo

Objectives

- To understand the significance of marketing on business operations or other planned area
- To identify and utilise the competitive tools in marketing
- To be able to apply marketing-oriented ideas in planning

Content

The course includes an introduction to marketing, negotiation skills, communication, advertising, product development and production for different media, auxiliary products, advertising based on images, brands, marketing a creative product, and sponsoring.

Literature / Study Material

- Kotler, P. 2000 (or later edition). Marketing Management: analysis, planning, implementation and control. (APPLICABLE SECTIONS TO BE ANNOUNCED)
- Anttila, M. & Kaarina Iltanen (1994 OR 2001). Markkinointi. (APPLICABLE SECTIONS TO BE ANNOUNCED)

Learning Methods

Lectures, assignments, examination

Assessment

1-5: lectures 40 %, assingments 40 % and active participation 20 %

Languages of Instruction Finnish

Irformation justice, 4 op KH18BITP008 (study unit)

Objectives

Upon completion of the course, students will be familiar with the legal problems associated with purchasing data systems and data transfer. They will also be adept in searching for information pertaining to legislation. Students will understand the concepts of copyright and basic issues concerning other immaterial property, and they will be familiar with data protection legislation.

Content

- Contracts Act, Personal Data Act, and the Copyright Act as applied to the web environment
- Searching for information pertaining to legislation (Finlex)
- Contents of the Copyright Act, influence of legislation on library activities, copyrights in the web environment

Literature / Study Material

- Poroila, Heikki: Tekijänoikeus ja kirjastot, latest edition
- Other material to be announced during the course

Learning Methods Lectures and assignments

Assessment Assessment is based on the assignments and written exam.

Financial and operational planning, 4 op KH18BITP009 (study unit)

Objectives

Students will understand basic issues pertaining to public-sector finances. They will be familiar with the structure of library budgeting and the principles of creating budgets as a part of public economy. The main emphasis in the course is
placed on the activities of public libraries.

Content

- Special features of public economy
- Planning and monitoring finances and interpreting financial statements
- Library budgets and the principles of creating budgets
- Accounting and monitoring

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises

Assessment Assessment is based on a written exam and assignments.

Library pedagogics, 5 op KH18BITP010 (study unit)

Objectives

Upon completion of the course, students will understand the connections between databases, information retrieval and learning and will be competent in planning, implementing and evaluating small–scale situations in teaching and guiding others in acquiring and retrieving information.

Content

- Concepts of learning, information retrieval and learning, information literacy, co-operation between schools and libraries
- Planning lessons, illustrating what is to be learned and evaluation
- Special features pertaining to teaching information retrieval

Literature / Study Material

- Kupias, Päivi. 2002. Oppia opetusmenetelmistä.
- Sormunen, Eero & Poikela, Esa (eds.). 2008. Informaatio, informaatiolukutaito ja oppiminen
- Lahtinen, Marko et al. (eds.). 2007 Vahva esitys!: vinkkejä ja malleja esseiden ja ryhmätehtävien ohjaamiseen

Learning Methods

- Working in projects, which alternate between introductory lectures, exercises, work with participants in training, reflection on one's own work, reporting and familiarisation with literature
- Co-operative learning methods

Assessment

Assessment is based on the material students gather together into a portfolio, which is indicative of the work they have done.

• Portfolio assessment

Developing library services, 5 op KH18BITP011 (study unit)

Objectives

Students will be competent in strategically planning library activities and services and evaluating the quality of services as part of the work in developing library activities. Students will be familiar with the legislation that guides the administration and activities of library and information services.

Content

- Current development projects and strategies in the library field
- Strategic planning and quality control systems
- Planning and developing facilities and services
- Evaluating the quality of services, quality control systems

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

- Lectures, groupwork and book exam
- Other ways to complete the course can be agreed upon separately
- Either part or all of the course may also be completed in a project in the working world

Assessment

Assessment is based on the teacher's evaluation, self-evaluation and peer evaluation.

Media education, 4 op KH18BITP012 (study unit)

Objectives

The aim of the course is to understand what the concept of media education means and the methods used in teaching it from the library's point of view. During the course, students will seek various models for instructing children and adolescents, especially, in using various media in the library. The course provides students with the readiness needed in working as media educators.

Content

- Concept of media education, the various perpsectives of media education
- Media as a part of the lives of children and adolescents
- Media literacy
- Methods used in media education in libraries

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, independently written assignments, and group work

Assessment Assessment is based on the assignments and group work.

Basics of statistics, 4 op KD18BITI010 (study unit)

Lecturers Hannu Tuuri

Objectives

Students will understand the basic concepts of statistics, be familiar with the acquisition of data, and be able to use statistical information. They will be able to process statistical data and learn to present key parametres, charts and figures using the Excel spreadsheet programme. Students will also know hoe to analyse their data.

Content

- Basic concepts
- Methods of sampling
- Scales, parametres, correlations
- Graphic presentation
- Excel spreadsheet functions
- Pivot charts
- Utility programmes for statistics

Literature / Study Material To be announced at the beginning of the course.

Learning Methods

- Lectures
- Assignments to be completed independently at home and in lessons on the computer

Assessment Assignments and exam

Research methods, 4 op KH18BITP013 (study unit)

Objectives

Students will understand the principles of research work and the research process, and they will be competent in reporting the results of a study/development project. Students will also be familiar with the principles of the more central research methods and know how to utilise them in their thesis work.

Content

- Introduction to research and development work: research topic, research process
- Academic writing: requirements of an academic text, style, language, use of sources, citation techniques, outward appearance of a thesis
- Principles of qualitative and quantitative research and development work

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures and assignments

Assessment Assignments and exam

Thesis seminar, 2 op KH18CPTU020 (study unit)

Objectives

The purpose of the thesis seminar is to provide support for students during their thesis process. Students will learn to present their thesis topic and plan, and they will also be competent in evaluating the thesis process of other students.

Content Seminar work:

- Determing the thesis topic
- Making a plan and presenting it
- Presenting the completed work
- Peer evaluation

Literature / Study Material Material distributed by the teacher.

Learning Methods Group work

Assessment Pass/fail

Vaihtoehtoiset ammattiopinnot, 12 op KH18CITP (study entity)

Students can use the optional professional courses to reinforce their professinal direction for example in work in children's libraries, in the field of culture, and in online business.

Basics of film art, 4 op KD18CIEL001 (study unit)

Lecturers Marita Nyrhinen, BA

Objectives

Students will become acquainted with the history and important trends of film, the means of making films and the methods used in analyzing films.

Content

• Film analysis

• Visit to see a film at the cinema

Literature / Study Material

- Bacon, Henry. 2000. Audiovisuaalisen kerronnan teoria.
- Bacon, Henry. 2005. Seitsemäs taide.
- Pirilä, Kari & Kivi, Erkki. 2005. Otos, elävä kuva, elävä ääni
- Hytönen, Jukka & Mandart, Pamela. 2004. Kamera käy

Learning Methods

Lectures, assignments in analysis and criticism, work in gorups and independently. Compulsory attendance.

Further Information

Next course to begin in spring 2009.

Children's and youth literature, 4 op KH18CITP001 (study unit)

Lecturers Sari Mäkinen–Laitila, MA

Objectives

The aim of the course is to familiarise students with both domestic and foreign literature for children and adolescents and to provide students with a general idea of the field's history and current directions. Students will also learn about the various genres of literature for children and adolescents, the development of those genres, and research in the field. Upon completion of the course, students will know how to use material appropriate for various activities associated with library work for children and adolescents.

Content

Students will become familiar with the more significant literary works for children and adolescents, both domestic and foreign works dating back to the beginning of the last century up until today, using the literary works themselves and research pertaining to them. Emphasis will be placed on domestic literature for children and adolescents. Various genres will be examined and how they have changed throughout the period.

Literature / Study Material

- Literature for children and adolescents announced at the beginning of the course (about 20 books)
- Huhtala, L. (ed.). 2003. Pieni suuuri maailma: suomalaisen lasten- ja nuortenkirjallisuuden historia.
- Korolainen, T. (ed.). 2001. Kirjaseikkailu, lasten- ja nuortenkirjallisuuden opas.
- Huhtala, L. 2004. Ilosaarten seutuvilta, lasten- ja nuortenkirjallisuuden historiaa ja tutkimusta.
- Lukens, R. J. 2007. A Critical Handbook of Children's Literature (or other history of literature for children and adolescents in the Western world).
- Other literature to be agreed upon at the beginning of the course

Learning Methods

Lectures, group and pair work, written assignments

Assessment

Assessment for the course will be based on active participation in the lectures, group and pair work, independent and group assignments, and students' self-evaluation.

Children's librarianship, 4 op KD18DVKI010 (study unit)

Lecturers

Sari Mäkinen-Laitila and Marja-Leena Mäkelä

Objectives

Upon completion of the course, students will be familiar with the phases of development, special features, and types of activities in children's libraries.

Content

The course teaches students about the history and current state of children's libraries, and the various activities, services and collections offered. The course takes a practical approach to introducing students to the various types of activities in children's libraries.

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Lectures and assignments
- Practical library work

Assessment

The course is graded on a pass/needs additional work/fail basis.

Further Information

Students may also use the course as an option in the studies for their major. The course lecturers will provide additional information: sari.makinen-laitila@seinajoki.fi and marja-leena.makela@netikka.fi.

Courses of the business operations KH18CITP002 (study unit)

Objectives

Students will possess a comprehensive perspective of online business and understand its prerequisites, possibilities and problems. They will be familiar with the processes involved in producing online services and the various areas of producing content, such as functional and graphical design and technical implementation, while keeping in mind the usability of the service. Students will know how to design, implement and develop online services for a company or similar organisation.

Content

The module includes the following courses:

- Implementing Online Services for a Business: 4 cr
- Using Databases in Online Services: 2 cr
- Graphics for an Online Service: 3 cr
- Online Trading: 3 cr

Further Information

The Online Business courses will be held in the school for business, entrepreneurship and catering (School of Business, Seinäjoki).

Courses from the programme of culture management KH18CITP005 (study unit)

Objectives

Students may reinforce their knowledge in the field of culture by taking appropriate courses in the Degree Programme in Cultural Production as their optional studies.

Further Information

Students must have the courses approved in advance by the head of degree programme for Cultural Production and the course teachers.

Studies according to the personal curriculum KH18CITP006 (study unit)

Objectives

Students will reinforce their professional direction and area of specialisation by completing studies in (an)other field(s) in institutions of higher education.

FREE-CHOICE STUDIES, 12 op VAPVAL18 (study entity)

Students may choose elective courses from the selection offered at the Seinäjoki University of Applied Sciences. Elective courses may also comprise optional courses for Professional Studies either in their own degree programme or in some other degree programme. Courses completed in other institutions of higher education, which are related to students' professional direction, may also be considered elective courses.

Footnotes

The head of degree programme must approve the module of elective courses.

Practical training, 30 op KH18HYTH120 (study unit)

Objectives

The aim of practical training is to guide the development of students' professional expertise and their skills to apply what they have learned in practice. Practical training will also prepare students to not only work independently, but to also actively work as a member of a work community. Students will have the opportunity to get ideas and inspiration for their own profession and a topic for their final thesis.

Content

- Job orientation
- After orientation, students take part in various duties as opportunities arise
- Compilation of an initial report before the pratical training begins, an interim report half way through the training and a final report at the end
- Seminar presentation of the experiences encountered during practical training

Assessment

Students receive a grade of 'pass' for completing the practical training.

Thesis, 15 op KH18FYOT200 (study unit)

Objectives

Students may do their thesis independently or take part in a more extensive research and development project. Students will illustrate their competence in applying the theoretical knowledge they have acquired in their studies to their thesis. During the thesis writing process, students will learn to solve problems and work in projects. They will also develop their skills in thinking scientifically and progressively and be adept in acquiring information independently. They will also be competent in presenting results or writing reports for development projects. Students will write their reports in a logical manner using correct forms of language and professional, academic terminology. The thesis process will also provide students with an opportunity to use their creativity, to experiment and to apply unique applications.

Content

The students themselves are responsible for choosing a thesis topic. Oftentimes, the organisation where they are doing their practical training commission them to carry out a study. Students discuss their chosen topic and what specifically about the topic they will be examining, as well as their thesis plan, with their thesis supervisor. Once the work is finished, they will present it in a thesis seminar. Students will actively keep in touch with their supervisor throughout the thesis process. Students must also sit a Maturity Test in which they indicate how well they have mastered the contents of their thesis and produce a clear and consistent text.

Literature / Study Material

Students use material that pertains to the topic of their thesis, which is discussed with the thesis supervisor.

Learning Methods

Independently seeking information, analysis of information and group work

Assessment

Assessment is based on the evaluation criteria used at the Seinäjoki University of Applied Sciences.

Maturity examination KH18FYOT100 (study unit)

Lecturers Thesis supervisor

Objectives

The Government Decree on Polytechnics (352/2003) states the following about Maturity Tests: "To receive a polytechnic degree, students must sit a Maturity Test pertaining to the topic of their thesis. The Maturity Test provides indication that students are familiar with the topic and that they possess skills in the Finnish or Swedish languages. The polytechnic decides on the Maturity Test in the event a student is not required to abide by the regulation stated in Article 8, Paragraph 1." (unofficial translation)

Content

Students must provide indication that they master the contents of their work, and provide grounds for their knowledge, and that they are capable of producing a clear and consistent text.

Assessment

Maturity Tests are graded on a pass/fail basis. Both the content and linguistic form are evaluated and either the content or the linguistic form can be the basis for receiving a failing grade.

Prerequisites Students may register for the Maturity Test once they have submitted their entire thesis.

Degree Programme in Mechanical and Production Engineering (In Finnish)

Degree Programme in Mechanical and Production Engineering (In Finnish), 240 cr (1.9.2008) KOTU 2008AUTO

Code	Name	Study Ye		ar	CR	
		1.	2.	3.	4.	
KC23AE10	BASIC STUDIES	1				55
KC23AK10012	Introduction to technical studies	х				1
KC23AK10013	Research methods			х		2
KC23AEKO	Language studies	1	1			
KC23AK10028	Communication and negotiation skills 1	x				3
KC23AK10029	Communication and negotiation skills 2			х		3
KC04AA10031	Swedish		x			3
KC23AK10041	English 1	x				3
KC04AA10050	English 2		x			3
KC04AA10060	English 3			x		3
KC23AEKLT	Natural sciences	-				
KC23AK10053	Algebra and trigonometry	x				4
KC23AK10054	Vectors and analytic geometry	x				3
KC23AK10055	Differential and integral calculus	x				3
KC23AK10056	Differential equations and business mathematics		x			3
KC23AK10057	Computer aided mathematics		x			3
KC23AK10058	Mechanics	x				3
KC23AK10059	Thermal and electrical physics	x				3
KC23AK10063	Wave and modern physics		x			3
KC23AK10064	Physics laboratory works		x			3
KC23AK10151	Basics of chemistry	x				3
KC23AK10066	Office applications	x				3
KC23BK20000	BASICS OF PROFESSIONAL STUDIES		_			38
KC23BK20012	Engineering drawing and CAD	x				6
KC23BK20030	Material technique 1	x				3
KC23BK20032	Manufacturing technology	x				3
KC23BK20051	Statics	x				3
KC23BK20062	Dynamics		x			3
KC23BK20071	Strength of materials 1		x			4
KC23BK20092	Machine elements		x			4
KC23BK20101	Electrical engineering and electronics	x				4
KC23BK20132	Industrial economics	х				3
KC23BK20135	Sustainable development	х				3
KC23BK20137	Auto– ja konetekniikan perusteet	x				2

KC04BA30	KC04BA30 PROFESSIONAL STUDIES MODULES				60	
KCAA10	Module in automotive engineering			-	-	15
KC04BA40101	Vehicle laws		x			2
KC04BA40031	Automotive engineering 1		x			3
KC04BA40021	Automotive engineering 2		x			3
KC04BA40072	Automotive engineering 3			x		4
KC04BA60022	Engine technology		x			3
KCAA50	Automotive Electronics Module					15
KC04BA50071	Automotive electrical and electronic systems		x			3
KC04BA50052	Automotive and work machine electronics 1		x			3
KC04BA50053	Automotive and work machine electronics 2			x		3
KC04BA50072	Automotive laboratories		х			6
KCBA60	Module in Transport Engineering					
KC04BA60033	Hydraulics		x			3
KC04BA60032	Mobile work machines			x		3
KC04BA60070	Commercial vehicles				x	4
KC04BA70011	Farming machinery engineering				x	3
KC04BA70050	Work machine engineering laboratories				x	2
KC04CA85	Module in entrepreneurship 6 cu					15
KC04BA60060	Repair shop economy		х			4
KC04BA84000	Project leadership		х			4
KC04BA85022	Automotive marketing and services			x		3
KC04BA85050	Human resources management				x	4
KC04EA30	PROJECT STUDIES					27
KC04DA90	04DA90 FREE-CHOICE STUDIES					15
KC04EA20 PRACTICAL TRAINING						30
KC04FA80	THESIS					15

Degree Programme in Mechanical and Production Engineering (In Finnish), 240 cr (1.9.2008) KOTU 2008KOTU

Code	Name	Study Year		ar	CR	
		1.	2.	3.	4.	
KC23AE10	BASIC STUDIES					55
KC23AK10012	Introduction to technical studies	x				1
KC23AK10013	Research methods			x		2
KC23AEKO	Language studies		-		-	
KC23AK10028	Communication and negotiation skills 1	x				3
KC23AK10029	Communication and negotiation skills 2			x		3
KC23AK10031	Swedish		x			3
KC23AK10041	English 1	x				3
KC23AK10051	English 2		x			3

KC23AK10061	English 3			x		3
KC23AEKLT	Natural sciences					
KC23AK10053	Algebra and trigonometry	x				4
KC23AK10054	Vectors and analytic geometry	x				3
KC23AK10055	Differential and integral calculus	х				3
KC23AK10056	Differential equations and business mathematics		x			3
KC23AK10057	Computer aided mathematics		x			3
KC23AK10058	Mechanics	x				3
KC23AK10059	Thermal and electrical physics	x				3
KC23AK10063	Wave and modern physics		x			3
KC23AK10064	Physics laboratory works		x			3
KC23AK10151	Basics of chemistry	x				3
KC23AK10066	Office applications	x				3
KC23BK20000	BASICS OF PROFESSIONAL STUDIES		-			38
KC23BK20012	Engineering drawing and CAD	x				6
KC23BK20030	Material technique 1	x				3
KC23BK20032	Manufacturing technology	х				3
KC23BK20051	Statics	x				3
KC23BK20062	Dynamics		x			3
KC23BK20071	Strength of materials 1		x			4
KC23BK20092	Machine elements		x			4
KC23BK20101	Electrical engineering and electronics	x				4
KC23BK20132	Industrial economics	x				3
KC23BK20135	Sustainable development	x				3
KC23BK20137	Auto– ja konetekniikan perusteet	x				2
KC23BK30	PROFESSIONAL STUDIES MODULES					45
KC23KO50	Production technology module					15
KC23BK30011	NC technology		x			3
KC23BK30021	Production systems		x			3
KC23BK30031	Ouality technology			x		3
KC23BK30041	Production management			x		3
KC23BK30051	Production technology laboratory work			x		3
KC23KO60	Mechanical engineering module					15
KC23BK40011	Strength of materials 2		x			3
KC23BK40012	Hydraulics and pneumatics		x			5
KC23BK40013	Welding technology		x			4
KC23BK40051	Product development				х	3
KC23KO80	Entrepreneurship module					15
KC23BK60005	Marketing		x			3
KC23BK60021	Business economics	1	x			4
KC23BK60050	Project leadership	1	x			4
KC23BK60062	Human resources management				x	4

KC23CK70000	3CK70000 OPTIONAL PROFESSIONAL STUDIES MODULES					15
KC23KO90	Applied mechanics module					
KC23CK70011	Matrix algebra			x		3
KC23CK70021	Finite-element method				x	4
KC23CK70031	Mechanical vibrations				x	4
KC23CK70041	Machinery simulation				x	4
KC23KO100	Material engineering module					
KC23CK50021	Plastics technology			x		3
KC23CK50011	Material technique 2				x	4
KC23CK80031	Material selection				x	4
KC23CK80041	Material engineering laboratory work				x	4
KC23KO10010	Automation systems module					15
KC23CK90011	Control systems			x		4
KC23CK90021	Sensor technology				x	3
KC23CK90031	Robotics				x	4
KC23CK90041	Automation systems design				x	4
KC23EK20	PROJECT STUDIES					27
KC23DK10000	FREE CHOICE STUDIES					15
KC23EK20010	C23EK20010 PRACTICAL TRAINING					30
KC23FK30001	KC23FK30001 FINAL THESIS					15

Degree Programme in Mechanical and Production Engineering (In Finnish), 240 cr (5.1.2009) KOTU 2008PUU

Code	Name	Study Year		ır	CR	
		1.	2.	3.	4.	
KC05AP10	BASIC STUDIES					55
KC05AP10012	Introduction to technical studies	x				1
KC05AP10013	Research methods			x		2
KC05AP10027	Communication and negotiation skills 1	x				3
KC05AP10028	Communication and negotiation skills 2		x			3
KC05AP10030	Swedish	x				3
KC05AP10040	English 1	x				3
KC05AP10050	English 2		x			3
KC05AP10060	English 3				х	3
KC05AP10061	Algebra and trigonometry	x				4
KC05AP10062	Vectors and matrices	x				3
KC05AP10063	Differential and integral calculus	x				3
KC05AP10064	Differential equations and business mathematics		x			3
KC05AP10065	Statistics		x			3
KC05AP10066	Mechanics	x				3
KC05AP10067	Thermal and electrical physics	x				3
KC05AP10068	Wave and modern physics		x			3

KC05AP10069	Physics laboratory works		x			3
KC05AP10172	Office applications	х				3
KC05AP10160	Basics of chemistry	x				3
KC05AOP	BASICS OF PROFESSIONAL STUDIES					
KC05BP20135	Sustainable development	x				3
KC05BP20045	Engineering drawing and CAD	х				5
KC05BP20044	Wood materials	х				4
KC05BP20160	Drying techniques	х				3
KC05BP20193	Basics of machine automation	х				4
KC05BP20171	Industrial economics	х				3
KC05BP20210	Energy technology	х				2
KC05BP20060	Statics		x			3
KC05BP20071	Strength of materials		x			4
KC05BP20141	Timber related chemistry		x			2
KC05BP40050	Woodworking and blade technology		x			2
KC05BP20111	Basics of hydraulics and pneumatics		x			3
KC05BP41032	Timber structures			х		3
KC05BP10190	Product design			х		3
KC05BP41172	Wood and log construction				x	3
KC05BP50071	Industrial safety and labour law				x	3
KC05BP30	PROFESSIONAL STUDIES MODULES					
KC05BP40	Wood technology basic module					15
KC05BP50041	Manufacturing technology	х				3
KC05BP40062	Surface treatment		х			4
KC05BP50042	Production and processing of sawn goods and wood-based panel production and processing		x			4
KC05BP20151	Gluing technique		x			4
KC05BP41	Wood technology continuation module					15
KC05BP40021	Joinery product industry		x			3
KC05BP40011	Furniture industry			x		3
KC05BP41122	Plant design 1			x		4
KC05BP41125	Plant design 2				x	3
KC05BP60011	Special wood technology assignment				x	2
KC05CP61	Production economic module					15
KC05BP50012	Production management		x			4
KC05BP70010	Logistics			x		4
KC05BP70021	Cost control			x		4
KC05BP30030	Quality technology			x		3
KC05CP71	Production automation module					15
KC05BP50051	CNC- technology		x			4
KC05BP50061	Robotics			x		4
KC05BP50032	Production automation			x		3

KC05BP50090	Plant simulation			x		4		
KC05CY10	Entrepreneurship module							
KC05BP70031	Project leadership		x			4		
KC05BP70081	Human resources management				x	4		
KC05BP70091	Business economics				x	4		
KC05BP70050	Marketing				x	3		
KC05DP90 FREE CHOICE STUDIES						15		
KC05EP00	PRACTICAL TRAINING					30		
KC05FP80	FP80 FINAL THESIS					15		

Study Descriptions

BASIC STUDIES, 55 op KC05AP10 (study entity)

The aim of the Basic Studies is to provide students with a theoretical and methodological foundation for a scientific approach to thinking, and to prepare students for their Professional Studies and expertise in the field.

Introduction to technical studies, 1 op KC05AP10012 (study unit)

Lecturers Heiskanen, Heikki, MSc

Objectives

Upon completion of the course, students will be familiar with the field of engineering and the duties engineers perform. They will also be able to plan the studies they will need to complete their degree. Additionally, students will be competent in using modern methods of searching for information.

Content

- Nature of and duties involved in the work of a wood engineer
- Structure of the studies and degree
- Compilation of a personal study plan
- Familiarisation with the library services and how to use them

Literature / Study Material

- Curriculum 2008–2009
- Lecturer's material

Learning Methods Lectures and assignments

Assessment Active participation in lessons and assignments, compilation of the personal study plan

Languages of Instruction Finnish

Introduction to technical studies, 1 op KC23AK10012 (study unit)

Lecturers Jukka Pajula

Objectives

Upon completion of the course, students will be familiar with their field and the duties of engineers. They will be capable of planning their studies according to the degree they intend to complete. Students will also be able to use modern information retrieval methods.

Content

- Nature of the work and duties of a mechanical engineer
- Degree programme and the structure of the degree
- Compiling a personal study plan
- Familiarisation with the library services and how to use them
- Student financial aid issues
- International activities
- Project workshop

Literature / Study Material

- Curriculum 2008–2009
- Material distributed by the teacher

Learning Methods Lectures and assignments

Assessment Active participation in the lectures and assignments

Languages of Instruction Finnish

Further Information Jukka Pajula

Research methods, 2 op KC05AP10013 (study unit)

Objectives

Students will obtain insight into various study techniques and methods for gathering information and doing research. Upon completion of the course, students will be conscious of their own learning styles, know the channels to use for gathering information, be competent in using tools for obtaining information, understand the fundamentals of scientific research, and know how to write a research paper.

Content

- Studying and learning
- · Library and information services
- Databases
- Obtaining information from databases and the Internet
- Scientific research
- Research methods

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, exercises and independent study

Assessment Exam and approved assignments

Languages of Instruction Finnish

Research methods, 2 op KC23AK10013 (study unit)

Objectives

The course will prepare students for acquiring the type of information they need to do their final thesis. They will be familiar with various research methods and know how to apply them in their thesis work.

- Making use of the Internet
- Databases in libraries and institutions of higher education

• Various scientific research methods and their feasibility in writing a thesis

Literature / Study Material To be announced.

Learning Methods Lectures and assignments

Assessment Assignments and exam

Languages of Instruction Finnish

Communication and negotiation skills 1, 3 op KC05AP10027 (study unit)

Lecturers Helena Mikkilä

Objectives

Students will be competent in communicating logically and clearly, in producing the more common texts needed in the academic and working communities, and understand the proper procedures of a meeting. They will understand the significance of communication in the working world. Students will also be capable of evaluating their skills in Finnish and communication and want to improve these skills as part of their professional development.

Content

- Basic concepts of communication
- Language maintenance
- Document standards and layout of texts
- Business correspondence
- Bulletins
- Everyday communication in the working world
- Applying for jobs and the types of texts needed for it
- Procedures of meetings documents associated with meetings

Literature / Study Material

• Kauppinen, A., Nummi, J. & Savola, T. 2005. Tekniikan viestintä. Kirjoittamisen ja puhumisen käsikirja. 4th–5th edition. Edita.

Learning Methods

Work in pairs and small groups, oral presentations, written assignments

Assessment

Active participation in class and assignments, written assignments, portfolio and exam

Communication and negotiation skills 2, 3 op KC05AP10028 (study unit)

Lecturers Helena Mikkilä

Objectives

Students will be competent in acting appropriately in various communicative and social situations in the working world and in expressing themselves convincingly and clearly. They will also possess the readiness needed in writing academic texts.

- Instructional texts
- Proposals
- Reports
- Academic writing: instructions for writing a thesis, evaluating sources, citation, literature
- Argumentation
- Goal–oriented discussions
- Oral and presentation skills for the working world

• Seminars

Literature / Study Material

- Kauppinen A., Nummi J. & Savola T. 2005. Tekniikan viestintä. Kirjoittamisen ja puhumisen käsikirja. 4th–5th editions. Edita.
- Instructions for Writing a Thesis: Seinäjoki University of Applied Sciences

Learning Methods

Pair and group work, oral presentations and written assignments

Assessment

Active participation in class and assignments, written and oral assignments, literary assignment and the presentation of it

Prerequisites Communications 1

Languages of Instruction Finnish

Communication and negotiation skills 1, 3 op KC23AK10028 (study unit)

Lecturers Helena Mikkilä

Objectives

Students will be competent in communicating logically and clearly, in producing the more common texts needed in the academic and working communities, and understand the proper procedures of a meeting. They will understand the significance of communication in the working world. Students will also be capable of evaluating their skills in Finnish and communication and want to improve these skills as part of their professional development.

Content

- Basic concepts of communication
- Language maintenance
- Document standards and layout of texts
- Business letters
- Bulletins
- Everyday communication in the working world
- Applying for jobs and the types of texts needed for it
- Procedures of meetings documents associated with meetings

Literature / Study Material

Kauppinen A., Nummi J. & Savola T. 2005. Tekniikan viestintä. Kirjoittamisen ja puhumisen käsikirja. 4th–5th editions. Edita

Learning Methods Work in pairs and small groups, oral presentations, written assignments

Assessment Active participation in class and assignments, portfolio and exam

Languages of Instruction Finnish

Further Information Helena Mikkilä

Swedish, 3 op KC05AP10030 (study unit)

Objectives

Upon completion of the course, students will be competent in using the Swedish language in their profession. They will possess good communication skills and be able to obtain and utilise information in Swedish, which pertains to their professional field.

- Education, job hunting, and work
- Work environment and society
- Customer contacts
- General texts
- Field-specific vocabulary: wood technology

Literature / Study Material

- Lehto, Teija. 2003. Koppling. Svenska för ingenjörer. WSOY.
- Other materials

Learning Methods

Lectures, listening comprehension and oral exercises, writing assignments in pairs, small groups and independently

Assessment

Active participation in lectures and mid-term and final examinations

Languages of Instruction Finnish and Swedish

Communication and negotiation skills 2, 3 op KC23AK10029 (study unit)

Lecturers Helena Mikkilä

Objectives

Students will be competent in acting appropriately in various communicative and social situations in the working world and in expressing themselves convincingly and clearly. They will also possess the readiness needed in writing academic texts.

Content

- Instructional texts
- Proposals
- Reports
- Academic writing: instructions for writing a thesis, evaluating sources, citation, literature
- Argumentation
- Goal–oriented discussions
- Oral and presentation skills
- Seminars

Literature / Study Material

- Kauppinen A., Nummi J. & Savola T. 2005. Tekniikan viestintä. Kirjoittamisen ja puhumisen käsikirja. 3th–5th editions. Edita
- Instructions for writing a thesis: Seinäjoki University of Applied Sciences

Learning Methods

Pair and group work, oral presentations and written assignments

Assessment

Active participation in class and assignments, written and oral assignments, literary assignment and the presentation of it

Languages of Instruction Finnish

Further Information Helena Mikkilä

English 1, 3 op KC05AP10040 (study unit)

Lecturers Riikka Ala–Sankila, MA

Objectives Students will develop their oral and writing skills in English. Upon completion of the course, they will be competent in

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describing the type of education and work experience they have, and they will be familiar with the job hunting process. Students will be competent in writing up documents pertaining to the job application process. Students will also practise written communication and business correspondance. They will become familiar with texts in the field of wood technology and have command of the more common vocabulary in the field and be able to use it in writing and when speaking to others.

Content

- Developing effective communication skills
- Acquisition of information in data bases
- Internet
- Writing a CV and job application
- Wood technology texts
- Informal oral presentation
- Texts from the textbook

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers (latest edition). Edita.
- Wood technology texts and other additional material.

Learning Methods

Written and oral exersices, assignments in pairs, small groups, or independently

Assessment

Active participation in the lectures and assignments, oral presentation and written exam, command of vocabulary, and other tasks required during the course.

Languages of Instruction Finnish and English

Swedish, 3 op KC23AK10031 (study unit)

Lecturers

Riikka Alasankila

Objectives

Upon completion of the course, students shall be able to use Swedish in various situations in their profession, applying it to interactive communication. They shall also know how to collect and make good use of information pertaining to their profession.

Content

The course comprises the following topics:

- Education
- Job applications
- Work environments and society
- Customer contacts
- General texts and field-specific texts
- Terminology used in mechanical and production engineering

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, listening comprehension, oral exercises, and written assignments independently, in pairs and in small groups

Assessment Active participation in lectures, approved interim and final exams

Languages of Instruction Finnish and Swedish

Further Information Riikka Alasankila

English 2, 3 op KC05AP10050 (study unit)

Lecturers Riikka Ala–Sankila, MA

Objectives

- Ability to give presentations and speeches
- Command of basic business correspondence,
- Commercial terminology
- Job applications
- Knowledge of advanced technical terminology
- Ability to give instructions
- Structure of technical language
- Structure of a written product
- Nature of oral presentation

Content

- Basic business correspondence
- Commercial terminology
- Data acquisition and wood technology texts
- Oral and written summaries
- Oral presentation in the wood technology field
- Texts in the textbook
- Business expos and processes

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers (latest edition). Edita.
- Wood technology texts and other additional material

Learning Methods

Oral and written presentations and assignments in pairs, small groups or independently.

Assessment

- Active participation in lectures and assignments
- Oral presentation and written exam
- Command of vocabulary
- Other tasks required during the course

Languages of Instruction Finnish and English

Swedish, 3 op KC04AA10031 (study unit)

Objectives

Upon completing this course, students will be capable of using Swedish in various work-related situations in their own professional field. They will also be competent in interactive communication and in acquiring and utilizing field-specific information.

Content

- Education
- Applying for a job and work
- Work environment and society
- Customer contacts
- Standard texts
- Field-specific terminology: basic vocabulary for the bio- and food fields

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, listening comprehension and oral exercises, written assignments, independent study, pair work and small group

work

Assessment Active participation in the lectures, approved interim and exams

Languages of Instruction Swedish and Finnish

English 3, 3 op KC05AP10060 (study unit)

Lecturers Riikka Ala–Sankila, MA

Objectives

Students will strengthen their knowledge of written and oral language skills and maintain and develop their existing language skills. They will write summaries, become familiar with meeting procedures and have command of the vocabulary associated with meeting procedures. Students will read and understand demanding texts related to wood technology and understand the vocabulary in such texts. They will be able to explain the key points of the texts either orally or in writing, and be competent in using high–level vocabulary when speaking and writing.

Content

- Reading and writing technical texts
- Compilation of a thesis abstract
- Presentations
- Meetings
- Interviews
- Field-related texts
- Texts from the textbook

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers (latest edition). Edita.
- Wood technology texts and other additional material

Learning Methods

Oral and written exercises and assignments in pairs, small groups or independently

Assessment

- Active participation in lectures and assignments
- Oral presentation and written exam
- Command of vocabulary
- Other tasks required during the course

Languages of Instruction Finnish and English

English 1, 3 op KC23AK10041 (study unit)

Lecturers Tapio Pihlajaniemi, MA

Objectives

Students will improve their oral and written language skills. Upon completion of the course, students will be competent in describing the type of education they have received and the work experience they have. They will be familiar with the job application process. Students will be introduced to the basics of written communication and writing business letters. They will be familiar with texts in the fields of mechanical and production engineering, and they will be able to understand and use the more common terminology in when speaking and writing.

- Communicating effectively
- Sources for retrieving information and the Internet
- Compiling a CV and job application
- Basic texts associated with the field

- Informal oral presentation
- Texts in the course book

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers (latest edition). Edita.
- Texts associated with the fields of mechanical and production engineering
- Other study material

Learning Methods

Oral and written assignments in pairs or small groups and independently

Assessment

- Active participation in lectures and assignments
- Oral presentation and written exam
- Command of vocabulary
- Other assignments required during the course

Languages of Instruction Finnish and English

Further Information Tapio Pihlajaniemi

Algebra and trigonometry, 4 op KC05AP10061 (study unit)

Lecturers Juhani Paananen, MSc (Eng.), MA

Objectives

Students will acquire the knowledge needed in mathematics for technology in the areas of mathematics taught in upper seconday school.

Content

- Literal equations
- Simplification of algebraic expressions
- Equations
- Trigonometry

Literature / Study Material

- Antti Majaniemi: ALGEBRA I
- Antti Majaniemi: GEOMETRIA: geometriaa, trigonometriaa ja vektorilaskentaa

Learning Methods

Lectures, calculations, and independent study. NB! 80 % attendance required in the lectures.

Assessment

Two mid-term exams, or final exam and points from calculations. Students who have studied advanced maths in upper secondary school may receive a grade for the course by sitting a test held at the beginning of the academic year.

Languages of Instruction Finnish

English 2, 3 op KC23AK10051 (study unit)

Lecturers Riikka Ala–Sankila

Objectives

The aim of the course is to provide students with more profound knowledge of oral and written language skills, as well as skills in written communication and business correspondence. Additionally, students will understand the more demanding terminology in their profession of mechanical and production engineering. They will be competent in using this terminology both orally and in writing.

Content

- · Basic business correspondance with some terminology
- · Obtaining information from professional texts associated with mechanical and production engineering
- Oral and written summaries
- Professionally-oriented oral presentations
- Texts in the course book
- Business expos
- Processes

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers. Edita. (latest edition)
- Texts associated with the fields of mechanical and production engineering, as well as other study material

Learning Methods

Oral and written assignments and exercises in pairs, in groups and individually

Assessment

- Active participation in lectures and exercises
- Oral presentation and written exam
- Command of vocabulary
- Other tasks required in the course

Languages of Instruction Finnish and English

Further Information Riikka Ala–Sankila

Vectors and matrices, 3 op KC05AP10062 (study unit)

Lecturers

Juhani Paananen, MSc, MA

Objectives

Students will acquire basic knowledge in vector and matrix calculations needed in their Professional Studies with which they will gain competence in demanding technical–mathematical matters.

Content

- Vectors and matrix algebra and application to technology
- Fundamentals of analytic geometry

Literature / Study Material

- Antti Majaniemi: ALGEBRA I
- Antti Majaniemi: GEOMETRIA: geometriaa, trigonometriaa ja vektorilaskentaa

Learning Methods Lectures, calculations and independent study

Assessment Two mid-term exams or final exam and points from calculations

Prerequisites

- Algebra
- Trigonometry

Languages of Instruction Finnish

English 2, 3 op KC04AA10050 (study unit)

Lecturers Riikka Ala–Sankila

Objectives

- Advancing oral and written skills
- Written communication and advanced business communication
- Familiarisation with demanding texts and literature in the field of auto and transportation technology and understanding and using the terminology in those texts when speaking and writing

Content

- Basic business communication
- Some commercial terminology
- Information acquisition from texts in the field of auto and transportation technology
- Oral and written summaries
- Oral presentation pertaining to the professional field
- Texts from the textbooks
- Business expos
- Processes

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers (latest edition). Edita. viimeisin painos.
- Other texts and material associated with the field

Learning Methods

Oral and written exercises, assignments to do in pairs and small groups and independently

Assessment

- Active participation in class and assignments
- Oral presentation and written exam
- Command of vocabulary
- Other tasks required during the course

Differential and integral calculus, 3 op KC05AP10063 (study unit)

Lecturers Juhani Paananen, MSc, MA

Objectives

Students will acquire basic knowledge in one-variable differential and integral calculations. Students will also use this knowledge in their Professional Studies with which they will gain competence in technical-mathematical matters.

Content

One-variable differential and integral calculations

Literature / Study Material

- Antti Majaniemi: MATEMATIIKKA I: Differentiaali- ja integraalilaskentaa insinööriopiskelijoille.
- Antti Majaniemi: MATEMATIIKKA II: Differentiaali- ja integraalilaskentaa sekä differentiaaliyhtälöitä.

Learning Methods

Lectures, calculations and independent study

Assessment

Two mid-term exams or a final exam and points from calculations.

Prerequisites

- Algebra
- Trigonometry

Languages of Instruction Finnish

English 3, 3 op KC23AK10061 (study unit)

Lecturers Tapio Pihlajaniemi, MA

Objectives

- To enforce and maintain students' previous oral and written language skills
- To be able to compile a summary
- To have command of meeting procedures and terminology
- To understand extensive, professional texts associated with the fields of mechanical and production engineering and competence in relating the key issues in the texts orally or in writing
- To have command of difficult terminology in writing and when speaking
- To prepare students to work in multi-national projects and business projects abroad

Content

- Reading and writing technical texts
- Writing the abstract to the thesis
- Presentations
- Meetings
- Interviews
- Texts pertaining to students' professional field
- Texts in the textbook

Literature / Study Material

Huhta, Marjatta: Connections: Communication Guidelines for Engineers. Edita. (latest edition).

• Texts associated with the fields of mechanical and production engineering, as well as other study material.

Learning Methods

Oral and written assignments and exercises in pairs, in groups and individually

Assessment

- Active participation in lectures and exercises
- Oral presentation and written exam
- Command of vocabulary
- Other tasks required in the course

Languages of Instruction Finnish and English

Further Information Tapio Pihlajaniemi

Differential equations and business mathematics, 3 op KC05AP10064 (study unit)

Lecturers Juhani Paananen, MSc, MA

Objectives

Students will acquire basic knowledge in one-variable differential and integral calculations. Students will also use this knowledge in their Professional Studies with which they will gain competence in technical-mathematical matters.

Content

- Differential equations
- Business mathematics

Literature / Study Material

• Antti Majaniemi: MATEMATIIKKA II: Differentiaali- ja integraalilaskentaa sekä differentiaaliyhtälöitä.

• Leila Karjalainen: OPTIMI: Matematiikkaa talouselämän ammattilaisille.

Learning Methods

Lectures, calculations and independent study

Assessment

Two mid-term exams or a final exam andpoints from calculations

Prerequisites

- Algebra and Trigonometry
- Differential and Integral Čalculus

Languages of Instruction Finnish

English 3, 3 op KC04AA10060 (study unit)

Lecturers Tapio Pihlajaniemi

Objectives

- To advance skills in oral and written language
- To maintain and improve existing language skills
- To write a summary
- Competence in the procedures of a meeting and use of relevevant vocabulary
- To handle extensive texts from the field of auto and transportation technology and to understand the vocabulary in them, and the ability to briefly explain the key issues in such texts either orally or in writing
- To use difficult vocabulary when speaking and writing
- To provide readiness for project studies on international project teams and in business projects abroad

Content

- Reading and writing technology-related texts
- Writing the abstract for a thesis
- Presentations
- Meetings
- Interviews
- Field-specific texts
- Texts from the textbook

Literature / Study Material

- Huhta, Marjatta: Connections: Communication Guidelines for Engineers (latest edition). Edita.
- Other field-specific texts and material

Learning Methods

Oral and written exercises, assignments in pairs, small groups and independently

Assessment

- Active participation in class and assignments
- Oral presentation and written exam
- Command of vocabulary
- Other tasks required during the course

Languages of Instruction

- Finnish
- English

Further Information Tapio Pihlajaniemi

Statistics, 3 op KC05AP10065 (study unit)

Lecturers

Juhani Paananen, MSc, MA

Objectives

Students will acquire basic knowledge in statistics and the other areas associated with it. Students will also use this knowledge in their Professional Studies with which they will gain competence in technical–mathematical matters.

Content

- Statistics
- Statistical methods used in processing measurement data
- Design of experiments
- Use of mathematical software

Literature / Study Material

• Antti Majaniemi. MATEMATIIKKA IV: Tilastot ja todennäköisyys

Learning Methods Lectures, calculations and independent study

Assessment Two mid-term exams or final exam and points from calculations

Prerequisites

- Algebra
- Trigonometry

Languages of Instruction Finnish

Mechanics, 3 op KC05AP10066 (study unit)

Lecturers Jarmo Oranen, LA

Objectives

Students will acquire basic knowledge of physics for engineering. The course creates a foundation for the comprehension of demanding technical information required for technical expertise in their profession.

Content

- Kinematics
- Newton's laws
- Work
- Power
- Energy
- Impulse
- Linear momentum
- Rotary movement
- Mechanics of change

Literature / Study Material

- Hautala, Peltonen: Insinöörin (AMK) Fysiikka osa I. Lahden Teho-Opetus Oy.
- Lecture notes

Learning Methods

Lectures, homework and calculations. NB! 80 % attendance required.

Assessment Written course–end examination Languages of Instruction Finnish

Algebra and trigonometry, 4 op KC23AK10053 (study unit)

Lecturers Heikki Kokkonen, LA

Objectives

Students will achieve the mathematical skills needed in their studies in technology. They will achieve the level of advanced upper secondary school mathematics.

Content

- Literal calculations
- Simplification of algebraic expressions
- Equations and trigonometry

Literature / Study Material

- Antti Majaniemi: ALGEBRA I
- Antti Majaniemi: GEOMETRIA

Learning Methods

- Lectures, calculations and independent study
- NB! 80 % attendance required in the lectures

Assessment

Two mid-term exams or final exam and point from calculations. Students who have completed advanced mathematics in upper secondary school may take an exam at the beginning of the academic year to receive credit for the entire course.

Languages of Instruction Finnish

Further Information Heikki Kokkonen, LA

Thermal and electrical physics, 3 op KC05AP10067 (study unit)

Lecturers Jarmo Oranen, LA

Objectives

Students will acquire basic knowledge of physics for engineering. The course provides students with the opportunity to learn complex technological knowledge in the working world.

Content

- Basics of thermal physics
- Electrostatics
- Direct-current circuits
- Basics in alternating current

Literature / Study Material

• Hautala, Peltonen: Insinöörin (AMK) Fysiikka osat I ja II. Lahden Teho-Opetus Oy.

Lecture notes

Learning Methods Lectures, assignments and calculations

Assessment Written course–end examination Prerequisites Mechanics

Languages of Instruction Finnish

Vectors and analytic geometry, 3 op KC23AK10054 (study unit)

Lecturers Heikki Kokkonen, LA

Objectives

Students will acquire basic knowledge in vector calculations, analytical geometry and know how to apply this knowledge in technology. Students will also use this knowledge in their Professional Studies with which they will gain competence in technical–mathematical matters.

Content

- Vector calculations
- Analytic geometry
- Application of the above in technology

Literature / Study Material

- Antti Majaniemi: ALGEBRA I
- Antti Majaniemi: GEOMETRIA

Learning Methods Lectures, calculations, and independent study

Assessment Two mid-term exams or final exam and points from calculations

Prerequisites Algebra and Trigonometry

Languages of Instruction Finnish

Wave and modern physics, 3 op KC05AP10068 (study unit)

Lecturers Jarmo Oranen, LA

Objectives

Students will acquire basic knowledge of physics for engineering. The course introduces a foundation for the comprehension of demanding technical information required in the vocational subjects and prepares the students for technical expertise in their profession.

Content

- Oscillatory motion
- Wave motion
- Acoustics
- Optics
- Radiation
- Nuclear physics

Literature / Study Material

- Hautala, Peltonen: Insinöörin (AMK) Fysiikka osa II. Lahden Teho-Opetus Oy.
- Lecture notes

Learning Methods Lectures, home work and calculations Assessment Course–end examination

Prerequisites Mechanics

Languages of Instruction Finnish

Differential and integral calculus, 3 op KC23AK10055 (study unit)

Objectives

Students will acquire basic knowledge in one-variable differential and integral calculations. Students will also use this knowledge in their Professional Studies with which they will gain competence in technical-mathematical matters.

Content One variable differential and integral calculations

Literature / Study Material

- Antti Majaniemi: MATEMATIIKKA I
- Antti Majaniemi: MATEMATIIKKA II

Learning Methods Lectures, calculations and independent study

Assessment Two mid-term exams or final exam and points from calculations

Prerequisites Algebra and Trigonometry

Languages of Instruction Finnish

Physics laboratory works, 3 op KC05AP10069 (study unit)

Lecturers Jarmo Oranen, LA

Objectives

The course provides students with basic knowledge of experimental measurements, processing and reporting results. They will learn about various applications of experimental physics for various fields within engineering.

Content Laboratory experiments from different areas of physics.

Literature / Study Material

• Instructions for assignments in physics (Seinäjoki University of Applied Sciences, School of Engineering)

Learning Methods

Laboratory assignments (a minimum 90 % attendance required) and written reports

Assessment Approved reports and written examination

Prerequisites Mechanics

Languages of Instruction Finnish

Differential equations and business mathematics, 3 op KC23AK10056 (study unit)

Lecturers Heikki Kokkone

Heikki Kokkonen, LA

Objectives

Students will acquire basic knowledge in differential equations and commercial mathematics. Students will also use this knowledge in their Professional Studies with which they will gain competence in technical–mathematical matters.

Content

Differential equations and commercial mathematics

Literature / Study Material

- Antti Majaniemi: Matematiikka II
- Hand-outs by the teacher

Learning Methods

Lectures, calculations and independent study

Assessment Two mid-term exams or final exam and points from the calculations

Prerequisites

- Algebra and Trigonometry
- Differential and Integral Calculus

Languages of Instruction Finnish

Office applications, 3 op KC05AP10172 (study unit)

Objectives

Students will become familiar with the institution's more important computer programmes and systems intended for students, and they will be adept in using these programmes and systems. Upon completion of the course, students will understand IT terminology, the role IT plays in society and how they can apply IT to their own professional field.

Content

- Computer technology at the Seinäjoki University of Applied Sciences (Intranet, Study Register, online learning environment, and equipment used in the institution)
- Network services (e-mail and websites)
- Common applications (word processing, spreadsheets, graphics and mathematics software, and creating a webpage, etc.)

Literature / Study Material

- Paananen J. Tietotekniikan peruskirja. Docendo.
- Handbooks pertaining to application softwares

Learning Methods

Lectures, exercises and independent study

Assessment Written examination and approved assignments

Languages of Instruction Finnish

Computer aided mathematics, 3 op KC23AK10057 (study unit)

Lecturers Heikki Kokkonen, LA

Objectives

Students will acquire basic knowledge in mathematical software, statistics, and Excel. Students will also use this knowledge in their Professional Studies with which they will gain competence in technical–mathematical matters. The student must accomplish the basic know–how of the course contents as stated below. This knowledge is needed in vocational subjects and mastering of which enables the command of demanding technical–mathematical knowledge.

Content

Mathematical software, statistics, and Excel

Literature / Study Material Hand–out by the teacher

Learning Methods Lectures, calculations, and independent study

Assessment Two mid-term exams or final exam and points for calculations

Prerequisites Algebra and Trigonometry

Languages of Instruction Finnish

Basics of chemistry, 3 op KC05AP10160 (study unit)

Lecturers Niina Kälviäinen, MSc (Tech.)

Objectives Students will acquire basic knowledge of organic and inorganic chemistry.

Content

- Atoms and chemical bonding
- Combustion
- Inorganic material
- Plastics
- Metals
- Acids
- Alkali
- Electrochemistry
- Periodic table of elements
- Environmental chemistry
- Safety at work

Literature / Study Material Lecturer's material

Learning Methods Lectures, exercises, practical work

Assessment Examination, practical work

Prerequisites

• Completed chemistry courses at the upper secondary school or vocational school level

Mechanics, 3 op KC23AK10058 (study unit)

Lecturers Pasi Junell, DSc (Tech.)

Objectives Students will acquire basic knowledge of physics for engineering. The course introduces a foundation for the

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comprehension of demanding technical information required for technical expertise in their profession.

Content

Kinematics and dynamics of particles, work, power, energy, mechanics of rigid objects, as well as mechanics of solids and fluids.

Literature / Study Material

- Hautala, Peltonen: Insinöörin (AMK) Fysiikka osa I. Lahden Teho-Opetus Oy.
- Lecture notes

Learning Methods

- Lectures, homework and calculations
- NB! 80 % attendance required

Assessment Written course–end examination

Languages of Instruction Finnish

BASICS OF PROFESSIONAL STUDIES, 50 op KC05AOP (study entity)

The aim of Basics in Professional Studies is to provide students with basic knowledge of wood technology and to lay the foundation for their technical and commercial subjects.

Thermal and electrical physics, 3 op KC23AK10059 (study unit)

Lecturers Pasi Junell, DSc (Tech.)

Objectives

Students will acquire basic knowledge of physics for engineering. The course introduces a foundation for the comprehension of demanding technical information required for technical expertise in their profession.

Content

Basics of thermal physics and alternating current, electrostatics, and direct current

Literature / Study Material

• Hautala, Peltonen: Insinöörin (AMK) Fysiikka osat I ja II. Lahden Teho-Opetus Oy.

• Lecture notes

Learning Methods Lectures, homework and calculations

Assessment Written course–end examination

Prerequisites Mechanics

Languages of Instruction Finnish

Sustainable development, 3 op KC05BP20135 (study unit)

Lecturers Jorma Tuomisto, MSc (Eng.)

Objectives

Students will acquire a comprehensive picture of environmental protection and the opportunities technology offers to the field. Students will understand the prerequisites of sustainable development and acquire a positive and responsible attitude toward environmental protection.

Content

- Climate, quality of the air, inland surface and ground waters, soil, the Baltic Sea and its surroundings
- Impact of people's activities on the environment, and the prevention of hazardous impacts, cleaning contaminated land
- Sustainable development, clean technology, Waste Act, and sorting, processing, recycling and depositing waste
- Environmental systems, environmental permits, environmental administration, directive on chemicals and the European Chemicals Agency

Literature / Study Material Lecturer's material

Learning Methods Lectures and assignment

Assessment Exam and assignments

Wave and modern physics, 3 op KC23AK10063 (study unit)

Objectives

Students will acquire basic knowledge of physics for engineering. The course introduces a foundation for the comprehension of demanding technical information required for technical expertise in their profession.

Content

- Oscillatory motion
- Wave motion
- Acoustics
- Wave optics
- Geometric optics
- Quantized radiation
- X–rays
- Lasers
- Nuclear physics

Literature / Study Material

- Hautala, Peltonen: Insinöörin (AMK) Fysiikka osa II. Lahden Teho-Opetus Oy.
- Lecture notes

Learning Methods Lectures, homework and calculations

Assessment Written course-end examination

Prerequisites Mechanics

Languages of Instruction Finnish

Engineering drawing and CAD, 5 op KC05BP20045 (study unit)

Objectives

Students will learn the basics in 2D and 3D modelling and know how to create quality product and assembly models, layouts, and assembly and component drawings independently. The course also involves the modelling of design products and CAD design in a business environment. Students will possess extensive knowledge of the theory of drawing, understand the meanings of the symbols used in mechanical drawing and know how to utilise standardisation.

- 2D and 3D modelling
- Making product and assembly models, as well as layout, assembly and component drawings
- Modelling desin products

- CAD designing in a business environment
- Theory of technical drawing
- Mechanical drawing
- Standardisation
- Assignments are completed with AutoCAD 2007 Autodesk Inventor
- Familiarisation with the Solid Edge 3D–CAD programme

Literature / Study Material

Handouts and the following sections of literature as announced in the lectures:

- Laakko, Sukuvaara, Borgman, Simolin, Björkstrand, Konkola, Tuomi & Kaikonen 1998. Tuotteen 3D–CAD–suunnittelu. WSOY. Helsinki. 312 pp.
- Hietikko 1996. Tietokoneavusteinen tuotesuunnittelu. Otatieto Oy. Series 567. Helsinki. 238 pp.
- Autio & Hasari 1999. Koneenpiirustus ammattikorkeakouluille ja teknillisille oppilaitoksille. Õtava. Keuruu. 290 pp.

Learning Methods

Lectures and guided assignments in computerized design

Assessment Assignments and exam

Physics laboratory works, 3 op KC23AK10064 (study unit)

Lecturers Pasi Junell, DSc (Tech.)

Objectives

The course provides students with basic knowledge of experimental measurements, processing and reporting the results. Applications of experimental physics for various fields of engineering will be introduced.

Content

Laboratory experiments from different areas of physics and technology

Literature / Study Material Instructions for exercises in physics (Seinäjoki University of Applied Sciences, School of Engineering).

Learning Methods Laboratory exercises (minimum 90 % attendance required) and written reports

Assessment Reports and written examination

Prerequisites Mechanics

Languages of Instruction Finnish

Wood materials, 4 op KC05BP20044 (study unit)

Lecturers Heikki Heiskanen, MSc (Eng.)

Objectives

The purpose of the course is to introduce students to the fundamentals of wood, its structure and characteristics. Students will understand the demands and limitations the raw materials in the Finnish wood product industry have on processes and products.

Content

- Wood resources in Finland, growth and use of forest in Finland
- Structure of wood, physical and mechanical properties
- Identifying the most important tree species and differences between them

Literature / Study Material

- Saarman, Endel. 1992. Träkunskap. Specialbok X-726. Sveriges Skogsindustriförbund. Markaryds grafiska, Markaryd. 308 pp.
- Kärkkäinen 1985. Puutiede. Hämeenlinna. (applicable sections)
- Kärkkäinen 2003. Puutieteen perusteet. Hämeenlinna. (applicable sections)
- Kuikka & Kunelius 1998. 2 Puutekniikka Materiaalit. Otavan kirjapaino, Keuruu. Pages 7–38
- Handouts and other course literature announced by the lecturer

Learning Methods

Lectures, laboratory work and seminar presentation

Assessment Approved assignments and an examination

Basics of chemistry, 3 op KC23AK10151 (study unit)

Objectives

The course introduces students to the chief aspects of general and inorganic chemistry.

Content

The course involves discussion of atoms and chemical compounds, chemical reactions and calculations, combustion, acids and alkalines, electrochemistry and corrosion, as well as safe working methods.

Literature / Study Material Lecturer's material

Learning Methods Lectures, calculations, assignments

Assessment Written examination, assignment

Prerequisites Completed relevant courses in upper secondary school or vocational school

Languages of Instruction Finnish

Drying techniques, 3 op KC05BP20160 (study unit)

Lecturers Heikki Heiskanen, MSc (Eng.)

Objectives

Students will understand the significance of the appropriate drying technique in wood processing.

Content

- Different methods of drying
- Types of dry houses and their structures
- Future drying methods
- Defects and their prevention
- Making the quality and timing of drying more efficient
- Special drying and sorting
- LAATUKAMARI simulation programme

Literature / Study Material

- Esping, B. 1992. Trätorkning 1a. Grunder I torkning. Trätek. (applicable sections)
 Esping, B. 1996. Trätorkning 1b. Praktisk torkning. Trätek. (applicable sections)
- Esping 1988. Trätorkning 2. Torkningsfel åtgärder. Trätek (applicable sections)
- Siimes 1983. Kuivauskäsikirja. VTT publication 243. (applicable sections)
- Usenius & Siimes 1991. Tulevaisuuden puunkuivausmenetelmät. VTT publication 1205. (applicable sections)
- Kuusela, J. 1984. Puun kuivauksen erikoismenetelmät. VTT publication 329. (applicable sections)
- Other material distributed in the lectures

Learning Methods Lectures, simulation exercises and drying seminar

Assessment Exam and approved assignments

Prerequisites Theory of Wood Materials

Office applications, 3 op KC23AK10066 (study unit)

Objectives

Students will be familiar with the more common software and computer systems used by students in the institution and learn to use them with competence. They will also be knowledgeable of the basic terminology used in the IT field, be conscious of the role of IT in society, and understand how to apply IT to the duties in their own profession.

Content

By way of various exercises, students will become familiar with the following topics:

- Computer technology at the Seinäjoki University of Applied Sciences (Intranet, study register, online learning environment, equipment in use)
- Network services (e-mail, websites)
- More significant application programmes (word processing, spreadsheets, graphics, mathematics programmes, and creating a website, etc.)

Literature / Study Material

- Juha Paananen. Tietotekniikan peruskirja. Docendo.
- Handbooks for application software
- Lecture material

Learning Methods Lectures, exercises and independent study

Assessment Written examination and approved assignments

Languages of Instruction Finnish

Basics of machine automation, 4 op KC05BP20193 (study unit)

Lecturers Veli–Jukka Uitto, MSc (Eng.)

Objectives

Students will understand the more common sensors in machine automation and be able to select the right sensor for various solutions. They will also understand how the automation systems used in machine automation work. Students will be competent in programming programmable logic controls in simple machines.

Content

- Common binary sensors in machine automation (mechanical, inductive, capasitive, optical)
- Binary measurements of temperature, pressure, flow and level
- Identication systems in machine automation (bar codes, RFID and machine vision)
- Binary arithmetics, Boolean algebra, relay and plc controls

Literature / Study Material

To be announced during lectures.

Learning Methods Lectures, exercises in class and laboratory work

Assessment Examination and approved assignments
Industrial economics, 3 op KC05BP20171 (study unit)

Lecturers Jukka Pajula

Objectives

Students will gain insight into the basic issues associated with a company's production economics.

Content

- Planning production, productivity, growth, profitability, liquidation and solvency
- Investment calculations, budgeting, parameters
- Industrial rationalisation and motion studies
- Material and personnel management and the basics in marketing and commercial law

Literature / Study Material

- Uusi-Rauva, Haverila, Kouri: Teollisuustalous (Industrial economics).
- Lecture handouts and other material

Learning Methods Lectures and assignments

Assessment Exam and seminar work

Engineering drawing and CAD, 6 op KC23BK20012 (study unit)

Lecturers Jukka Aarnio

Objectives

Students will learn manual and computer-aided methods for designing and measuring machines and machine parts, in accordance with regulations and standards, while taking into account production methods.

Content

- Significance of mechanical design
- Projections
- Measurement
- Surface markings
- Welding marks
- Tolerances
- Assembly drawings
- CAD 2D and 3D modelling

Literature / Study Material

- Pere: Koneenpiirustus
- Autio: Koneenpiirustus

Learning Methods Lectures, manual exercises, supervised CAD work, independent study, and exercises

Assessment Examinations and exercises

Languages of Instruction Finnish

Further Information Jukka Aarnio

Energy technology, 2 op KC05BP20210 (study unit)

Lecturers

Veli–Jukka Uitto, MSc (Eng.)

Objectives

The aim of the course is to provide students with insight into energy resources, energy production technology, environmental impacts, and energy production opportunities in the wood industry.

Content

- Energy resources
- Production processes of energy
- Environmental impacts
- Cleaning systems
- Using energy in industry
- Energy production opportunities in wood industry
- Burning wood and waste

Literature / Study Material

- Hellgren, Heikkinen, Sumalainen & Kala: Energia ja ympäristö (Energy and the environment).
- Additional material to be announced during lectures

Learning Methods Lectures and assignments

Assessment Exam and seminar presentation

Material technique 1, 3 op KC23BK20030 (study unit)

Lecturers Jukka Pajula

Objectives Students will be familiar with construction materials, their characteristics, handling, standards and selection.

Content

- Operating characteristics and materials testing
- Internal structure of metals
- Constitutional diagram
- Thermal treatment
- Steel and cast iron
- Other alloys.

Literature / Study Material Koivisto, K. et al. Konetekniikan materiaalioppi.

Learning Methods Lectures, exercises, laboratory work

Assessment Examination, practical work, laboratory exercises

Languages of Instruction Finnish

Further Information Jukka Pajula

Statics, 3 op KC05BP20060 (study unit)

Objectives

Students will acquire basic knowledge of statics and know how to apply their knowledge to simple structures.

Content

- Basic laws of mechanics
- Combination of forces, static momentum of power
- Balance of a rigid object
- Supports
- Stress of beams and stress diagrams
- Centre of gravity and the structure of beams

Literature / Study Material Salmi, T.: Statiikka

Learning Methods Lectures and assignments

Assessment Examination

Prerequisites

- Physics 1
- Mathematics 1

Manufacturing technology, 3 op KC23BK20032 (study unit)

Lecturers Kimmo Kitinoja

Objectives

Students will be familiar with the more common manufacturing methods, machines and tools in the engineering industry.

Content

- Welding methods
- Casting
- Powder metals
- methods for forming and removing material
- Working with sheet metal
- Coating
- Measuring

Literature / Study Material

- Ihalainen et al. Valmistustekniikka. Otatieto.
- Other lecture material

Learning Methods Lectures, visits to factories, exercises and independent study

Assessment Written examination and exercises

Languages of Instruction Finnish

Further Information Kimmo Kitinoja

Strength of materials, 4 op KC05BP20071 (study unit)

Lecturers Jukka Pajula, MSc (Eng.)

Objectives

Upon completion of the course, students will be familiar with the fundamental concepts of material strengths and simple structures such as rods and other linear structures.

Content

- Pulling, pressing and cutting
- Rod structures
- Clean cuts
- Bending, twisting and buckling

Literature / Study Material Karhunen et al.: Lujuusoppi (Strength of Materials).

Learning Methods Lectures and assignments

Assessment Two mid-term tests or a final examination and approved calculations

Prerequisites Statics

Statics, 3 op KC23BK20051 (study unit)

Lecturers Jukka Aarnio

Objectives

Upon completion of the course, students will possess basic knowledge of statics and the ability to use that knowledge in simple structures.

Content

- Basic principles of mechanics
- Summation of forces
- Moment of force
- Types of support
- Center of gravity
- Equilibrium in relation to particles and solids
- Loads and load diagrams of beams
- Statics of structures
- Friction
- Principle of virtual work
- Simple mechanical machines

Literature / Study Material

- Kärkkäinen M. & Mikkonen P. Insinöörin mekaniikka.
- Outinen H. Statiikka I ja II.
- Lecture material

Learning Methods Lectures and exercises, independent study

Assessment Written examination, exercises

Languages of Instruction Finnish

Further Information Jukka Aarnio

Timber related chemistry, 2 op KC05BP20141 (study unit)

Lecturers Niina Kälviäinen, DSc

Objectives Students will acquire basic knowledge of chemistry and wood chemistry.

Content

- Oraganic chemistry with special emphasis on wood chemistry
- Wood processing from the perspective of chemistry
- Gluing and painting wood

Literature / Study Material Lecturer's materials

Learning Methods Lectures, assignments

Assessment Exam and reports on assignments

Prerequisites Basics in Chemistry

Dynamics, 3 op KC23BK20062 (study unit)

Lecturers Jukka Aarnio

Objectives

Upon completion of the course, students will possess basic knowledge of dynamics and the ability to use that knowledge to solve practical problems. They will also have an understanding of the basic phenomena of mechanical vibrations.

Content

- Basic principles of dynamics
- Kinematics of particles
- Kinematics of solids
- Basic principles of kinetics
- Vibrations of a single degree of freedom system
- Energy principle

Literature / Study Material

- Salmi, T. & Virtanen S. Dynamiikka. (Assigned sections)
- lecture material

Learning Methods Lectures and exercises, independent study

Assessment Written examination

Prerequisites Statics

Languages of Instruction Finnish

Further Information Jukka Aarnio

Woodworking and blade technology, 2 op KC05BP40050 (study unit)

Lecturers

Heikki Heiskanen, MSc (Eng.)

Objectives

The aim of the course is to familiarise students with the fundamentals of wood cutting methods and related factors, blade structures and sanding of wood.

Content

- Cutting in various situations
- Blade structures, materials and design
- Wood sanding

Literature / Study Material

- Grönlund, A. 1986. Träbearbetning. Träteknik Centrum. Liber tryck AB, Stockholm. (applicable sections)
- Jussila, A. et al. 1999. Puutekniikka 3 Tuotantotekniikka. Otavan kirjapaino oy, Keuruu (applicable sections)
- Lecturer's handout
- Other material to be announced in the lectures

Learning Methods Lectures, assignments

Assessment Examination, assignments

Prerequisites Theory of Wood Materials

Strength of materials 1, 4 op KC23BK20071 (study unit)

Lecturers Mika Kumara

Objectives

Upon completion of the course, students will possess basic knowledge of the strength and elasticity of materials and the ability to apply this knowledge to the components and structures of machines.

Content

- Basic concepts of the strength of materials
- Tension in structures
- Deformations and dimensioning in cases of tension, compression, shearing, bending and torsional loading cases
- State of plane stress
- State of combined stresses

Literature / Study Material Karhunen et al. Lujuusoppi

Learning Methods Lectures and exercises, independent study

Assessment Written examination, exercises

Prerequisites Statics

Languages of Instruction Finnish

Further Information Mika Kumara

Basics of hydraulics and pneumatics, 3 op KC05BP20111 (study unit)

Lecturers

Veli–Jukka Uitto, MSc (Eng.)

Objectives

Students will acquire basic knowledge of hydraulic and pneumatic systems and of how to design them.

Content

- Structure and function of hydraulic and pneumatic components
- Devices that produce, control and regulate compressed energy
- Devices, reservoirs, pipes, and extra devices
- Low pressure technology
- Basics in the design and measurement of a hydraulic and pneumatic network

Literature / Study Material To be announced during lectures.

Learning Methods

- Lectures and assignments: 40 h
- Independent study: 40 h

Assessment

Two interim tests or final examination and approved assignments and laboratory work

Machine elements, 4 op KC23BK20092 (study unit)

Lecturers Mika Kumara

Objectives

Students will gain insight into the principles of operation of machine components and design calculations, and they shall be capable of selecting parts from standards and catalogues.

Content

- Component calculations and basis of design
- Joints
- Revolving components: axle connections, parallel bearings, roll bearings, shaft couplings, springs, brakes, chain and belt drives, toothed wheels and gears

Literature / Study Material To be announced during the lectures.

Learning Methods Lectures and exercises, independent study

Assessment Examination and exercises

Prerequisites Strength of Materials 1

Languages of Instruction Finnish

Further Information Mika Kumara

Timber structures, 3 op KC05BP41032 (study unit)

Objectives

Students will gain knowledge of the properties and use of timber in load-bearing structures. They will also become

familiar with the functions of common timber structures and principles of their measurements.

Content

- Materials of timber structures
- Principles of planning
- Joints
- Structural parts and their measurements

Literature / Study Material

• Lea Kähkönen: Kantavat puurakenteet (Load-bearing timber structures)

Learning Methods Lectures, calculations, homework, structure testing in the laboratory

Assessment Exam, approved calculations, and assignments

Prerequisites

- Theory of Wood Materials
- Statics
- Strength of Materials

Electrical engineering and electronics, 4 op KC23BK20101 (study unit)

Lecturers Veli–Jukka Uitto, MSc (Eng.)

Objectives

Upon completion of the course, students will be familiar with the more important concepts and calculation methods used in theoretical electrical engineering. They will also acquire a general view of the possibilities of electronics in mechanical engineering applications. Students will know the more important components used in electronics.

Content

- Basics in electrical engineering and methods of calculation
- Basic structures and features of various types of motors
- Basic components of electronics: diodes, transistors, operation amplifiers and their operating principles, basic circuits in analog technology
- Basics in digital electronics
- Boole algebra
- Logic ports

Literature / Study Material To be announced during the course.

Learning Methods Lectures and exercises, independent study

Assessment Written examination and exercises

Languages of Instruction Finnish

Further Information Veli–Jukka Uitto

Product design, 3 op KC05BP10190 (study unit)

Lecturers Jaakko Purtanen

Objectives

The aim of the course is to provide students with basic knowledge of industrial product planning and design from both the consumer's and the manufacturer's points of view.

Content

- Design
- Study of colours and perspective
- Design technology
- Model construction and testing

Literature / Study Material To be announced during lectures.

Learning Methods Lectures, exercises and homework

Assessment Written examination and approved exercises

Industrial economics, 3 op KC23BK20132 (study unit)

Lecturers Jukka Pajula

Objectives Students will acquire knowledge of issues related to a company's production economics.

Content

- Production planning, productivity, growth, profitability, liquidity and financial solidity
- Investment calculations, budgeting, key ratios
- Rationalization and analyzing performed work in the metal industry
- Materials management
- Fundamentals of marketing
- Quality

Literature / Study Material Uusi–Rauva, Haverila & Kouri: Teollisuustalous

Learning Methods Lectures and exercises, independent study

Assessment Examination and seminar work

Languages of Instruction Finnish

Further Information Jukka Pajula

Wood and log construction, 3 op KC05BP41172 (study unit)

Lecturers Juhani Saukko, BSc

Objectives

Students will learn about the more common industrial timber house and log production methods, basic principles of log building design and special requirements in wood and log construction.

- Industrial production of wooden houses
- Open structure system
- Pre-cut

- Platform
- Design, erection, protection and surface treatment of log houses
- Log drying, production and working methods

Literature / Study Material Lecturer's material and Puuinfo material

Learning Methods Lectures, seminars, exercises and field trips

Assessment Approved assignments and examination

Prerequisites Building Joinery Industry

Sustainable development, 3 op KC23BK20135 (study unit)

Lecturers Jorma Tuomisto

Objectives

Students will gain comprehensive insight into environmental protection and the opportunities afforded by technology. They will understand the prerequisites for sustainable development and have a positive and responsible attitude toward environmental protection.

Content

- Climate, air quality, inland surface and ground water, soil, Baltic Sea and its environs
- Impact of humans on the environment, preventing negative impacts on the environment, purifying contaminated soil
- Sustainable development, clean technology, Act on Waste, sorting, handling and recycling waste and final disposal
- Environmental systems, environmental licenses, environmental administration, directive on chemicals and the European Chemical Agency

Literature / Study Material Lecturer's own material

Learning Methods Lectures and assignment

Assessment Written examination and assignment

Languages of Instruction Finnish or English if necessary

Further Information jorma.tuomisto@seamk.fi

Industrial safety and labour law, 3 op KC05BP50071 (study unit)

Objectives

The aim of the course is to provide students with knowledge of various aspects of work safety and related legislation.

Content

- Work safety organisations
- Plant layout, lighting, noise, air-conditioning
- Danger, preventive work safety, psychological work safety, safety procedures, risk assessment
- Work legislation norms, individual and collective legislation, and social security

Literature / Study Material

• Risto Järvinen: Puusepänteollisuuden työsuojeluopas (work safety in the joinery industry)

• Other material provided during lectures

Learning Methods Lectures and assignments

Assessment Approved assignments and an examination

Prerequisites Practical training

Auto- ja konetekniikan perusteet, 2 op KC23BK20137 (study unit)

Lecturers Hannu Ylinen and Juho Yli–Suomu

Objectives

Students will be aware of the safety factors involved in laboratory work. They will be familiar with the basic tools used in engineering shops. Students will also understand the basic concepts associated with the structure of an automobile. The course also provides students with basic knowledge needed in the Professional Studies for automotive engineering.

Content

- General occupational safety in a machine laboratory, machine-specific safety factors
- Basic training in the use of the following machines for the engineering industry: saws, lathes, milling machines, plate shears, and welding machines
- Equipment for automobile chassis and controls, transmission gears, motors, electrical devices, and electronic systems

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Laboratory work and independent study

Assessment Assignments and exam

Languages of Instruction Finnish

Further Information Hannu Ylinen or Juho Yli–Suomu

PROFESSIONAL STUDIES MODULES, 45 op KC23BK30 (study entity)

Compulsory modules in the Professional Studies include Production Engineering, Mechanical Engineering and Business Operations.

Wood technology basic module, 15 op KC05BP40 (study entity)

The objective of the Basic Module in Wood Technology is to provide students with basic knowledge of woodworking machines, surface treatment, gluing techniques, products and manufacturing in the wood industry.

Manufacturing technology, 3 op KC05BP50041 (study unit)

Lecturers Heikki Heiskanen, MSc (Eng.)

Objectives

The course provides students with an overview of the types of products that can be made in the wood product industry using wood working equipment. Students also learn about the more common production methods and equipment in the joinery industry, as well as the correct working methods and the prevention of hazardous situation. risk prevention.

Content

• Various wood working machines used for cutting, edging, planing, facing, sanding, drilling, dowelling, mounting, etc. wood

Literature / Study Material

- Grönlund, Anders. 1986. Träbearbetning. Träteknik Centrum. Libertryck AB, Stockholm. (Applicable sections)
- Jussila, Ari et al. 1999. Puutekniikka 3 Tuotantotekniikka. Otavan kirjapaino Oy, Keuruu. (Applicable
- sections) • Lecturer's handouts
- Other material provided in the lectures

Learning Methods

Lectures, laboaratory work (learning about the laboratory equipment by making a simple wood product, for example), field trips

Assessment Exam and approved assignments

Prerequisites Theory of Wood Materials

Surface treatment, 4 op KC05BP40062 (study unit)

Lecturers Jyri Saranpää, MSc

Objectives

The aim of the course is to familiarise students with the principles of the most common surface treatment materials and methods used in joinery, as well as the properties of different surface materials.

Content

- Chemical and physical concepts of surface treatment
- Composition and properties of paints and lacquers, and application and hardening techniques
- Different types of films, foils and laminates, their application methods and costs

Literature / Study Material

- Koponen 1988. Puutuotteiden pinnoitus. Otakustantamo (applicable sections)
- Koponen 1991. Puutuotteiden jalostus ja kehitys. Otakustantamo (applicable sections)
 Jussila, et al. 1999. Puutekniikka 3 Tuotantotekniikka (applicable sections)
- von Tell, B. 1990. Ytbehandling. Trätek (applicable sections)
- Becker & Acroma. 1999. Pintakäsittelyn perusteet
- Tikkurila. Puun teollinen pintakäsittely
- Other material provided in the lectures

Learning Methods

Lectures, laboratory work, and field trips

Assessment Laboratory work and an examination

Prerequisites

- Theory of Wood Materials
- Drying Technology
- Gluing Technology

Module in automotive engineering, 15 op KCAA10 (study entity)

The program's objectives are to provide the students with knowledge pertaining to the mechanics and structure involved in car movement.

Production and processing of sawn goods and wood-based panel production and processing, 4 op KC05BP50042 (study unit)

Lecturers Heikki Heiskanen, MSc (Eng.)

Objectives

The aim of the course is to provide students with basic knowledge of the significance of timber sawing and wood-based panels in the Finnish economy. The course introduces students to the modern production and further processing of sawn timber and wood-based panels and familiarises them with structure, production processes, costs, and profitability.

Content

- Properties, production and processing of sawn timber and various types of wood–based panels
- Wood as a raw material, its procurement and handling
- Industrial specialisation: sorting by strength, protection of timber, and scarf-jointing, laminated wood and roof trusses

Literature / Study Material

- Sipi, M. 2002. Sahatavaratuotanto.
- Koponen, Hannu. 2005. Puulevytuotanto
- Report by the Ministry of Trade and Industry
- Other material provided in the lectures

Learning Methods

Lectures, demonstrations, laboratory work (comparison of the strength of panels, sorting of sawn timber), field trips

Assessment Approved assignments and an examination

Prerequisites Theory of Wood Materials

NC technology, 3 op KC23BK30011 (study unit)

Lecturers Kimmo Kitinoja

Objectives Students will acquire basic knowledge of automatic manufacturing and programming.

Content

- NC-machines
- Programming codes
- Interactive programming
- CAD/CAM systems

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, exercises, laboratory work and independent study

Assessment Written examination/laboratory work: 70/30

Prerequisites Manufacturing Technology

Languages of Instruction Finnish

Gluing technique, 4 op KC05BP20151 (study unit)

Lecturers

Heikki Heiskanen, MSc (Eng.)

Objectives

Students will understand the basic nature of gluing and the factors affecting it. They will also be familiar with various types of glue, gluing techniques and mistakes.

Content

- Chemistry and physics of gluing
- Natural resins and thermoses and thermoplastic glues
- Spreading, pressing and heating techniques
- Causes for gluing defects and testing of joints

Literature / Study Material

- Raknes, Eirik. 1986. Trälimning. Trätek. Graphic systems AB. Göteborg, 156 pp. (applicable sections)
- Koponen, H. 1974. Puun teollinen liimaus.
- Koponen, H. Puutuotteiden liimaus (applicable sections)
- Lecturer's handouts
- Other material provided during lectures

Learning Methods Lectures, laboratory work (gluing), and field trips

Assessment Approved assignments and an examination

Prerequisites Theory of Wood Materials

Vehicle laws, 2 op KC04BA40101 (study unit)

Objectives

Students will understand the legislation concerning the automobile industry and how to apply it in practice.

Content

- Vehicles Act
- Decree on Vehicle Construction and Equipment
- Decree on the Use of Vehicles on the Road
- Structural changes and assembling an automobile from parts
- Installation and repair permits
- Occupational safety legislation

Literature / Study Material Vehicle regulations

Learning Methods Lectures and exercises

Assessment Examination and exercises: 80/20

Wood technology continuation module, 15 op KC05BP41 (study entity)

The aim of the Advanced Module in Wood Technology is to deepen students knowledge of building joinery products and furniture. Upon completion of the module, students will have command of various techniques, which aid in the improvement of a company's productivity and profitability. Additionally, students will have command of factory planning and calculations in investment profitability.

Production systems, 3 op KC23BK30021 (study unit)

Lecturers Kimmo Kitinoja

Objectives

Students will acquire knowledge of various methods of production in industrial enterprises and understand their significance in production.

Content

- Flow of manufacture
- Assembly
- Automation
- Tool
- Control and controllability
- Data systems

Literature / Study Material Lapinleimu et al. Kone– ja metalliteollisuuden tuotantojärjestelmät

Learning Methods Lectures, group study and exercises, independent study

Assessment Written examination/exercises: 70/30

Prerequisites Manufacturing Technology

Languages of Instruction Finnish

Joinery product industry, 3 op KC05BP40021 (study unit)

Lecturers Heikki Heiskanen, MSc (Eng.)

Objectives

The aim of the course is to provide students with fundamental knowledge of the building joinery product market, structures, properties.

Content

- Overview of the building joinery industry
- Fixtures, doors, windows, stairs, trusses, partitions, folding doors and parquets

Literature / Study Material

- Report by the Ministry of Trade and Industry: Rakennuspuusepäntuotteiden valmistus (manufacturing building joinery products)
- Hannu Koponen: Rakennuspuusepänteollisuus (Building joinery industry)
- Some construction industry files
- Other material provided during lectures

Learning Methods Lectures, field trips and assignments

Assessment Approved assignments and an examination

Prerequisites Manufacturing and Refining of Timber and Wood Panels

Automotive engineering 1, 3 op KC04BA40031 (study unit)

Lecturers Jukka Pajula

Objectives

Student will understand the factors affecting fuel consumption and the formation of driving resistance under various circumstances. They will be able to determine the factors corresponding to the performance of a car.

Content

- Driving resistance
- Basic, operational principles of the engine and transmission
- Diagrams of the driving space
- Acceleration
- · Choosing transmission drive gear
- Fuel consumption
- Durability
- Limitations of acceleration and ascent

Literature / Study Material

- Laine, O. Autotekniikka.
- Field-related publications
- Lecturer's material

Learning Methods Lectures, exercises, and diagrams of the driving space

Assessment Examination and approved exercises

Languages of Instruction Finnish

Furniture industry, 3 op KC05BP40011 (study unit)

Lecturers Heikki Heiskanen, MSc (Eng.)

Objectives

The aim of the course is to provide students with basic knowledge of the products in the furniture industry and their structures, materials, joints and production methods as well as the technical design and marketing of furniture.

Content

- Structure and development of the field
- Market structure and development
- Production and related methods
- Main success factors
- Problems and needs for development
- Materials, joints, furniture fittings, furniture doors, components of cupboard frames, drawers, and different furniture structures

Literature / Study Material

- Nutsch: Möbel und Einbauschränke
- Report by the Ministry of Trade and Industry on furniture production
- Other material to be announced during lectures

Learning Methods Lectures and field trips

Assessment Approved exercises and an examination *Prerequisites* Theory of Wood Materials

Quality technology, 3 op KC23BK30031 (study unit)

Lecturers Kimmo Kitinoja

Objectives

Upon completion of the course, students will understand the importance of quality in the various operations within a company, and be familiar with the more important philosophies and terminology associated with quality assurance and understand the importance of the continuous improvement of quality.

Content

The course involves discussion the importance of quality, quality management, quality manual, quality costs, social importance of quality, continuous improvement of quality, ISO 9000 quality standard, Finnish quality award, Malcolm Baldrige quality award, six sigma.

Literature / Study Material

- Lecklin Olli: Laatu yrityksen menestystekijänä
- Lecture material

Learning Methods Lectures, exercises and assignments, and independent study

Assessment Written examination and assignments

Languages of Instruction Finnish

Further Information Kimmo Kitinoja

Plant design 1, 4 op KC05BP41122 (study unit)

Lecturers Heikki Heiskanen, MSc (Eng.)

Objectives

The aim of the course is to provide students with insight into the various methods for producing building joinery products and furniture. Throughout the course, students will become familiarised with the methods for manufacturing first-degree processed products, glue boards, doors, windows, fixtures, and dining-room furniture

Content

- Capacity and layout design, evaluation of phases of work and schedule, motion study
- Production lines, discussion and analysis
- Analysis of the layout and material flow of one functioning production plant
- Students make up suggestions for developmental procedures and present them to a company

Literature / Study Material

- Harmon, R.L. & Peterson, L.D. Reinventing the Factory.
- Additional literature to be announced during lectures

Learning Methods

Lectures, supervision of assignment and field trips

Assessment Approved assignment and an examination

Prerequisites Production Technology

Automotive engineering 2, 3 op KC04BA40021 (study unit)

Objectives

Students will understand how the steering of a vehicle reacts in various situations, and be able to make dimensions of the mentioned systems.

Content

- Angles of wheels and pivoted axles and measurement of them
- Steering devices
- Tires
- Rims
- Balancing
- Cornering and the properties of side–wind

Literature / Study Material

- Laine O: Autotekniikka 1
- Field-related publications and literature on maintenance
- Lecturer's material
- Calculation programmes

Learning Methods Lectures and exercises

Assessment Examination and exercises: 70/30

Languages of Instruction Finnish

Plant design 2, 3 op KC05BP41125 (study unit)

Lecturers

Heikki Heiskanen, MSc (Eng.)

Objectives

The aim of the course is to provide students with knowledge of a systematic plant design and the significance of streamlining the layout.

Content

- Various stages of a plant design project
- Cost calculations for investments and production
- Sensitivity analysis
- Special issues related to wood industry plant design
- Case-study lectures
- Factory design work: initial plan including product description, capacity requirements, and availability of raw materials for a mechanical wood product industrial plant, in which nearly all of the required phases of a normal factory design project are discussed (does not include detailed planning of all specific details).

Literature / Study Material

- Harmon & Peterson: Reinventing the Factory.
- Koponen: Tehdassuunnittelu mekaanisessa metsäteollisuudessa
- Other material to be announced during lectures

Learning Methods

Lectures, group work and supervision of assignments

Assessment

Initial exam, active participation in the field trips, and factory design work

Prerequisites

• Factory Design 1

• Production Management

Production management, 3 op KC23BK30041 (study unit)

Lecturers Kimmo Kitinoja

Objectives

Students will understand the concepts and terminology associated with production management, as well as the problems, needs and aims in production management.

Content

- Organisation of production management
- Significance of various forms of production as regards management
- Common production management systems

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, exercises, and independent study

Assessment Examination/exercises: 70/30

Languages of Instruction Finnish

Special wood technology assignment, 2 op KC05BP60011 (study unit)

Lecturers Heikki Heiskanen, MSc (Eng.)

Objectives

Upon completion of the course, students will be able to carry out a project, make a report of it and present it clearly and to the point.

Content

- Independent seminar or research assignment based on topical research issues
- Obtaining information from field-related databases
- Seminar presentation

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Independent research work or written report

Assessment Approved report

Prerequisites Factory Design 1

Automotive engineering 3, 4 op KC04BA40072 (study unit)

Lecturers Mika Kumara

Objectives

Upon completion of the course, students will be familiar with the behavior of braking systems in various situations, and the fundamentals and strain of suspension. They will be able to make measurements of the mentioned systems. Students will understand how transmission system shafts and tandem axles function, including their design, service and repairs.

Content

- Drum brakes and disc brakes
- Hydraulic brake systems
- Types of suspension and the basics of their design
- Clutches
- Gears and choosing gear ratios
- Final drives
- Differential gears
- S4 traction system

Literature / Study Material

- Laine O: Autotekniikka 2
- Vehicle regulations
- Bosch: Autoteknillinen taskukirja
- Field-related publications and literature pertaining to maintenance
- Lecturer's material
- Calculation programmes
- BrakeWin

Learning Methods Lectures and exercises

Assessment Examination and exercises: 70/30

Languages of Instruction Finnish

Production economic module, 15 op KC05CP61 (study entity)

The aim of the Production Economics Module is to familiarise students with the expansion of production processes such that the improved productivity, economics, and efficiency leads to improved customer satisfaction and financial profitability. The management of product control and logistics ensures that the flow of materials, information and finances are beneficial to both the customer and the company. Companies, which are able to control their quality, safeguard sufficient cash flow financing with which they cover the production factor and capacity costs necessary in cost–efficient operations. Accomplishing quality performance with favourable capacity utilisation keeps the capital restricted to operations at a moderate level. In this way, a company is able to achieve sufficient profit for its onwers.

Production technology laboratory work, 3 op KC23BK30051 (study unit)

Lecturers Kimmo Kitinoja

Objectives

Students will apply their acquired knowlege to the production, management and development of production systems.

Content

• Various topics relate to production technology

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Laboratory work and independent study

Assessment Laboratory work

Prerequisites Manufacturing Technology, NC Technology, Production Systems, Production Management

Languages of Instruction Finnish

Study Descriptions

Production management, 4 op KC05BP50012 (study unit)

Lecturers

Heikki Heiskanen, MSc (Eng.)

Objectives

The aim of the course is to provide students with an understanding of the objectives and tasks involved in production management, and the principles of rough planning, materials control and production control, as well as knowledge of the most important concepts and systems in production control.

Content

- Efficiency
- Capacity
- Scheduling
- Timing
- Rough planning
- Materials control
- Production control
- MRP, JOT, OPT, and the LEAN concept
- WinPlan production planning programme

Literature / Study Material

- Uusi–Rauva et al. 1999 or newer edition. Teollisuustalous. (Applicable sections)
- Handouts and other material distributed by the lecturer

Learning Methods Lectures, field trips and assignments

Assessment Approved assignments and examination

Prerequisites Industrial Economics

Engine technology, 3 op KC04BA60022 (study unit)

Lecturers Mika Kumara

Objectives

Students will understand the general structures of engines, thermal processes, and the stress on mechanisms in relation to use and maintenance. They will familiarize themselves with fuel and exhaust systems and their maintenance.

Content

- Combustion engines
- Thermodynamics
- Concepts of power recovery and coefficients of performance
- Structures and maintenance of crank mechanisms and valve gears
- Vibration dampers
- Lubricaiton and cooling
- Fuel devices
- Fuel and exhaust and measuring exhaust
- Super-charging

Literature / Study Material

- Bosch: Autoteknillinen taskukirja
- Field-related literature and publications

Learning Methods Lectures and exercises Assessment Examination and exercises: 70/30

Languages of Instruction Finnish

Logistics, 4 op KC05BP70010 (study unit)

Objectives

Students will gain an overall view of the economic significance of logistics in industry.

Content

- Central concepts and models of logistics
- Storage, order and customer driven logistics
- Location and allocation decisions and transportation
- Efficiency, punctuality and the effect on business performance and finance
- Logistics of chains, green logistics, procurement and logistic services
- Organisation and strategy of logistics
- Future challenges

Literature / Study Material

- Karrus: Logistiikka
- Lecturer's material

Learning Methods Lectures, exercises, field trips and guest lecturers

Assessment Approved assignments and a final examination

Prerequisites Industrial Economics

Mechanical engineering module, 15 op KC23KO60 (study entity)

The purpose of the Mechanical Engineering Module is to familiarise students with the designing and product development of mechanical structures and hydraulic and pneumatic systems.

Cost control, 4 op KC05BP70021 (study unit)

Objectives

Efficient cost control helps organisations improve their operations and achieve a competitive advantage. Students will gain skills required for management of financial information and efficient shaping and evaluation of data.

Content

- Production and cost theory,
- Cost category, cost centre, and performance-based calculations
- Activity calculations, interest and depreciation, capacity control and processing and transfer pricing
- Investment and financing calculations, calculation methods and cost control in practice.

Literature / Study Material

- Jyrkkiö, Riistama: Laskentatoimi päätöksenteon apuna
- Vehmanen, Koskinen: Tehokas Kustannushallinta

Learning Methods Lectures and exercises

Assessment Approved assignments and a final examination Prerequisites Industrial Economics

Automotive Electronics Module, 15 op KCAA50 (study entity)

The Automotive Electronics Module familiarizes students with the methods involved in applied automotive electronics, testing and measurement.

Quality technology, 3 op KC05BP30030 (study unit)

Lecturers

Heikki Heiskanen, MSc (Eng.)

Objectives

Students will understand how quality effects the success of a business. They will be familiar with the more significant philosophies and concepts associated with quality assurance and understand the importance of continuously developing quality.

Content

- Significance of quality
- Quality management
- Social impacts of quality
- Continuous development of quality
- ISO 9000 quality standard
- Finnish quality award
- Malcolm Brigde quality award
- Six sigma

Literature / Study Material

- Lecklin Olli: Laatu yrityksen menestystekijänä
- Lecture material

Learning Methods Lectures, exercises, assignments and independent study

Assessment Exercises and examination

Prerequisites Production Management

Languages of Instruction Finnish

Strength of materials 2, 3 op KC23BK40011 (study unit)

Lecturers Mika Kumara

Objectives

Upon completion of the course, students will understand the principles associated with dimensioning dynamically loaded structures, stability problems in bar and beam structures, as well as the principles of energy in beam structures.

Content

- Fatigue
- Buckling
- Energy principles in beam structures.

Literature / Study Material Karhunen et al. Lujuusoppi. *Learning Methods* Lectures and exercises, independent study

Assessment Written examination, exercises

Prerequisites Strength of Materials 1

Languages of Instruction Finnish

Further Information Mika Kumara

Production automation module, 15 op KC05CP71 (study entity)

The objective of the Production Automation Module is to prepare students to use new production technology in the production process of the wood industry.

Automotive electrical and electronic systems, 3 op KC04BA50071 (study unit)

Objectives

Students will acquire knowledge concerning the more common automotive electrical systems, their properties and use. They will be able to interpret and design plans for the installation and wiring of electronic equipment and be familiar with inspection and trouble shooting.

Content

- Electric diagrams
- Electric clutches
- Batteries
- Lights
- Ignition, charging and starting systems
- Other electric equipment

Literature / Study Material

- Juhala et al. Moottorialan sähköoppi
- Field-related publications and maintenance literature

Learning Methods Lectures and exercises

Assessment Examination

Languages of Instruction Finnish

CNC- technology, 4 op KC05BP50051 (study unit)

Lecturers Ala-Louko, Martti

Objectives

Students will be familiar with CNC equipment structures and functions. They will be able to independently program and use CNC equipment.

- NC machining
- Numerical control
- NC machines and devices
- G-code in machining centres and lathes

- Tool systems
- · Mounting technology and industrial applications
- CAD/CAM programming
- Product design modelling and creation of NC code using CAD/CAM software
- Work on a programmed item

Literature / Study Material

- Pikkarainen 1999, NC-tekniikan perusteet. Helsinki, Hakapaino Oy
- Heian Manual
- Lecturer's material

Learning Methods

Lectures, assignments and test run with an NC machining centre

Assessment

Approved assignments and test runs, and CAD/CAM exam

Hydraulics and pneumatics, 5 op KC23BK40012 (study unit)

Lecturers Kimmo Kitinoja

Objectives

Students will understand how the central components in hydraulic and pneumatic systems work and have command of the principles of theory and design for both types of systems. Additionally, students will be familiar with the areas where hydraulics and pneimatics can be used and be able to choose a suitable system as needed.

Content

- Basic theory of hydraulics and pneumatics, structures of components and how they work
- General perspectives on design, dimensioning components, selection and systems design
- Devices that produce, control and regulate pressurized energy
- Hydraulic and pneumatic devices, reservoirs, pipes and additional devices
- Basics in proportional, munition and servotechnologies

Literature / Study Material

- Kauranne, Kajaste, Vilenius: Hydraulitekniikan perusteet.
- Other material to be announced at the beginning of the course

Learning Methods

Lectures, laboratory work, assignments and independent study

Assessment Assignments, mid-term tests/exam

Languages of Instruction Finnish

Robotics, 4 op KC05BP50061 (study unit)

Lecturers Veli–Jukka Uitto, MSc (Eng.)

Objectives

Students will understand the structure of robots and how they work, which will enable them to determine the pros and cons of purchasing a robot and to make comparisons between various robot alternatives. They will also be able to make simple robotic programmes with the robots in the wood laboratory.

- Structure, grippers, sensors, detectors, control systems of robots
- Robot acquisitions
- Costs and possible savings of robot projects

Literature / Study Material

- Finnish Robot Association's publication on robotics
- Other material to be announced during lectures

Learning Methods Lectures and laboratory work

Assessment Approved laboratory work and an examination

Prerequisites Basics in Machine Automation

Languages of Instruction Finnish (English)

Automotive and work machine electronics 1, 3 op KC04BA50052 (study unit)

Objectives

Students will be familiar with the more common electronic equipment in automobiles and machinery, the basic properties of the mentioned equipment and how to use it. They will understand the designs for installing and connecting electronic equipment, the general ways to enter information into the mentioned systems, as well as testing and troubleshooting.

Content

- Electronic components and circuit technology
- Sensor technology
- Electronic fuel injection systems for Otto-cycle engines and diesel engines
- OBD
- Testing technology

Literature / Study Material

- Juhala et al. Moottorialan sähköoppi
- Bosch: Autoteknillinen taskukirja
- Field-related publications and maintenance literature

Learning Methods Lectures and exercises

Assessment Examination and exercises: 80/20

Prerequisites Automotive Electronic Systems

Production automation, 3 op KC05BP50032 (study unit)

Lecturers Veli–Jukka Uitto, MSc (Eng.)

Objectives

Students will be familiar with the various hierarchical levels of extensive automation systems and typical automation devices used at each level, as well as the various phases of an automation project. They will know about the various production lines and systems used in the wood product industry and how to use PC control rooms in industrial control systems, as well as data transfer in automation systems. Students will also know how utilise simulation in the designing of production lines.

- Automation systems and their levels of hierarchy
- PC control rooms
- Channels
- Principles of FMS technology
- Basics in the use of simulation

Literature / Study Material To be announced during lectures.

Learning Methods Lectures and exercises in class

Assessment Approved excercises and an examination

- -

Prerequisites

- Basics of Machine Automation
- Robotics

Welding technology, 4 op KC23BK40013 (study unit)

Lecturers

Kimmo Kitinoja

Objectives

Students will acquire basic knowledge in how the more common metals can be welded, and they will be familiar with various welding methods and how to use them. They will also be introduced to the mechanization and automation of welding.

Content

- Welding methods
- Welding various metals
- Changes in shape
- Welding mistakes
- Planning welded joints and costs

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, assignments and independent study

Assessment Exam/assignments: 70/30

Prerequisites Materials Technology 1

Plant simulation, 4 op KC05BP50090 (study unit)

Lecturers Pakkanen, Jarkko

Objectives

The aim of the course is to provide students with basic knowledge of factory simulation and the ability to use simulators as aids in production planning and development.

Content

- Basic components of simulation
- Modelling processes
- Construction of logistics systems
- Routing logic
- Employees and factory calendars
- Reporting

Literature / Study Material

- Material distributed by the lecturer
- QUEST online documentation

Learning Methods

Lectures, exercises in class and a more extensive assignment

Assessment

- Written exam: questions concern the simulation theory discussed in class and issues pertaining to the building of a model
- Exercises completed in class are reported in the assignment book and the book is submitted to the lecturer at the end of the course

Languages of Instruction Finnish

Automotive and work machine electronics 2, 3 op KC04BA50053 (study unit)

Objectives

Students will be familiar with the more common electronic equipment in automobiles and machinery, the basic properties of the mentioned equipment and how to use it. They will understand the designs for installing and connecting electronic equipment, the general ways to enter information into the mentioned systems, as well as testing and troubleshooting.

Content

- · Electronically controlled gearboxes
- · Anti-locking and anti-skidding systems
- ESP system
- Adjusting electronic suspension and shock absorption
- Proportional valve technology
- Electronically steering machinery
- Routing technology

Literature / Study Material

- Juhala et al. Moottorialan sähköoppi
- Bosch: Autoteknillinen taskukirja
- Field-related publications and maintenance literature

Learning Methods Lectures and exercises

Assessment Examination and exercises: 80/20

Prerequisites Automotive and Machinery Electronics 1

Languages of Instruction Finnish

Entrepreneurship module, 15 op KC05CY10 (study entity)

The aim of the Business Operations Module is to familiarise students with the business world in general and, more specifically, with the areas of business economics, financing, accounting, marketing, and personnel management. Students may also choose courses in business leadership, project management, quality management, labour legislation and occupational safety.

Product development, 3 op KC23BK40051 (study unit)

Lecturers Jorma Nevaranta

Objectives

Upon completion of the course, students will understand the entire product development process and possess competency in working on product development teams.

Content Study Descriptions

- Production process and organisational models
- Identifying the needs of customers
- Designing concepts and determining product specifications
- Industrial design
- Design that facilitates manufacturing
- Prototypes in product development
- Controlling costs in product development projects
- Patents and trademarks
- Managing project portfolios

Literature / Study Material

- Jokinen T.: Tuotekehitys
- Aalto A .: Projektisalkun johtaminen
- Lecture material

Learning Methods Lectures and exercises, independent study

Assessment Written examination and exercises

Languages of Instruction Finnish

Further Information Jorma Nevaranta

Project leadership, 4 op KC05BP70031 (study unit)

Objectives

The aim of the course is to provide students with fundamental knowledge of the concepts and methods of project work and the ability to complete all stages of a project.

Content

- · Goal-oriented development as projects
- Priject preparation, planning, implementation and establishment
- Principles and methods of project work
- Project organisation and its function
- Management of time, resources and costs in project planning

Literature / Study Material

- Lanning, Roiha & Salminen 1999. Matkaopas muutokseen
- Kettunen Sami. 2003. Onnistu projektissa

Learning Methods Project work, lectures and case studies

Assessment Project plan, implementation and presentation of final report: 100 %

Prerequisites Industrial Economics

Automotive laboratories, 6 op KC04BA50072 (study unit)

Lecturers Ari Itämäki

Objectives

Students will learn about the most common measurements in automobiles and be familiar with garage equipment, meters and instruments and their use in troubleshooting.

- Inspections of driving space, movement, steering, braking and engines
- Inspections of fuel and exhaust systems for Otto-cycle and diesel engines
- Ignition, charging and ignition system measurements
- Inspections of lights, noise, vibration and rocking inspection
- Wheel alignment

Literature / Study Material

Material relating to automotive and body technology, garage manuals, equipment manuals, and settings.

Learning Methods Laboratory work, work reports

Assessment Approved assignments and reports: 50/50

Languages of Instruction Finnish

Human resources management, 4 op KC05BP70081 (study unit)

Objectives

The aim of the course is to familiarise students with the basic issues involved in operative and strategic personnel management from the perspective of both the individual and the processes.

Content

- Personnel management today: the goal for a learning organisation
- Strategic dimension of personnel management and organisational culture
- Management in changing organisations, situation management and interaction
- Individuals as part of a work community: motivation, dedication and supervisor-subordinate discussions
- Development of skills, collective labour agreements and labour legislation

Literature / Study Material

- Riitta Viitala. 2000. Henkilöstöjohtaminen
- Teachers material

Learning Methods

Active participation in the lectures, group work and seminars

Assessment Approved exercises, seminars and a final examination

Prerequisites Industrial Economics

Entrepreneurship module, 15 op KC23KO80 (study entity)

The aim of the Business Operations Module is to familiarise students with the business world in general and its various sectors in more detail, including business economics, funding accountancy, marketing, and personnel management. A business–related project, and courses in process management and strategic accounting may also be included in the module.

Business economics, 4 op KC05BP70091 (study unit)

Objectives

The aim of the course is to introduce students to the complex world of entrepreneurship and business. Students will be familiar with the principles of business operations and know how to establish a business and manage its operations.

- Innovations and business ideas
- Choosing a type of company, establishing a business and the activities in the company
- Production, financial management and marketing
- Internal accounting, taxation and financing a company

Literature / Study Material Lecturer's material

Learning Methods Lectures, assignments and project work

Assessment Approved assignments, seminar and a final examination

Prerequisites Industrial Economics

Module in Transport Engineering, 15 op KCBA60 (study entity)

The Machinery Engineering Module familiarizes students with the engineering of machinery and farming machinery technology.

Marketing, 3 op KC05BP70050 (study unit)

Objectives

The course provides students with insight into marketing concepts, models and marketing strategy and the operative implementation of the strategy. Students will understand cutomer–oriented marketing as a critical success factor in marketing.

Content

- Marketing environment and forms of activity
- Customer-oriented marketing, segmentation and individual marketing
- Internal marketing and the organisation of marketing: structure and resources
- New competition in the service economy and managing customer relations
- Role of coimmunication in marketing and service culture

Literature / Study Material

- Lahtinen & Isoviita. 2001. Asiakaspalvelun ja markkinoinnin perusteet
- Grönroos. Palveluiden johtaminen ja markkinointi

Learning Methods

Project work, lectures and case studies, marketing simulations, lectures and independent study

Assessment Approved exercises, seminars and course-end examination

Prerequisites Industrial Economics

Marketing, 3 op KC23BK60005 (study unit)

Objectives

Upon completion of the course, students will possess knowledge of customer–oriented marketing concepts, models, and marketing strategy and its operational implementation. Students will also understand customer relationship management as a critical success factor for a company.

Content

- Operational environments and forms of marketing
- Customer-oriented marketing
- Segmentation and focused marketing
- Internal marketing and marketing organization: structure and resources
- New competition in the service economy and customer relationship management
- Role of communication in marketing
- Service cultures

Literature / Study Material

- Lahtinen & Isoviita. 2001. Asiakaspalvelun ja markkinoinnin perusteet.
- Grönroos. Palveluiden johtaminen ja markkinointi.

Learning Methods

Project work, lectures, case studies and marketing simulations, lectures, and independent study

Assessment Written examination/projects and case studies: 80/20

Prerequisites Industrial Economics

Languages of Instruction Finnish

FREE CHOICE STUDIES, 15 op KC05DP90 (study entity)

Students may select elective courses from the professional studies modules at the School of Engineering and/or from other universities of applied sciences (or higher–level institutions).

Hydraulics, 3 op KC04BA60033 (study unit)

Lecturers Kimmo Kitinoja

Objectives Students will understand the more important concepts associated with hydraulic systems and their design.

Content

- Structure and function of hydraulic components
- Equipment that produces, controls and regulates compressed energy
- Common devices, reservoirs, pipes and accessories
- Fundamentals of proportional, cartridge and servo-technology
- Perspectives of general planning

Literature / Study Material Kauranne, Kajaste, Vilenius: Hydraulitekniikan perusteet

Learning Methods Lectures and exercises

Assessment Examination/exercises: 70/30

Languages of Instruction Finnish

PRACTICAL TRAINING, 30 op KC05EP00 (study entity)

- Objectives: To work in one's own professional field under the supervision of an expert. Practival training provides students with the opportunity to deepen their knowledge of the profession they have chose.
- Contents: To familiarise oneself with the practical aspects of one's profession and to put into practice what has been learned in the classroom. Practical training takes place during summer holidays and during one period during the academic year.
- Literature/Study material: To be announced at the beginning of the training
- Learning methods: Independent study
- Assessment: References from the employer and reports

Business economics, 4 op KC23BK60021 (study unit)

Lecturers Lasse Tarhala

Objectives

Upon completion of the course, students will understand the complexity of entrepreneurship and the business world. They will also be familiar with the basics of business operations and possess the knowledge needed to establish their own business and manage it.

Content

- Innovations and business ideas
- Selection of a company type
- Establishing a business, business operations: production, financing and marketing
- Internal accounting, taxation and financial matters in a company

Literature / Study Material Lecturer's material

Learning Methods Lectures, exercises and project

Assessment Lectures/independent study: 50/50

Prerequisites Industrial Economics

Languages of Instruction Finnish

FINAL THESIS, 15 op KC05FP80 (study entity)

- Objectives: To prepare students for their future career. Students learn to apply the knowledge they have learned during their time of study and to find necessary information for solving problems.
- Contents: Topic related to students' profession
- Literature/Study material: All possible, relevant material
- · Learning methods: Independent study
- Assessment: Written report, presentation of the results in a seminar and a Maturity Test. Instructions for writing the thesis have been compiled by the institution.

Mobile work machines, 3 op KC04BA60032 (study unit)

Lecturers Mika Kumara

Objectives

Students will possess knowledge of the more significant mobile machines, including their design, use and function.

Content

• Mobile crawler and wheel-mounted machines, e.g. earthwork machinery and forest machinery

Literature / Study Material

- Field-related literature and publications
- Manufacturer's material

Learning Methods Lectures and assignments

Assessment Examination and exercises: 60/40

Languages of Instruction Finnish and English

Project leadership, 4 op KC23BK60050 (study unit)

Lecturers Jukka Pajula

Objectives

The aim pf the course is to provide students with basic knowledge and skills in the principles and methods involved in project work. They will also be competent in supervising a project.

Content

- Goal–oriented development through projects
- Project preparation, planning, and implementation, decision-making
- Principles and methods of project work
- Project organization and operation
- Time management, resources and costs in project planning
- Tekes projects

Literature / Study Material

- Lanning, Roiha & Salminen. 1999. Matkaopas muutokseen.
- Kettunen, Sami. 2003. Onnistu projektissa.
- Lecture material

Learning Methods Project work, lectures and case studies

Assessment Written examination, exercises

Prerequisites Industrial Economics

Languages of Instruction Finnish

Further Information Jukka Pajula

Commercial vehicles, 4 op KC04BA60070 (study unit)

Lecturers Mika Kumara

Objectives

Students will possess knowledge of heavy-duty automotive body technology, measurements, and the concepts associated with structural engineering.

Content

- Constructing and servicing heavy–duty automotive bodies
- Measurement regulations
- · Caculating weight and dimensions
- Choosing a chassis
- Body structures and components
- Designing and choosing vehicle equipment
- Pneumatic brake systems
- Structures of axles and transmissions
- Polar clearances

Literature / Study Material To be announced.

Learning Methods Lectures and exercises Assessment Examination and exercises: 60/40

Languages of Instruction Finnish

Human resources management, 4 op KC23BK60062 (study unit)

Objectives

The aim of the course is to familiarise students with the basic issues involved in operational and strategic human resources management from the point of view of both individuals and the processes involved.

Content

- Human resources management today, with a focus on the learning organization
- Strategic dimensions in human resources management and company culture
- Leadership in changing organizations, situation management and interaction
- Individuals as part of the work community (motivation, commitment and superior/subordinate dialogs)
- Development of expertise
- Collective agreements and labour regulations

Literature / Study Material

- Riitta Viitala. 2000. Henkilöstöjohtaminen.
- Lecturer's material

Learning Methods Active participation in lectures and group work, seminars and approved assignments and final exam

Assessment Examination/assigments: 80/20

Prerequisites Industrial Economics

Languages of Instruction Finnish

Farming machinery engineering, 3 op KC04BA70011 (study unit)

Objectives

Students will be familiar with the structure, function and design of the more common farming machinery.

Content

- Structures of tractors, features, engines, steering devices, transmissions, brakes, tyres, attaching machinery, and hydraulics
- Harvesting and threshing mechanisms in combine harvesters, separators and conveyors, power transmission and utilising electronics
- Soil cultivators, hoppers and fertilizer spreaders, plant protection sprays, bailers and feed machines

Literature / Study Material Field–related literature and publications

Learning Methods Lectures and exercises

Assessment Examination and exercises: 80/20

OPTIONAL PROFESSIONAL STUDIES MODULES, 15 op KC23CK70000 (study entity)

The Technological Mechanics Module, Materials Design Module and the Automation Systems Module are elective modules, but one of them must be chosen as a compulsory module.

Work machine engineering laboratories, 2 op KC04BA70050 (study unit)

Objectives

Upon completion of the course, students will be familiar with the concepts assciated with the dimensioning, servicing, and troubleshooting of farming equipment and machinery. Students shall learn the most common measurements in the engineering of mobile work machinery and farming machinery, and shall be familiar with garage equipment, meters and instruments and their use in trouble shooting.

Content

To be announced when the laboratory assignments begin.

Literature / Study Material Material pertaining to automotive and body technology, garage manuals, equipment manuals, settings

Learning Methods Laboratory work/reports

Assessment Approved work/reports: 50/50

Applied mechanics module, 15 op KC23KO90 (study entity)

The purpose of the Technological Mechanics Module is to deepen students' knowledge of how to analyse the mechanical behaviour of various structures.

Module in entrepreneurship 6 cu, 15 op KC04CA85 (study entity)

The aim of the Business Operations Module is to familiarise students with business operations in general and its various sectors, such as business economics, finance accounting, marketing and personnel management, in more detail.

Matrix algebra, 3 op KC23CK70011 (study unit)

Lecturers Mika Kumara

Objectives

Upon completion of the course, students will possess basic knowledge of matrices and matrix algebra to pass the courses Finite–rlement Methods, Mechanical Vibrations and Simulation of Machines.

Content

- Definitions, transpose, determinant, inverse of a matrix
- Solving a linear system of equations
- Gauss elimination method
- Eigenvalues and eigenvectors
- Diagonalization
- Use of mathematics software

Literature / Study Material Lecture material

Learning Methods Lectures and exercises, independent study

Assessment Written examination, exercises

Languages of Instruction Finnish

Further Information Mika Kumara
Repair shop economy, 4 op KC04BA60060 (study unit)

Lecturers Hannu Ylinen

Objectives

Students will learn the fundamentals of and solutions for garage design, as well as be familiar with environmental issues, personnel and customer relations, work management, cost planning and follow–up and rationalisation of garage equipment and garage operations.

Content

- Car dealers and customers
- Garage organisations
- Work flow in a garage
- Garage design
- Garage netowrks
- Waste disposal for garages
- Terms of repair and consumer protection
- Furnishings and equipment
- Cost calculations
- Profitability
- Rationalisation

Literature / Study Material Field–related publications, importer's instructions and lecturer's material

Learning Methods Lectures and exercises

Assessment Examination and exercises: 70/30

Languages of Instruction Finnish

Finite-element method, 4 op KC23CK70021 (study unit)

Lecturers Mika Kumara

Objectives

Upon completion of the course, students will possess the ability to use finite-element methods in the dimensioning of structures and understand the basic principles of the use of FEM software in static analyses of structures.

Content

- Basic principles of finite-element methods
- Stiffness matrix, summing of elements, burden, boundary conditions, basic equations
- Rod, beam, plate, shell and tile structures

Literature / Study Material Lecture material

Learning Methods Lectures and exercises, independent study

Assessment Written examination, exercises

Prerequisites

- Strength of Materials 1 and 2
- Matrix Algebra

Further Information Mika Kumara

Project leadership, 4 op KC04BA84000 (study unit)

Lecturers Jukka Pajula

Objectives

Students will understand the fundamental concepts and methods involved in projects, and acquire competency in completing all phases of a project.

Content

- Goal-oriented development in the form of projects
- Preparation, planning, implementation and establishment
- Principles and methods for working in a project
- · Project organisation and how it works
- Directing time, resources and costs in project planning

Literature / Study Material

- Lanning, Roiha & Salminen. 1999. Matkaopas muutokseen.
- Kettunen Sami. 2003. Onnistu projektissa

Learning Methods Lectures, exercises and case seminars

Assessment Project plan, implementation and final report: 100 %

Mechanical vibrations, 4 op KC23CK70031 (study unit)

Lecturers Mika Kumara

Objectives

Upon completion of the course, students will understand vibration phenomena and their significance in mechanical engineering. They will also understand the basic principles of the use of FEM softwares in dynamic analyses of structures.

Content

- Mathematical illustrations of vibration
- Vibrations of one degree of freedom
- Vibrations of many degrees of freedom
- Natural frequencies and natural modes
- Damping

Literature / Study Material Lecture material

Learning Methods Lectures and exercises, independent study

Assessment Written examination, exercises

Prerequisites

- Dynamics
- Finite-element Methods

Further Information Mika Kumara

Automotive marketing and services, 3 op KC04BA85022 (study unit)

Objectives

Students will understand general marketing concepts, as well as procedures involved in finance, sales and services of a diversified car firm.

Content

- Development of marketing and competitive tools (product, price, distribution, communication)
- Spare parts and garage sales
- Vehicle sales process
- General terms of sale
- Consumer protection
- Customer services

Literature / Study Material Field–related literature and publications

Learning Methods Lectures and exercises

Assessment Examination and exercises: 70/30

Languages of Instruction Finnish

Machinery simulation, 4 op KC23CK70041 (study unit)

Lecturers Mika Kumara

Objectives

Upon completion of the course, students will be familiar with the principles of creating analytical models of structures and use of FEM software in the static and dynamic simulation of machines.

Content

- Pre-processors, solvers, post-processors
- Data transfer from CAD software
- Finite–element library
- Material models
- Static and dynamic analyses
- Linear and nonlinear problems

Literature / Study Material Lecture material

Learning Methods Lectures and exercises, independent study

Assessment Written examination, exercises

Prerequisites

- Finite-element Methods
- Mechanical Vibrations

Further Information Mika Kumara

Human resources management, 4 op KC04BA85050 (study unit)

Lecturers Lasse Tarhala

Objectives

Students will be familiar with the basic principles pertaining to the management of people and matters. Upon completion of the course, students will have knowledge of various organisational models, various styles of management and know how to use various methods of creativity.

Content

- Organisations
- · Leadership skills and functions
- Models of leadership
- Basics of occupational psychology and personnel management
- Evaluation of students' leadership profile
- Creativity

Literature / Study Material To be announced.

Learning Methods Lectures, assignments and seminars

Assessment Participation in class assignments, exam

Languages of Instruction Finnish

Further Information Lasse Tarhala

Material engineering module, 15 op KC23KO100 (study entity)

The purpose of the Materials Design Module is to deepen students' knowledge of the selection and use of materials with special consideration to factors concerning manufacturing technology.

PROJECT STUDIES, 27 op KC04EA30 (study entity)

Objectives: Students will understand the requirements associated with the duties of an engineer, know how to independently apply previously acquired knowledge and skills to problem–solving situations and acquire new knowledge. Project Studies prepare students for the professional duties of an engineer and to acquire on–the–job skill in an area of specialisation related to the profession. Project Studies also teach students creative problem–solving skills, information retrieval and the use of it in training their communication and social skills. Students complete their Project Studies independently or in small groups in projects offered by companies or other organisations. Contents:

- Practical work in the Projectipaja and company projects
- Seminar for presenting the work carried out in a project and the results of it
- Approved work, project reports and seminar
- At least three of the following are chosen as a learning task: Automotive Technology, Automotive Electronics, Machinery Technology, Business Operations, Technical Mechanics, and Leadership
- English 3 is included in the Project Studies, which makes the total of 30 credits for Project Studies

Literature/learning material: To be announced, depending on the project Learning methods: Independent study and working in a project Assessment: Reporting, performance during the project, seminars, company evaluation Previous studies: Professional Studies

Plastics technology, 3 op KC23CK50021 (study unit)

Lecturers Jukka Pajula

Objectives

Upon completion of the course, students will understand the basic concepts of polymer chemistry, and be familiar with the more important engineering plastics, their technical characteristics and areas of application.

Content

- Structure of plastics
- Physical and mechanical characteristics of plastics
- Manufacturing, machining and bonding plastics
- Areas of application

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises, seminar work, independent study

Assessment Written examination/seminar work: 70/30

Languages of Instruction Finnish

Further Information Jukka Pajula

FREE-CHOICE STUDIES, 15 op KC04DA90 (study entity)

The purpose of the elective courses is to deepen the knowledge students acquire in their Professional Studies. Courses completed in other institutions of higher education may also be used as elective courses. We recommend that students choose electives among the selection offered by their degree programme. This way they support students' other studies the best and completing them along with other studies is, practically speaking, easier.

Material technique 2, 4 op KC23CK50011 (study unit)

Lecturers Jukka Pajula

Objectives

Upon completion of the course, students will be familiar with the destructive and non-destructive inspection and research procedures for metals.

Content

- Procedures for ultrasound, penetrant solutions, magnetic particles, X-rays and eddy-currents
- Tests for durability, hardness, tension, bending and form
- Measurement of residual tensions

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and exercises, independent study

Assessment Written examination/assignments: 70/30

Languages of Instruction Finnish Further Information Jukka Pajula

PRACTICAL TRAINING, 30 op KC04EA20 (study entity)

Objectives: Students will work in their own profession under the supervision of an expert. They will have an opportunity to deepen their knowledge of their own line of specialisation. Contents: Students will become familiar with their profession and apply in practice what they have learned in theory. There is practical training during two periods in the spring semester. Literature/learning material: To be announced at the beginning of the training. Learning methods: Working and independent study Assessment: Reference and report

Material selection, 4 op KC23CK80031 (study unit)

Lecturers Jukka Pajula

Objectives

Students will acquire the basic principles involved in the selection of materials.

Content

- General principles
- Selection process
- Types of tension
- Selection maps
- Economical aspects of the selection of materials

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and assignments, independent study

Assessment Written examination/assignments: 70/30

Prerequisites

- Welding Technology
- Materials Selection

Languages of Instruction Finnish

Further Information Jukka Pajula

THESIS, 15 op KC04FA80 (study entity)

Objectives: The aim of the final thesis is to prepare students for their future career. Students will learn to apply the theory they have learned during their studies into practice and to seek information they are lacking to solve problems. Contents: Field–related Literature/Study material: All possible, relevant material Learning methods: Independent study Assessment: The institution has provided separate guidelines for writing the thesis. Written report, presentation of the results in a thesis seminar, and a Maturity Test.

Material engineering laboratory work, 4 op KC23CK80041 (study unit)

Lecturers Jukka Pajula

Objectives

Students will be competent in designing and manufacturing a product while considering the demands of the product and manufacturing.

Content

• Design and manufacture of a product

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures and assignments, independent study

Assessment Written examination/assignments: 70/30

Prerequisites Materials Design Module

Languages of Instruction Finnish

Automation systems module, 15 op KC23KO10010 (study entity)

The purpose of the Automation Systems Module is to deepen students' knowledge of the opportunities automation provides in modern production systems.

Control systems, 4 op KC23CK90011 (study unit)

Lecturers Veli–Jukka Uitto

Objectives

Upon completion of the course, students will be able to design a control system for automation systems using programmable controllers, microcomputers and other control devices.

Content

- Hardwired and programmable control systems
- Structure of a programmable controller, usage and programming
- Diagram of connections
- Input and output lists
- Use of a microcomputer in controlling an actuator and a system
- PC control rooms and user interfaces
- Basic concepts of electronic data transfer

Literature / Study Material To be announced at the beginning of the course.

Learning Methods Lectures, assignments, and independent study

Assessment Written examination/assignments: 70/30

Languages of Instruction Finnish

Sensor technology, 3 op KC23CK90021 (study unit)

Lecturers Veli–Jukka Uitto

Objectives

Students will understand how basic sensors are used in automation systems. They will also be familiar with how sensors work: their electrical and mechanical features, as well as their performance characteristics. They will be competent in selecting the right sensor to solve a problem in detection or measurement. Students will be familiar with the electrical connections of senosrs and know how to connect them to control devices. Furthermore, students will learn how to

connect a sensor to a fieldbus.

Content

- Basics in sensor and measurement
- Shield categories
- Bistable sensors
- Senors that detect presence
- Sensors that measure magnitude
- Detection systems
- Measuring movement
- Basics of computer vision
- · Connecting sensors and measurement exercises in the laboratory

Literature / Study Material

- Lecturer's material
- Examples from lectures
- Assignments
- Product and programming manuals from importers

Learning Methods Lectures and assignments, independent study

Assessment Written examination/assignments: 70/30

Languages of Instruction Finnish

Robotics, 4 op KC23CK90031 (study unit)

Lecturers Veli–Jukka Uitto, MSc (Eng.)

Objectives

Students will be familiar with various types of robots. They will be capable of inspecting robots and how to use it in factory automation and other areas where robotics are used. Students will be familiar with the structure, features, coordinations of robots, as well as the additional devices used in robots. They will be competent in handling and programming industrial robots using online and offline methods of programming. They shall also be competent in designing and selecting devices for the automatic handling of products.

Content

- Types of robots
- Mechanical structure of industrial robots
- Control systems, features, coordinations, and additional devices
- Handling an ABB industrial robot and online and offline programming
- Handling a Motoma robot, online programming
- Handling robots and programming exercises in the laboratory

Literature / Study Material

- Lecturer's material
- Examples from the lectures
- Assignments
- Product and programming manuals from importers
- Kuivanen, R. Robotiikka. Suomen Robottiyhdistys Ry

Learning Methods Lectures and assignments, independent study

Assessment Written examination/assignments: 70/30

Prerequisites Sensor Technology

Further Information Veli–Jukka Uitto

Automation systems design, 4 op KC23CK90041 (study unit)

Lecturers Veli–Jukka Uitto

Objectives

Upon completion of the course, students will have command of the basic principles associated with designing and selecting automation systems for production machinery and equipment.

Content

- Architecture of automation systems,
- Fieldbuses
- Control rooms
- Integration of automation system components and subsystems to a complete system,
- Purchasing an automation system

Learning Methods Lectures and assignments, independent study

Assessment Written examination/assignments: 70/30

Prerequisites

- Production Technology Module
- Control Systems
- Sensor Technology
- Robotics

Languages of Instruction Finnish

PROJECT STUDIES, 27 op KC23EK20 (study entity)

Objectives:

• Students will understand the demands associated with the duties of an engineer and be able to apply knowledge and skills they have learned previously to independent problem-solving situations and to help them obtain new knowledge. The aim of Project Studies is to prepare students for a career as an engineer and to allow them to acquire specialized expertise in some area of the profession while they work. At the same time, Project Studies guide students in developing creative problem-solving skills, obtaining information and applying it in practice, and in practicing their communictive and social skills. Students may complete their Project Studies independently or as part of a small group in projects offered by companies or communities.

Contents:

- Practical training in Projektipaja and company projects
- Presentation of the project and its results in a seminar
- Approved work performance, project reports, and seminar
- Chosen assignment from at least three of the following: Production Technology, Mechanical Engineering, Business Operations, Technological Mechanics, Materials Design, Automation Systems and Leadership
- English 3 is included in the Project Studies, making a total of 30 credits for Project Studies

Literature/Study material: To be announced Learning methods: Independent study Assessment: Reports, completion of a project, seminars and assessment by the company/organisation Previous studies: Professional Studies

FREE CHOICE STUDIES, 15 op KC23DK10000 (study entity)

The purpose of the elective courses is to deepen the knowledge students acquire in their Professional Studies. Courses completed in other institutions of higher education may also be used as elective courses. We recommend that students choose electives among the selection offered by their degree programme. This way they support students' other studies the best and completing them along with other studies is, practically speaking, easier.

PRACTICAL TRAINING, 30 op KC23EK20010 (study entity)

- Objectives: Students will work in their own profession under the supervision of an expert. They will have the oppotunity to deepen their knowledge of the profession they have chosen.
- Contents: Students will familiarise themselves with their professiona and apply the knowledge they have learned in the classroom in practice. Practical training takes place in two periods in the spring semester.
- Literature/Study material: To be announced at the beginning of the practical training.
- Learning methods: Independent study
- Assessment: References and reports

FINAL THESIS, 15 op KC23FK30001 (study entity)

- Objectives: The aim of the final thesis is to prepare students for their future career. Students will learn to apply the theory they have learned during their studies into practice and to seek information they are lacking to solve problems.
- Contents: Field-related
- Literature/Study material: All possible, relevant material
- Learning methods: Independent study
- Assessment: The institution has provided separate guidelines for writing the thesis. Written report, presentation of the results in a thesis seminar, and a Maturity Test.

Degree Programme in Nursing (In Finnish)

Head of degree programme: Ms Raija Palo, Tel. + 358 20 124 5181, Gsm +358 40 830 3956, E-mail: raija.palo@seamk.fi Student counsellor: Ms Tellervo Pihlaja, Tel. + 358 20 124 5180, Gsm +358 40 830 3959, E-mail: tellervo.pihlaja@seamk.fi ECTS/International coordinator: Ms Helinä Mesiäislehto–Soukka, Tel. + 358 20 124 5194, Gsm +358 40 830 4200, E-mail: helina.mesiaislehto–soukka@seamk.fi

Degree and qualification awarded

The Bachelor Degree in Social Services and Health Care, Registered Nurse (AMK), Public Health Nurse (AMK), Bachelor of Health Care

Access requirements

Please see the Applicant's Guide or the website www.seamk.fi.

General description of the degree programme

The purpose of the degree programme in nursing is to train experts of nursing and public health nursing, whose work is based on multi-disciplinary knowledge, extensive nursing competence and high ethical standards. Registered Nurses (AMK) and Registered Public Health Nurses (AMK) are qualified to examine, assess and develop their competence, work, work community and professional field. Registered Nurses (AMK) and Public Health Nurses (AMK) plan, implement and

develop nursing in national and international contexts..

The Registered Nurses (AMK) are licensed to practise professional nursing as nurses in the health service. The Public Health Nurses (AMK) are licensed to practise professional nursing as nurses and public health nurses. The education is in harmony with the European Council directives on the education of nurses responsible for general care.

Registered Nurses (AMK) and Registered Public Health Nurses (AMK) work as independent experts of nursing in primary health care, specialized medical services, social services and in the private and third sector. They help, support, nurse and counsel healthy and sick individual people of all ages, families, groups, and communities. Their work involves nursing in the areas of promotion and maintenance of health, prevention and treatment of illness, rehabilitation and medical treatment prescribed for the patients.

Subject specific competences

Degree programme in Nursing, Bachelor of Health Care (Nurse)

Competence in customerships in health care

- has a holistic conception of man and recognises the complexity of a human being using the knowledge base of neighbouring disciplines and fields
- recognises various functional deficiencies and disorders and their degrees of difficulty

Competence in health promotion

- knows the treatment chains and service networks in health care and understands the aetiology and medical treatment processes of the most common diseases (general practice, surgery, paediatrics, obstetrics and maternity care, mental health care, psychiatry, geriatric care and geriatrics) in order to define nursing needs
- recognises and anticipates the medical problems and threats of an individual and a family/ group
- supports and empowers individuals, families and groups to assume responsibility for the maintenance and promotion of their health, resources and functional capacity.
- applies the principles of rehabilitative health care
- acts as an expert in health care enhancing sustainable development and environmental health

Clinical competence

- assumes responsibility for the patient's/ client's physical, psychological, spiritual and social needs and safety
- monitors the patient's condition, symptoms and the effectiveness of medical care in the treatment of the most common diseases and is able to make necessary conclusions
- examines, assesses, monitors and secures the vital functions of the patient
- prevents infections
- manages the most essential examination and treatment methods, and the safe and correct use of the necessary machinery and equipment and is able to carry out examinations with the equipment suitable for immediate care
- uses the examination results in treatment and follow-up
- supports the wellbeing and coping of the patient and his/her family
- prevents and recognises situations threatening the patient's/ client's mental health and assists him/her whenever necessary
- alleviates the patient's/ client's pain and suffering in different life situations, also in end-of-life care
- provides first aid in various care and operative environments as well as gives both manual, machine and intensive resuscitation within the limits of his/her authority
- · acts as a nurse in crises and emergency situations according to the valid instructions
- is able to use various instruments and aids in a safe and ergonomic way
- is able to estimate the patient's total care needs
- implements safe medical treatment (pharmacotherapy) as prescribed by a medical doctor and monitors the effects and effectiveness of medical treatment
- is able to do medical and dose calculations and possesses the knowledge of clinical pharmacology essential for nursing patients of all ages
- manages the preparative procedures for intravenous (IV) therapy, endovascular treatment and blood transfusion, is able to prepare a patient for these procedures and treatments and to monitor the patient during and after IV-therapy and blood transfusion
- is able to cannulate the peripheral vein and implement IV-therapy
- implements intravenous and medical treatment to the central vein
- recognises the risks of pharmacotherapy and is able to use information on unexpected effects of medical treatment in order to develop processes of pharmacotherapy

Decision-making competence

- is able to establish and maintain client-centric and goal-oriented interaction and relationships with the patient, family and community
- assumes responsibility for defining the nursing needs and plans, implements and evaluates the patient care together with the patient and his/her next-of-kin
- enters nursing information to patient documents and data registers in accordance with data and privacy protection policies

Counselling and mentoring competence

- is able to mentor and counsel different patients/ clients, their next-of-kin and groups
- supports and guides the patient/ client in his/her self-treatment and management of personal health problems and concerns
- teaches and counsels students and staff
- uses and produces suitable counselling material and uses electronic means of patient counselling
- guides patient/ client in matters relating to medical treatment to promote the patient's commitment to his/her health promotion and treatment

Degree programme in Public Health Care,

Bachelor of Health Care (Public Health Nurse)

Nursing competence

- bases his or her work on nursing science and other related sciences in interaction and care of clients/patients and their significant others
- knows how to plan, implement and evaluate nursing care and to make professional decisions based on research and practical experience
- knows how to use central nursing interventions and implements nursing care safely

Health promotion competence

- bases his or her work on strategies and programmes of health promotion and public health work and on sound knowledge of his/her purview and community
- knows how to promote public health by strengthening clientsý awareness of their health, resources and independence and by intervening if factors threatening health emerge
- is able to participate in multi-professional work teams as an expert of public health nursing and to coordinate their function
- knows how to evaluate, justify and develop the productiveness and effectiveness of health promotion

Competence in public health nursing of individuals, families, groups and community

- recognises clients' growth and developmental phases in relation to the human life cycle
- knows how to monitor the clients' health, growth and development; recognises their resources and risk factors and knows what action to take
- is able to establish and foster confidential and open client relationships, which are long-lasting if required
- takes into account clients' cultural background when planning and implementing the public health nurse's work
- masters evidence-based practices of public health nursing at individual, family, group and community level and uses them in a client-oriented way
- knows how to utilise applications of health technology

Promotion of environmental health

- knows how to assess the effects of communities and environments on health and to make suggestions for promoting the clients' health and functional capacity
- takes into account the global health risks and their prevention from the viewpoint of national health promotion
- masters the prevention of infectious diseases and implements the official immunisation programme
- is able to prevent domestic, industrial and recreational accidents and knows how to give first-aid

Competence in community-based public health nursing

- recognises differences in health between various population groups, identifies insecurity, risks and disturbances in social development and needs for special support and treatment and demonstrates ability to intervene in early stages
- is able to collaborate and network with different interest groups to advance health and well-being
- recognises the health effects of decision-making and is able to affect local decision-making to promote the health of the population

Educational approach and learning methods

In the degree programme in Nursing the theory of constructivist learning is used as the pedagogical background theory. Virtual and other independent studies promote student's self-directed and evidence-based learning.

Access to further studies

Eligible for second-cycle higher education studies. For second-cycle studies, three years' work experience is also required. The admission decisions are made in the receiving higher education institution. Registered Nurse (ylempi AMK), Public Health Nurse (ylempi AMK)

Course structure diagram with credits

60 per year

Degree Programme in Nursing (In Finnish), 210 cr (1.9.2008) HOITOTYO 2008SH

Code	Name	Study Year			ar	CR
		1.	2.	3.	4.	
KG09AIHE1	IE1 TERVEYS, YHTEISKUNTA JA YKSILÖ					
KG09AIHE101	Opiskelu hoitotyön koulutusohjelmassa	x				6
KG09AIHE102	Terveys ja hyvinvointi	x				12
KG09AIHE103	Sosiaali– ja terveysalan asiakkuus	x				6
KG09AIHE2	HOITOTYÖN PERUSTIEDOT JA TAIDOT					36
KG09AIHE201	Hoitotyön teoreettiset lähtökohdat	x				6
KG09AIHE202	Hoitotaitojen lähtökohdat	x				12
KG09AIHE203	Lääkehoidon perusta	x				6

KG09AIHE204	Practical training: Foundation of nursing	x				12
KG09AIHE3	PERHEHOITOTYÖ				18	
KG09AIHE301	Children, youth and families as clients in nursing		x			6
KG09AIHE302	Perhehoitotyön harjoittelu		x			12
KG09AIHE4	HOITOTYÖ ERI TOIMINTAYMPÄRISTÖISSÄ I					42
KG09AIHE401	Adults as clients in nursing		x			12
KG09AIHE402	Aikuisen hoitotyön harjoittelu		x			30
KG09AIHE5	HOITOTYÖ ERI TOIMINTAYMPÄRISTÖISSÄ II					18
KG09AIHE501	The elderly as clients in nursing			х		6
KG09AIHE502	Practical training: Elderly nursing			х		12
KG09AIHE6S	HOITOTYÖN SYVENTÄMINEN				33	
KG09AIHE6S1	Syventävät hoitotyön opinnot			x		12
KG09AIHE6S3	Multicultural Nursing (In English)					
KG09AIHE6S2	Syventävä hoitotyön harjoittelu eriytyvillä alueilla			х		21
KG09AIHE7	TUTKIVA JA KEHITTÄVÄ HOITOTYÖ				33	
KG09AIHE701	Työelämäosaaminen, laadunhallinta ja yrittäjyys hoitotyössä			x		8
KG09AIHE702	Hoitotieteellinen tutkimus ja hoitotyön kehittäminen			х		7
KG09AIHE703	Final thesis and maturity test			x		15
KG09AIHE704	Project training			x		3
KG09D FREE-CHOICE STUDIES				6		

Degree Programme in Nursing (In Finnish), 240 cr (5.1.2009) HOITOTYO 2008TH

Code	Name	Study Year C		CR		
		1.	2.	3.	4.	
KG09AIHE1	TERVEYS, YHTEISKUNTA JA YKSILÖ					24
KG09AIHE101	Opiskelu hoitotyön koulutusohjelmassa	x				6
KG09AIHE102	Terveys ja hyvinvointi	x				12
KG09AIHE103	Sosiaali– ja terveysalan asiakkuus	х				6
KG09AIHE2	G09AIHE2 HOITOTYÖN PERUSTIEDOT JA TAIDOT					36
KG09AIHE201	Hoitotyön teoreettiset lähtökohdat	х				6
KG09AIHE202	Hoitotaitojen lähtökohdat	x				12
KG09AIHE203	Lääkehoidon perusta	х				6
KG09AIHE204	Practical training: Foundation of nursing	x				12
KG09AIHE3	AIHE3 PERHEHOITOTYÖ					18
KG09AIHE301	Children, youth and families as clients in nursing		х			6
KG09AIHE302	Perhehoitotyön harjoittelu		x			12
KG09AIHE4	HOITOTYÖ ERI TOIMINTAYMPÄRISTÖISSÄ I					42
KG09AIHE401	Adults as clients in nursing		х			12
KG09AIHE402	Aikuisen hoitotyön harjoittelu		x			30
KG09AIHE5	HOITOTYÖ ERI TOIMINTAYMPÄRISTÖISSÄ II					18
KG09AIHE501	The elderly as clients in nursing			x		6
KG09AIHE502	Practical training: Elderly nursing			x		12

KG09AIHE6T	AIHE6T TERVEYDENHOITOTYÖ ERI TOIMINTAYMPÄRISTÖISSÄ					33
KG09AIHE6T1	Eri–ikäisten terveydenhoitotyö			x		12
KG09AIHE6T2	Terveydenhoitotyön harjoittelu				x	21
KG09AIHE7	TUTKIVA JA KEHITTÄVÄ HOITOTYÖ					33
KG09AIHE701	Työelämäosaaminen, laadunhallinta ja yrittäjyys hoitotyössä			x		8
KG09AIHE702	Hoitotieteellinen tutkimus ja hoitotyön kehittäminen			x		7
KG09AIHE703	Final thesis and maturity test			x		15
KG09AIHE704	Project training			x		3
KG09AIHE8	TERVEYDENHOITOTYÖ ELÄMÄNKULUN ERI VAIHEISSA					30
KG09AIHE801	Näyttöön perustuva eri ikäisen terveydenhoitotyö				x	10
KG09AIHE803	Opinnäytetyö / kehittämistehtävä				x	5
KG09AIHE802	Terveydenhoitotyön harjoittelu				x	15
KG09D FREE-CHOICE STUDIES				6		

Study Descriptions

Opiskelu hoitotyön koulutusohjelmassa, 6 op KG09AIHE101 (study unit)

Lecturers

- Tellervo Pihlaja, MA (Edu.)
- THM Simo Ranta, MSc (Healthcare)
- THM Mari Salminen-Tuomaala, MSc (Healthcare)
- YK Kari Jokiranta, BSSc
- KT Ritva Kuoppamäki, PhD (Edu.)
- YM Silja Saarikoski
- Tradenomi Ari Saunamäki

Objectives

LEARNING AND STUDY SKILLS: 3 cr. Students will be orientated into studying at the university of applied sciences and the Degree Programme in Healthcare. They will identify their own needs as regards learning and learn to analyse what they have learned. Students will also gain experience in self-guidance, using IT services and programmes, as well as library and information services. They will become familair with Educational Science and the more central theories concerning learning and teaching. SELF-KNOWLEDGE, INTERACTION AND TEAMWORK SKILLS: 1.5 cr Students will learn to use their physical, mental and social resources in various interactive and learning situations. WRITTEN COMMUNICATION: 1.5 cr Students will understand the significance of various types of texts and use of language as the foundation for communication. They will be familiar with the characteristics and styles of various texts and the basis for academic writing.

Content

LEARNING AND STUDY SKILLS

- Being a student in the university of applied sciences, Degree Programme for Healthcare, and as a member of a group
- Information and working with it
- Information retrieval
- Ecudational science as a science
- Theories of learning and teaching
- Life-long learning
- Self-guidance

SELF-KNOWLEDGE, INTERACTION AND TEAMWORK SKILLS

- Socialisation of the individual
- Self-esteem and self-confidence
- World of values
- Self-knowledge
- Communication skills

- Team group
- Group membership
- Group dynamics/group process
- Group feedback
- Group learning

WRITTEN COMMUNICATION

- Research communication
- · Academic writing and ways of documenting
- Academic essays, summaries, reports, posters, journals
- Planning what to write, the writing process, revision and documenting

Literature / Study Material

- Seinäjoki University of Applied Sciences Study Guide
- Curriculum for the Degree Programme in Healthcare
- Dunderfelt, T. 2006. Elämänkaaripsykologia. WSOY.
- Vilen, M. & Leppämäki, P. & Ekström, L. 2002. Vuorovaikutuksellinen tukeminen sosiaali- ja terveysalalla. WSOY. (assigned chapters)
- Kopakkala, A. 2005. Porukka, jengi, tiimi. Ryhmädynamiikka ja siihen vaikuttaminen. Edita. (assigned chapters)
- Repo, I. & Nuutinen, T. 2003. Viestintätaito. Opas aikuisopiskelun ja työelämän vuorovikautustilanteisiin. Otava.
- Seinäjoki University of Applied Sciences. 2008. Instructions for Writing a Text.
- Other material assigned by the lecturer.

Learning Methods

Written assignments, lectures, group work, seminar, co-operative learning, and independent study

Assessment

Seminar paper and presentation of it; the seminar paper should be written according to the Instructions for Writing a Text guidebook. The paper is graded by the course teachers. Numerical grades will be given for the work.

Languages of Instruction Finnish

Further Information Primary topics:

- Preparing for the nursing profession
- Learning to learn
- Identifying one's own strengths and the development of social skills for interacting with others as individuals and in a group
- Basic pronciples: security, reliability, appreciation and co-operation
- Self-development
- Communication and interaction with others
- Ethics
- Multicultural awareness
- Entrepreneurship
- Professional awareness

Terveys ja hyvinvointi, 12 op KG09AIHE102 (study unit)

Lecturers

- Helinä Mesiäislehto–Soukka, DHSc
- Hilkka Majasaari, MA (Healthcare)

Objectives Students will

- be competent in identifying health problems and threats to the health of the individual, family, community and population,
- be able to strengthen the customer's (individual, family, group, population) resources, and participation in health promotion,

- be able to support and activate customer's in taking responsibility for the maintenance and promotion of health and resources,
- know how to listen and handle situations where writing, oral and visual skills are needed using various communication skills in Finnish and in English, and
- be competent in using international, field–related information resources.

Content COURSE FOUNDATION

- Oral Communication: 1.5 cr
- English: 2 cr
- Psychology: 1 cr
- Public Health Science: 1 cr
- Nuring Science: 2.5 cr
- Anatomy and Physiology: 4 cr
- Polite and appropriate communication with customers in healthcare situations
- Communication and interactive situations typical to the field
- English for nursing
- Introduction to academic English
- Development in the different phases of life
- Health of the population and measuring it
- More significant national diseases in Finland
- Multi-dimensional nature of nursing
- Health literacy and promoting one's own health
- Customer- and resource-oriented health promotion
- Health promotion on the level of the individual, the family and the community

Literature / Study Material

- Repo, I. & Nuutinen, T. 2003. Viestintätaito. Opas aikuisopiskelun ja työelämän vuorovaikutustilanteisiin. Otava.
- Saarinen, K. & Saarinen, J. 2007. Way to Health.
- Lyytinen, P., Korkiakangas, M. & Lyytinen, H. (eds.). 1995. Näkökulmia kehityspsykologiaan. Kehitys konktekstissaan. (assigned chapters)
- Kauhanen, J. et al. Kansanterveystiede. Latest edition (assigned chapters)
- Åstedt–Kurki, P. et al. 2008. Kohti perheen hyvää hoitamista. WSOY.
- Pietilä, A.-M. et al. (eds.). 2002. Terveyden edistäminen. Uudistuvat työmenetelmät.
- Current articles related to the topics

Learning Methods

Lectures, co-operative learning, learning by doing, team teaching, and independent study

Assessment Active participation, assignments and exams

Languages of Instruction Finnish and English

Further Information

The foundation of the course comprises knowledge of health promotion, communication and social skills, and multicultural awareness. Two credits of the course will be taught in English. One credit of the course will involve integrated R&D teaching.

Sosiaali– ja terveysalan asiakkuus, 6 op KG09AIHE103 (study unit)

Lecturers Kari Jokiranta, BSSc

Objectives BASICS IN SOCIAL WELFARE AND HEALTHCARE: 2 cr Students will

- understand the main principles associated with the policies of well-being,
- be perceptive of the duties of basic nursing and specialized nursing in the Finnish healthcare system,
- understand the similarities and differences between the duties in social welfare and healthcare,
- be familiar with the basic paths of treatment, and
- be knowledgeable of the costs involved in social welfare and healthcare.

SOCIOLOGY: 2 cr Students will

- be perceptive of the societal and reciprocal connections of human behaviour,
- understand human activity and world of experience in the role of patient and as a healthcare customer,
- understand the significance of societal change on health and definitions of healthcare, and
- be familiar with the challenges of helping people with an immigrant background.

FINNISH SOCIETY AND SOCIAL POLICY: 2 cr Students will

- understand the primary legislation regulating the activities of a nurse and the responsibilities contained in the mentioned legislation,
- be familiar with the administrative structures of Finnish society,
- be familiar with the primary forms of support in the Finnish social security system,
- know how to support cutomers/patients in taking care of their personal financial issues,
- understand the foundation upon which the Finnish affluent society,
- be perceptive of the significance of previous experience on the customer's/patient's current life situation,
- be familiar with the principles of sustainable development and the of those principles on social welfare and healthcare.

Content

BASICS IN SOCIAL WELFARE AND HEALTHCARE

- Affluent state and society
- Basic nursing and specialised nursing
- Social welfare and social insurance
- Status of private companies and the third sector in the Finnish social welfare and healthcare system
- Fees and costs associated with the social welfare and healthcare system
- Terveys 2015 programme

SOCIOLOGY

- Social problems and deviant behaviour
- Societal and communal framework for health and treatment
- Foreign cultures and encountering people with an immigrant background

FINNISH SOCIETY AND SOCIAL POLICY

- Social security
- Historical development of the Finnish affluent society
- Sustainable development

Literature / Study Material Literature assigned by the lecturer

Learning Methods BASICS IN SOCIAL WELFARE AND HEALTHCARE

• Contact teaching, written assignments (online studying), and independent study

SOCIOLOGY

• Contact teaching, journal, and independent study

FINNISH SOCIETY AND SOCIAL POLICY

• Contact teaching and independent study

Assessment

- Online assignment and exam
- Evident participation in contact lessons and in journal writing
- Evident participation in contact lessons and exam

Languages of Instruction Finnish

Further Information Online Studies: 2 cr Primary topics:

- Entrepreneurship
- Being a customer
- Health promotion
- Self-development
- Ethics
- Organisation and society
- Multicultural awareness

Hoitotyön teoreettiset lähtökohdat, 6 op KG09AIHE201 (study unit)

Lecturers

- Marjut Nummela, MSc (Healthcare)
- Liisa Ahola, MSc (Health Science)
- Kari Jokiranta, BSSc
- Simo Ranta, MSc (Healthcare)
- Annu Peltoniemi, DSc (Health Science)

Objectives

Students will

- become familiar with the philosophical aspects of nurisng,
- understand ethical problems associated with nursing,
- become familiar with the ethical decision-making involved in nursing,
- understand the significance of science in nursing and the development of nursing,
- understand the science of nursing as the foundation of nursing, as well as other sciences as supportive elements to nursing,
- develop their critical and reflective thinking skills concerning the practicality of nursing,
- form a general picture of the principles of nursing and nursing activities, and
- be familiar with the phases in the history or nursing and its characteristics.

Content

PHILOSOPHY AND THE SCIENCE OF NURSING

- Science and theory
- Philosophical thinking and the primary concepts of nursing science
- Science of nursing and a field of science
- Areas of research in nursing

ETHICS

- Concept of ethics
- · Foundational values of nursing
- Understanding of the human being in nursing
- Professional discretion and obligation of notification in healthcare
- Ethical decisions-making in nursing

NURSING

- Nursing as a concept and activity
- Principles of nursing
- Care and assistance relationship
- Nursing process
- Models of nursing
- Phases in development in caring, treatment and nursing and the distinctive characteristics during different time periods
- Development of the theory of nursing and training from the 1800s to today

Literature / Study Material

- Eriksson, K.& al. 2007. Hoitotiede. WSOY.
- Leino-Kilpi, H.& Välimäki, M. 2003. Etiikka hoitotyössä. WSOY.
- Sorvettula, M. 1998. Johdatus suomalalaisen hoitotyön historiaan. Suomen sairaanhoitajaliitto ry.
- Laine, T, and Kuhmonen, P. 1998. Ajattelukirja filosofiaan. University of Jyväskylä.
- Sajama, S. 1993 (or later version). Arkipäivän filosofiaa. Kirjayhtymä.
- Kassara, H. et al. 2004. Hoitotyön osaaminen. WSOY.
- Other material provided by the lecturer

Learning Methods Lectures, seminar work, group work, and independent study

Assessment Written assignements and exams

Languages of Instruction Finnish

Further Information

- Online studies: 2 cr
- R&D integrated teaching: 2 cr

Essential topics: ethics, research and development

Hoitotaitojen lähtökohdat, 12 op KG09AIHE202 (study unit)

Lecturers

- Marja Toukola, MSc (Healthcare)
- Mari Salminen–Tuomaala, MSc (Healthcare)
- Tarja Knuuttila, MSc (Health Ed.)
- Leena Katajamäki, MSc (Healthcare)
- Katriina Kuhalampi, MSc (Healthcare)
- Specialist Juhani Laakso

Objectives Students will

- form a holistic picture of human activity and become perceptive in planning, implementing and evaluating the care of a patient,
- be familiar with the primary assistance and research methods associated with human activity,
- have profound understanding of the significance of aseptic work,
- know how to prepare patients for and guide them through the more common laboratory and radiology examinations,
- work according to the principles of rehabilitative care,
- be competent in the written and oral skills needed in nursing,
- identify the need for immediate first aid and know how what to do in the more common first-aid situations,
- form an understanding of the diognostics, manifestations, impacts, prevention and care of the more common diseases,
- be familiar with the mechanisms of infectious diseases, the body's immune system, and the ways to prevent infectious diseases, and
- be familiar with a person's basic diet and the significance of nutrition on a person's health.

Content

- Safety in nursing
- Preventing infections
- Working in dangerous and first-aid situations
- Principles of microbiological and radiological research
- Communication in nursing
- Assessing respiratory and blood circulation conditions, disorders and methods of treatment
- Common blood samples
- Assessing nutritional conditions, disorders, and methods of treatment
- Basic nutrition
- · Assessing secretion, disorders, and methods of treatment
- Common urinary and stool samples
- Personal hygiene and dressing
- Body temperature
- Assessing exercise/movement
- Helping a patient in exercising/moving
- Rehabilitative approach to work
- Working, recreation, and playing
- Expression of sexuality
- Sleeping: assessing sleep and rest, disorders, and methods of treatment
- Caring for a person who is dying or has passed and supporting family members

- Documentation
- Diagnostics, manifestations, impacts, prevention and treatment of the more common diseases
- Multi-staged medical care

Literature / Study Material

- Kassara, H.& al. 2004. Hoitotyön osaminen. WSOY.
- Sahi, T. et al. 2006. Ensiapuopas. Duodecim and Finnish Red Cross.
- Hellsten, S. (ed.). 2002. Kliininen mikrobiologia terveydenhuollossa. Suomen kuntaliitto. Chapters 1-7.
- Haglund, B. et al. 2007. Ihmisen ravitsemus. 9th edition. WSOY. (assigned chapters)
- Roper, N. & Logan, W. & Tierney, A. 1993. Hoitotyön perusteet. Kirjayhtymä. (assigned chapters).
- Other material announced by the lecturer

Learning Methods

Lectures, laboratory work, co-operative learning, PBL, and independent study

Assessment

Students receive numerical grades for the course. To receive a grade, students are required to attend the laboratory lessons and field trips. They are also required to submit written assignments and sit exams. There are three exams during the course, one of which involves the principles of medicine and pathology.

Languages of Instruction

- Finnish
- English: 1 cr

Further Information

A portion (1 cr) of the course is taught in English. The essence of the course involves the following:

- Determining, planning, implementing and evaluating the needs for treatment of a healthy person and an ill person based on their resources in various areas of human activity
- Areas of expertise include individuals as patients, clinical know-how, decision-making, communicating and interaction

Lääkehoidon perusta, 6 op KG09AIHE203 (study unit)

Lecturers

- Katri Mäki-Kala, MSc (Healthcare)
- Liisa Ahola, MSc (Healthcare)
- Marja Toukola, MSc (Healthcare)
- Kristiina Vahtera, MSc (Healthcare)
- Chemist Leena Ulvinen

Objectives

MÉDICAL CARE: 3 op Students will

- be familiar with the regulations pertaining to medical care,
- have a profound understanding of the areas of responsibilities of nurses in handling drugs and giving patients medical treatment,
- have command of various forms of medicine and how to administer them, and take responsibility for correctly and carefully handling medicine, and
- have command of the calculations necessary in medical care.

CLINICAL PHARMACOLOGY: 3op Students will

- be familiar with various drugs and pharmaceutical preparations and know how to use them appropriately to treat various illnesses and disorders,
- be familiar with the impact of various medicines and understand the impact of various drugs on the body, and
- have command of the primary features of the more common drugs, their uses, and side affects and synergy.

Content MEDICAL CARE

- Legislation pertaining to medical care
- Risks in medical care
- Forms of medicine, handling drugs and ways to administer drugs

- Distribution of drugs
- Documenting medical care
- Using the Pharmaca Fennica
- Maintenance of medicines
- Medical calculations

CLINICAL PHARMACOLOGY

- Drugs and pharmaceutical preparations
- Appropriate use of drugs
- Impact of drugs on the body
- Uses of drugs
- Side effects and synergy of drugs

Literature / Study Material

- Nurminen, M.-L. 2006. Lääkehoito. 7th edition. WSOY. (assigned chapters)
- Lääkelaki (amended)
- Ministry of Health and Welfare. 2006. Turvallinen lääkehoito.
- Ernvall, S. et al. 2005. Lääkelaskenta. 5th edition. WSOY.
- Material provided by the lecturer

Learning Methods

Lectures, mathematics for medicine, calculations, practising drug administration during calculations lessons, using the medical care card (throughout entire course), and independent study

Assessment MEDICAL CARE

- Active participation
- Theory: exam in which 50 % must be correct and each question approved (numerical grade)
- Calculations: exam completed without mistakes
- Exam on medical calculations must be completed and approved before the practica training in the third semester

CLINICAL PHARMACOLOGY

- Active participation
- Exam in which 50 % must be correct to receive a grade

Languages of Instruction

Finnish

Further Information

The Clinical Pharmacology course takes place at the beginning of the second year of study, at the same time as the Internal Medicine and Surgeoun Studies courses. Essential topics include medical care and clinical expertise.

Practical training: Foundation of nursing, 12 op KG09AIHE204 (study unit)

Lecturers

- Mari Salminen-Tuomaala, MSc (Healthcare)
- Tarja Knuuttila, MSc (Health Science)
- Marja Toukola, MSc (Healthcare)

Objectives Students will

- know how to evaluate their own needs for expertise and plan their internship,
- create a systematic relationship with patients,
- comprehensively monitor and nurse patients and their family members, and document and report given treatment,
- be competent in safely administering common forms of treatment and taking samples,
- accurately calculate treatment fees for billing and administer the correct the dosage of medicine to patients,
- work in a multi-professional environment,
- work aseptically,
- abide by the principles of nursing,

- become familiar with the more common radiological examinations, the operations of the out-patient depatment and rehabilitation, and know how to take common blood samples, and
- be competent in reflecting upon their own professional skill.

Content

INITIAL PRACTICAL TRAINING: 2 cr

• Takes place during the laboratory lessons in the Foundations of Nursing Skills course and the orientation day for practical training.

PRACTICAL TRAINING IN A WARD AT A HEALTHCARE CENTRE OR SIMILAR UNIT: 9 cr REFLECTION ON PRACTICAL TRAINING: 1 cr

- Aptitude test and preparation for it
- 1+1 reflection days and the practical training periods

Literature / Study Material

• Same literature as in the Foundation of Nursing Skills course

Learning Methods

Laboratory work, pratical training, and seminar work

Assessment

Students will be graded on a pass/fail basis. To successfully complete the practical training, students must

- complete the Initial Practical Training,
- complete practical training in a ward at a healthcare centre or similar unit,
- participate in the orientation and reflection days for the practical training,
- fill out a Learning Agreement and submit it,
- compile a list of work shifts and return it, and abide by the work schedule,
- fill out a card that indicates they possess skills in medical care,
- submit a written assignment explaining how the principles (3) of nursing were implemented during work in the ward,
- submit a written report concerning the plan of one patient's treatment according to the theory of Roper et al., as well as their thoughts about their learning experiences of this particular treatment realtionship, and
- pass the aptitude test.

Languages of Instruction

- Finnish
- English: 1 cr

Further Information

The essence of the practical training includes:

- Learning to determine, plan, implement and evaluate the resources of a healthy person and an ill person in various areas of human activity and the need for treatment
- Medical care
- Ethics of nursing
- Development of professional identity
- Areas of expertise: nursing patients, clinical expertise, medical care, decision-making, communication and interaction, ethics, self-development

Children, youth and families as clients in nursing, 6 op KG09AIHE301 (study unit)

Lecturers

- Kaarina Ketonen, MSc (Healthcare)
- Marja Toukola, MSc (Healthcare)
- Aija Risku, MSc (Nursing Science)
- Hilkka Majasaari, MSc (Healthcare)
- Simo Ranta, MSc (Healthcare)

Objectives This course will teach students to

- guide and instruct children, adolescents and families about issues concerning their health or illness,
- treat children, adolescents and families with respect and keep information concerning them confidential,
- guide families in using social welfare and healthcare services,
- promote the health of pregnant women and their family,
- care for newborn babies and identify threats to their health,
- support families in the development of early interaction between the child and parents,
- evaluate the developmental phases of children and adolescents and to identify risks to their health,
- support the healthy growth and development of children and adolescents and to guide them in caring for themselves,
- evaluate the needs of children and adolescents when they become ill and to support and care for healthy, ill and disabled children and adolescents of different ages and their families as a part of a multi-professional team,
- understand the treatment chains and the more common methods of research and treatment of the illnesses and development disorders children and adolescents may encounter,
- understand the complications associated with reproduction and the methods for researching and treating them,
- understand the more common mental health problems encountered by children, adolescents and their families, as well as the methods for researching and treating them.

All students are required to attend the Professional Development and Guidance and Counselling part of each course. The objectives and contents of this section of the courses are not indicated separately for each course. Students will evaluate the development of their professional expertise and strengthen the developmental processes associated with the nursing and healthcare profession that have begun within themselves. Students will also prepare themselves for the demands of society and the working world. They will also develop their skills in managing their lives, such as their study skills, their ability to organise and manage their time, and their ability to identify their personal resources. In addition, students will develop their problem–solving and decision–making skills and monitor their level of motivation, commitment and self–regulating abilities with the goal of developing and strengthening their professinal expertise.

Content

Professional Development and Guidance and Counselling

- Expertise in nursing and healthcare
- Development and reinforcement of professional expertise in the various phases of students' education
- Guidance and counselling and tutoring to support studies

Caring for Children, Adolescents and Families

- Responsibility in the family for supporting the growth and development of the children
- Children, adolescents and families as consumers of social welfare and healthcare services
- Preventing infections in caring for children, adolescents and families
- Preventive mental-health care and social work with intoxicant users
- Guiding, teaching and supporting children, adolescents and families in health promotion and parenting
- Development of healthcare for children, adolescents and families on the national and international levels
- Family planning and sexual health
- Supporting motherhood and fatherhood
- Pregnant women, women in childbed and families as consumers of healthcare services
- Safe pregnancies and giving birth
- Supproting the health of newborns and early interaction with new parents
- Supporting breast feeding
- The physical growth of children, incl. the support of their motoral, mental and social devlopment
- Emotional development of children of different ages and the theories of development supporting them
- Identifying changes and crisis situations within families and early intervention
- Safe environments for the physical, psychological and social development of children, as well as the prevention of accidents
- Fears and crying associated with children
- How to identify and intervene in situations where a child is being teased, sexually abused or when children experience domestic violence, substance abuse in families, or when a child suffers from being or is in danger of becoming marginalised
- Family–based care of children and adolescents
- Processes involved in the care of children and adolescents of various ages
- Acute or long-term illnesses of children and adolescents of various ages
- Children and adolescents with psycological disorders or problems with social behaviour
- Children and adolescents as surgical patients
- Supporting families in caring for children and adolescents
- Directing children, adolescents and their families to examinations and medical treatments
- Common research methods and measures for treatment in child and adolescent healthcare
- Promoting the health and welfare of children and adolescents
- Guidance and instruction in child and adolescent healthcare
- Caring for acutely ill children and adolescents
- Caring for children and adolescents with a long-term illness
- Caring for children and adolescents who are critically ill

• Caring for the mental health of children and adolescents

Swedish: 1.5 cr

Languages of Instruction

- Finnish
- Swedish: 1.5 cr

Further Information Areas of competence:

- Ethics
- Guidance and instruction
- Health promotion
- Clinical skills
- Decision-making skills

Perhehoitotyön harjoittelu, 12 op KG09AIHE302 (study unit)

Lecturers

- Kaarina Ketonen, MSc (Healthcare)
- Marja Toukola, MSc (Healthcare)
- Aija Risku, MSc (Nursing Science)
- Hilkka Majasaari, MSc (Healthcare)
- Simo Ranta, MSc (Healthcare)

Objectives

Upon completion of the course, students will possess skills in encountering, treating and guiding healthy, ill or disabled children and adolescents of different ages and their families in their different life situations and when encountering changes in their health. Students will also consider the various treatment and other environments.

Content

1. Family Healthcare Orientation: 3 cr

- Preventing infections
- Vaccination programme
- Isolation
- Monitoring growth and development
- Practising the administration of fluids and medicines to children and adolescents
- Practising the examination and treatment of children and adolescents
- Documentation
- Monitoring children and adolescents in perioperative care
- Making a family tree from the psychological perspective
- Analysing various family situations

2. Practical Training in the Care of Children and Adolescents and Their Families in the Treatment and Functional Environments: 9 cr The practical training will take place in day–cares, clinics, childrens' wards, maternity wards, psychiatric wards for children and adolescents, child welfare clinics, units specialising in services specifically for children and adolescents, projects that promote the health and welfare of children, adolescents and families, as well as in organisations and doing volunteer work.

Learning Methods

- · Laboratory work
- Seminar work
- Field trips
- Assignments pertaining to the practical training
- Training

Assessment

- Approved assignments
- Training
- · Seminar work

Prerequisites

Children, Adolescents and Families as Consumers of Healthcare Services: 6 cr of theory

Languages of Instruction

- Finnish
- Swedish
- The language of the country of student exchange

Further Information Areas of competence:

- Ethics
- Guidance and counselling
- Health promotion
- Clinical skills
- Decision–making skills

Adults as clients in nursing, 12 op KG09AIHE401 (study unit)

Lecturers

- Paula Paussu, MSc (Nursing Science)
- Liisa Ahola, MSc (Healthcare)
- Katri Mäki–Kala, MSc (Healthcare)
- Mari Salminen–Tuomaala, MSc (Healthcare)
- Kristiina Vaahtera, MSc (Healthcare)
- Tarja Knuuttila, MSc (Healthcare)

Objectives

The course teaches students to

- understand the significance of promoting the health and supporting the resources of adults in multi-professional healthcare on the national and international levels,
- understand the factors influencing the health and illnesses of adults,
- guide and instruct adults about issues concerning their health and illnesses, and base their guidance and instruction on factual information,
- identify and evaluate sudden changes/disorders in basic vital functions and be competent in initiating the required treatment procedures,
- identify the needs of adults and their families as regards healthcare, as well as to plan, implement, evaluate and document healthcare,
- prepare patients for treatments, to monitor and care for them during and after treatments,
- safely administer fluids and medicines to adult patients,
- work aseptically to prevent the spread of infections,
- properly encounter adults in various crisis situations in their lives,
- understand the principles associated with working in patient– and resource–oriented care as part of the multi–professional care of the adult and his/her family,
- encounter substance abusers and understand the methods for early intervention
- prepare patients for common examinations and measurements,
- be knowledgeable of the more common examinations, measurements, samples and to be competent in interpreting their results correctly,
- be knowledgeable of the more common illnesses of adult psychiatric and surgical patients, methods of diagnosis and treatment on the level of general medicine,
- be knowledgeable of the requirements involved in the evaluation, methods of treatment and out-patient surgical procedures of patients' suitability for anaesthesia or an operation, and
- be knowledgeable of the nutritional care for the more common illnesses.

Content

Professional Growth and Guidance and Counselling

- Skills in instruction and guidance: applying a customer- and resource-oriented guidance process in adult healthcare
- Planning the guidance of patients
- Skills in promoting health: basis, values and principles of adult healthcare
- Promotion of the health of adults and supporting rehabilitation in the various areas of healthcare
- Occupational Health Care Act
- Occupational disease and occupational accident as concepts and from the viewpoint of one's own work

- The impact of the work environment on one's health: physical, chemical, biological, psychological, and ergonomical factors
- Surveying the health of an adult
- · One's own understandings and attitudes about mental health and mental illnesses
- One's own relationship to and attitudes toward intoxicants, the use of intoxicants and substance abusers
- Compilation of a written healthcare plan
- Clinical skills: traumatic crises, identifying crises, principles of crisis treatment and methods of implementation
- Crisis of the aide
- Identifying the acute situation of a patient (breathing, blood circulation, consciousness), evaluation and monitoring, as well as the immediate methods of assistence
- Preparing patients for anaesthesia and surgical procedure(s), and preparation for the monitoring and care while a patient is under anaesthesia and during a medical procedure and after
- Caring for and the special diets of patients with asthma, cardiac arrest, stroke, rheumatoid arthritis, a liver disorders, and type-2 diabetes
- Intravenous fluid and medical care, as blood transfusions
- Perioperative care as a method used across wards
- Symptoms, diagnostics, examination and methods of treatment for the more common internal diseases
- Preparing patients for medical procedures, and monitoring and caring for patients after the procedure
- Evaluation and measurement of pain in healthcare
- Circulation disorders in the lower limbs, diseases of the digestive system, prostatomegaly, and the care and special diet of cancer and orthopaedic patients
- Safe use of equipment
- Perioperative care processes
- Receiving patients in the surgical and anaesthesia wards
- Maintaining a safe nursing realtionship
- Working aseptically in perioperative nursing
- Various duties and team work in perioperative nursing
- Monitoring patients' recovery in the recovery room and entended care in the ward or at home
- Documentation and notices in perioperative nurising
- Out-patient nursing
- · Central issues in surgery and anaesthesiology
- Evaluating a patient's suitability for an operation, ASA categorisation and basic anaesthetic care, and pain treatment
- More common symptoms, diagnoses, examinations and treatment procedures of surgical diseases and injuries
- Beneficial, preventive, corrective and rehabilitative mental health care and the system of services
- Mental Health Act and Mental Health Decree
- Individual, group, family and communal care
- Patient- and resource-oriented nursing
- Multi–professional team work
- Occupational guidance
- Addiction vs. non-addiction
- Development of addiction and the substances that cause it
- Resources for taking control of one's life without intoxicants
- Acts and decrees pertaining to intoxicants
- More common adult psychiatric illnesses and disorders, prevention of them and monitoring
- Promoting the health and welfare of adults
- · Guidance and instruction in adult healthcare
- Caring for acutely ill adults
- Caring for adults with a long-term illness
- Caring for adults who are critically ill
- Adult mental-health care
- Adults as surgical patients

Swedish: 1.5 cr

Literature / Study Material

- Kyngäs, H. & al. 2007. Ohjaaminen hoitotyössä. WSOY.
- Health in All Policies. Prospects and Potentials. Finland/EU. 2006.
- Pääkkönen, R. & al. 2006. Työn terveysvaarojen tunnistaminen. Ministry of Social Affairs and Health: Finnish Institute of Occupational Health.
- Holmia, S. & al. 2004. Sisätautien, kirurgisten sairauksien ja syöpätautien hoitotyö. WSOY. (applicable sections).
- Lukkari, L. & al. 2007. Perioperatiivinen hoitotyö. WSOY. (applicable sections).
- Ministry of Social Affairs and Health. 2006. Turvallinen lääkehoito Valtakunnallinen opas lääkehoidon toteuttamisesta sosiaali- ja terveydenhuollossa.
- Kuisma, E. & al. 2008. Ensihoito. Tammi. (applicable sections).
- Noppari, E. & al. 2007. Mielenterveystyö perusterveydenhuollossa. Tammi.

- Lepola, U. & al. 2002. Psykiatria. WSOY.
- Havio, M & al. 2008. Päihdehoitotyö. Tammi
- Salaspuro, M. & al. 2003. Päihdelääketeide, 2nd edition. Duodecim. (applicable sections).
- Other current literature and articles

Learning Methods

Interactive and engaging methods, co-operative learning, independent study, and online learning

Assessment

Active participation, guidance and counselling, and written assignments and exams

Languages of Instruction

- Finnish
- Swedish
- English
- Further Information

Areas of competence:

- Clinical skills
- Health promotion
- Skills in guidance and counselling

Aikuisen hoitotyön harjoittelu, 30 op KG09AIHE402 (study unit)

Lecturers

- Paula Paussu, MSc (Nursing Science)
- Liisa Ahola, MSc (Healthcare)
- Katri Mäki–Kala, MSc (Healthcare)
- Mari Salminen-Tuomaala, MSc (Healthcare)
- Kristiina Vaahtera, MSc (Healthcare)
- Tarja Knuuttila, MSc (Health Ed.)

Objectives

The practical orientation has the same objectives as Adults as Consumers of Healthcare Services: 12 cr.

Content

1. Practical Orientation: 4 cr

- Examining a patient's sight, hearing and lungs
- Physical examination and basic examinations of adults
- Intravenous fluid and medicine
- Blood transfusions
- Peripheral cannulation
- Guidance in using inhalable medicines and PEF
- Treating a clean wound
- Treating a dirty wound
- Measuring residuals
- Breast examinations
- Dressing an amputated limb
- Disinfecting hands for surgery and sterile dressing
- Preparing a sterile table
- Disinfection of an area of skin for an operation
- Monitoring and caring for a patient that has been put to sleep or given local anaesthesia
- Oral reporting and documentation
- Taking an EKG and interpreting the results
- Examining a patient's vital functions (consciousness, breathing, blood circulation)
- Perfusors, infusion pumps and monitors
- Interviewing a patient in crisis
- Compiling a treatment plan
- Solution–oriented interview
- Reflective family interview
- Detailed compilation of a family tree through substance
- Mini intervention

2. Practical training in various healthcare environments: 26 cr

Learning Methods

Training in the classroom, seminar work, field trips, and practical training in healthcare environments

Assessment

Approved practical orientation and assignments

Prerequisites

- Adults as Consumers of Healthcare Services
- Participation in laboratory studies

Languages of Instruction

- Finnish
- Language required in an international exchange programme

Further Information

Areas of competence:

- Clinical skills
- Guidance and counselling skills
- Health promotion

The elderly as clients in nursing, 6 op KG09AIHE501 (study unit)

Lecturers

- Kristiina Vaahtera, MSc (Healthcare)
- Tarja Knuuttila, MSc (Healthcare)
- Liisa Ahola, MSc (Healthcare)
- Helena Koskinen, MSc (Healthcare)
- Anna Saari, MSc (Healthcare)

Objectives

Upon completion of the course students will

- understand the theory associated with nursing, gerontological/geriatrical and other knowledge associated with researching the elderly as a theoretical basis for nursing,
- identify the challenges in their professional development in caring for the elderly, and be familiar with the essential areas of expertise in today's elderly care,be familiar with the national service system for elderly care and the recommendations associated with it,
- be knowledgeable of the more significant changes caused by aging and their impact on the health, well-being and functioning of the elderly,
- be familiar with experiential aging in the light of literature, research and interviews,
- be competent in evaluating and promoting the health, ability to function, and well-being of elderly people,
- be competent in compiling a plan for treatment and services and in reporting information orally, in writing and electronically,
- be able to participate in promoting the health, well-being, the ability to funciton, and the prevention of illness of an elderly person and his/her family,
- be competent in planning, implementing and evaluating the treatment of an elderly person with an acute or long-term illness, in various healthcare environments as a part of a multi-professional team,
- further their knowledge of medical care for the elderly and the implementation of it, and be aware of their own responsibility in guiding and implementing medical care,
- be familiar with the special procedures that pertain to elderly care,
- be prepared to develop and evaluate elderly care,
- be familiar with enterprises that offer services for the elderly, and
- be aware of the international challenges in elderly care.

Content

- Expertise in caring for the elderly
- Essential areas of expertise in today's elderly care
- Working on a multi-professional team
- Challenges and resources for professional development
- Caring for the elderly in the social welfare and healthcare service system and in various nursing environments

- Political goal-oriented and procedure-oriented programmes for the elderly on the international, national, regional and local levels
- Biological, physical, psychological and social aging and experiential aging
- Special features of illnesses of the elderly and the main features of medical healthcare
- Evaluating an elderly person's ability to function using various metres
- Environmental factors that promote and hinder an elderly person's ability to function
- Providing an elderly person with basic needs
- Promoting and supporting the well-being, resources and ability to function of elderly people
- Considering the spiritual needs of the elderly in helathcare
- Understanding the planning, implementation and evaluation of the rehabilitation of an elderly person together with a multi-professional team
- Challenges associated with nutrition for the elderly
- Special features of medical care for the elderly
- Caring for an elderly diabetic
- Caring for an alderly person with a memory disorder
- Caring for an elderly person with a neurological disorder
- Caring for an elderly person with pulmonary disease
 Accidents the elderly have and preventing them
- Caring for an elderly person who is depressed
- Caring for a confused elderly person
- Caring for an elderly person who is a substance abuser
- Caring for a mistreated elderly person
- Compiling a plan for treatment and services for an elderly person and in reporting information orally, in writing and electronically
- Multi-professional co-operation and one's personal way of caring for the elderly
- Guiding and supporting the elderly and their family
- Special issues in the medical care of the elderly and typical side-effects
- Managing medical care for the elderly
- Hobbies and recreational activities as a method for elderly healthcare

Literature / Study Material

- Vallejo Medina, A. & al. 2006. Vanhusten hoito. WSOY. (applicable sections).
- Eloranta, T. & Punkanen, T. 2008. Vireään vanhuuteen. Tammi. (applicable sections).
- Kivelä, S.-L. 2004. Vanhusten lääkehoito. Tammi. (applicable sections).
- Tilvis, & al. 2003. Geriatria. Duodecim (applicable sections)
- Heikkinen, E: & Rantanen, T. 2008. Gerontologia. Duodecim (applicable sections)

Learning Methods

Lectures, group assignments, seminar assignments, orientating assignments, field trips, and independent study

Assessment

- Exams on gerontology, geriatrics and healthcare
- Assessment based on numerical grades: to receive a grade for the course, students must participate in the practical orientation and field trips, complete written assignments and exams

Prerequisites

- Theoretical Foundations of Healthcare
- Foundations of Nursing Skills
- Foundations of Medical Care
- Adults as Consumers of Healthcare Services

Languages of Instruction

Finnish

Further Information

- The required level of competence in elderly care is defined for each area of competence
- Separate description of the levels of competence

Practical training: Elderly nursing, 12 op KG09AIHE502 (study unit)

Lecturers

• Kristiina Vaahtera, MSc (Healthcare)

- Tarja Knuuttila, MSc (Healthcare)
- Liisa Ahola, MSc (Healthcare)
- Helena Koskinen, MSc (Healthcare)
- Anna Saari, MSc (Healthcare)

Objectives

The orientation has the same objectives as The Elderly as Consumers of Healthcare Services: 6 cr.

Content

1. Practical training in Elderly Care: 3 cr

- Seminar work
- Field trips
- Planning and participation in the implementation of theme-based events and projects
- Implementation planned together with students, teachers and interest groups

2. Guided Practical Training: 9 op

- Takes place in various environments associated with elderly care
- Practical training in jobs associated with elderly care

Learning Methods

- Practical orientation
- Guided training and on-the-job training

Assessment

- Preparation for and active participation in the lessons pertaining to practical orientation and reflection on the training
- Completed and approved guided training and on-the-job training
- Filling out the medical care card

Prerequisites The Elderly as Consumers of Healthcare Services: 6 cr (theory)

Languages of Instruction Finnish

Further Information

- The required level of competence in elderly care is determined for each area of competence
- Separate description of the levels of competence

Eri-ikäisten terveydenhoitotyö, 12 op KG09AIHE6T1 (study unit)

Content

- Professional growth and guidance and counselling
- National health
- Gradation of treatment
- Nursing in healthcare work

Syventävät hoitotyön opinnot, 12 op KG09AIHE6S1 (study unit)

Objectives

More detailed information about the objectives of the course will be planned at a later date.

Content

ADVANCED STUDIES IN NURSING: Detailed planning of the contents of the course will take place at a later date. MULTICULTURAL NURSING: Detailed planning of the contents of the course will take place at a later date. HEALTHCARE OF PEOPLE OF DIFFERENT AGES (ADVANCED STUDIES IN PUBLIC HEALTHCARE): Detailed planning of the contents of the course will take place at a later date.

Literature / Study Material To be planned at a later date. *Learning Methods* To be planned at a later date.

Assessment To be planned at a later date.

Prerequisites Both the Basic and Professional Studies must be completed.

Languages of Instruction

- Finnish
- English

Further Information The Advanced Studies will be planned at a later date.

Terveydenhoitotyön harjoittelu, 21 op KG09AIHE6T2 (study unit)

Content

Students will do their training in healthcare work in outpatient wards, healthcare centres, doctors' offices and child welfare centres.

Multicultural Nursing KG09AIHE6S3 (study unit)

Content

This course involves practical training (21 ECTS) in various types of clinical settings, and it includes seminar work and field trips.

Syventävä hoitotyön harjoittelu eriytyvillä alueilla, 21 op KG09AIHE6S2 (study unit)

Objectives To be planned at a later date.

Content

This course involves practical training (21 ECTS) in advanced nursing in various types of clinical settings, and it includes seminar work and field trips. More details about the contents of this course will be planned at a later date.

Literature / Study Material To be planned at a later date.

Learning Methods To be planned at a later date.

Assessment To be planned at a later date.

Prerequisites Both Basic and Professional Studies must be completed.

Languages of Instruction Finnish

Further Information To be planned at a later date.

Työelämäosaaminen, laadunhallinta ja yrittäjyys hoitotyössä, 8 op KG09AIHE701 (study unit)

Lecturers

- Aija Risku, MSc (Nursing Science)
- Katriina Kuhalampi, MSc (Healthcare)
- Kari Jokiranta, MŜSc

• Ritva Kuoppamäki, PhD (Education)

Objectives

Upon completion of the course, students will:

- act according to labour legislation and collective labour agreements,
- take initiative and work in a progressive manner, exercising problem-solving and decision-making skills in their work,
- understand the fundamental aspects of entrepreneurship, and possess skills in social relationships and networking needed in business,
- take responsibility for the quality and development of nursing, and be competent in working as a team leader, and
- take responsibility for the cost-efficient activities of their own work and the work of their team.

Content

- Labour legislation
- Collective labour agreements
- Organisation cultures and values
- Occupational health and welfare
- Supervising sobordinates
- Working on a team
- Areas of leadership and supervision
- Quality control in nursing, modelling processes, and cost calculations
- Business ideas, business plans, choosing the type of enterprise to establish

Literature / Study Material

- Laaksonen, H: & al. 2005. Lähijohtamisen perusteet terveydenhuollossa. Edita.
- Meretniemi, I: & Ylönen, H: 2008. Yrityksen perustajan käsikirja. Otava.

Learning Methods Student–oriented learning methods

Assessment Exam and assignments

Languages of Instruction Finnish

Further Information The course renders 8 R&D study points.

Hoitotieteellinen tutkimus ja hoitotyön kehittäminen, 7 op KG09AIHE702 (study unit)

Content

- Research in Nursing Science
- Research process
- Quantitative and qualitative research
- Action research
- Projects
- Research analysis methods
- Presenting research

Final thesis and maturity test, 15 op KG09AIHE703 (study unit)

Lecturers

- Annu Peltoniemi, DSc (Health Science)
- Helinä Mesiäislehto-Soukka, DSc (Health Science)
- Eija Kyrönlahti, PhD (Education)
- Ritva Kuoppamäki, PhD (Education)
- Erna Nikkola, PhL (Education)
- Hilkka Majasaari, MSc (Healthcare)
- Marjut Nummela, MSc (Healthcare)

Objectives

Upon completion of the thesis and Maturity Test, students will:

- be competent in finding and processing information pertaining to their specific field, critically evaluating the information they obtain and in perceiving information as a wahole,
- apply their knowledge of healthcare in the working world, take responsibility for and work independently in completing a thesis,
- be competent in independently searching for information and critically analysing it, and
- develop readiness and volition to participate in research and development projects in the working world.

The Maturity Test enables students to show their knowledge of the topic of their thesis and proficiency in writing in the Finnish language.

Content

The process of writing a thesis:

- Choosing a topic
- Thesis plan
- Gathering data and analysing it or carrying out a project
- Writing the thesis
- Publishing the thesis
- Writing the Maturity Test

Literature / Study Material As agreed.

Learning Methods Student–oriented methods of learning:

- Seminars
- Supervision of the thesis
- Independent work on the thesis

Assessment

Theses are given numeric grades. The grade consists of the thesis itself, presentation of it, and acting as an opponent, active participation in discussions with the supervisor, in group supervision as well as in seminars. Theses are graded in joint co-operation by the supervisors, opponents and thesis writer(s).

Prerequisites

The completion of the Research and Development in Nursing Science course in the same phases as the thesis process progresses during the training.

Languages of Instruction Finnish

Further Information The course renders 15 R&D study points.

Project training, 3 op KG09AIHE704 (study unit)

Lecturers Ritva Kuoppamäki, PhD (Education)

Objectives Students will be familiar with the various areas of project work and be competent in working in various projects.

Content

- Projects as an instrument in developing the nursinf field
- Project training in clinics, organisations or with business-type activities

Literature / Study Material

Ruuska, K. 2007. Pidä projekti hallinnassa. Suunnittelu, menetelmät, vuorovaikutus. Talentum.

Learning Methods

• Project training

• Student–oriented learning methods

Assessment Approved project training

Languages of Instruction Finnish

Further Information The course renders 3 R&D study points.

FREE-CHOICE STUDIES, 6 op KG09D (study entity)

- Lecturer(s): expert lecturers in the field
- Objectives: Students will increase their professional competence
- Course contents: Students may choose studies offered to nursing students specifically, or studies offered at the School of Healthcare and Social Work, at other schools within the Seinäjoki University of Applied Sciences or at other institutions of higher education. The length of the studies is 2–3 credits. Students will select studies that increase their professional skills and knowledge and register via the Internet and that take place in various institutions. The guidance counsellor is the contact person for Elective Studies at the School of Healthcare and Social Work.
- Literature/study material: Provided by each lecturer individually
- Learning methods: Students will be informed at the beginning of the course.
- Assessment: Students will be informed at the beginning of the course.

Näyttöön perustuva eri ikäisen terveydenhoitotyö, 10 op KG09AIHE801 (study unit)

Content

- The public health nurse profession and its development
- Family planning
- Healthcare work with families expecting a child or families with mothers in child-bed
- Healthcare work with children and adolescents
- Healthcare work with people of the working age
- Healthcare work with the elderly
- The public health nurse as promoter of health and well-being

Opinnäytetyö / kehittämistehtävä, 5 op KG09AIHE803 (study unit)

Objectives

Throughout the duration of the course, students will develop their capacities for analytical thought and internalize the idea of taking a scientific approach to the development of healthcare work. They will use their capacities to carry out research and development processes. Upon completion of the course, students will know how to use the results of their thesis to develop healthcare work. They will also recognize the promotional aspects of healthcare work and health in various areas of development.

Content

- Developmental work research
- Action research
- Projects
- Competence-based healthcare work

Literature / Study Material To be announced.

Learning Methods

- Lectures
- Seminars
- Presentation of one's work to a work community
- Supervision
- Independent study

Assessment

Theses/development projects are grade numerically.

- Active participation
- Approved completion of the work from the perspective of healthcare work
- Maturity Test, if the content of the previous thesis is not preventive/representative of the healthcare perspective

Terveydenhoitotyön harjoittelu, 15 op KG09AIHE802 (study unit)

Content

Training in healthcare takes place in prenatal clinics, delivery rooms, child welfare centres, schools, student healthcare clinics, occupational healthcare clinics, and welfare centres for the elderly.
Degree Programme in Physiotherapy (In Finnish)

Head of degree programme: Ms Riitta Kiili, Tel +358 20 124 5179, E-mail: riitta.kiili@seamk.fi Student counsellor: Ms Tellervo Pihlaja, Tel +358 20 124 5180, E-mail: tellervo.pihlaja@seamk.fi ECTS/International coordinator: Ms Helinä Mesiäislehto–Soukka, Tel. + 358 20 124 5170, E-mail: helina.mesiaislehto–soukka@seamk.fi

Degree and qualification awarded

The graduates of the degree programme in physiotherapy will gain the degree title of physiotherapists (AMK). The extent of the studies is 210 credits.

Access requirements

Please see the Applicant's Guide or the website www.seamk.fi.

General description of the degree programme

Physiotherapists are experts in the assessment, maintenance and promotion of clients' mobility and functional capacity. They plan, implement, evaluate and develop their work independently. They collaborate with the medical staff in charge of their clients' treatment and represent their profession in multi–professional teams. The central aim in physiotherapy is to maintain the functional and work capacity of the population as long as possible. The physiotherapists also seek to affect our living and working environment.

The physiotherapists work in hospitals, health centres, research and care institutions, rehabilitation centres and spas, in the occupational health service, in public health and sports organizations, in institutions for the disabled and the elderly, in children's day care centres, in schools and in the municipal provision of physical education services. They may also become independent practitioners.

Subject-specific competences

Physiotherapeutic examination and clinical conclusions

- ability to examine and analyze function and dysfunction, especially mobility
- ability to draw up physiotherapy plans based on assessment and clinical conclusions in collaboration with the client to meet the client's needs
- ability to evaluate and monitor the effectiveness of physiotherapy

Teaching and counselling competence

- ability to apply a variety of teaching and counselling interventions to purposefully maintain and promote clients' functional capacity and health
- ability to apply the principles of motor learning to promote the clients'/groups' mobility and functional capacity
- ability to use therapeutic exercise methods in work with groups
- ability to plan and supervise exercise promoting health and functional capacity

Therapy competence

- ability to apply evidence-based knowledge in planning physiotherapy
- client activation and reciprocal interaction
- planning and implementation of therapeutic exercises on the basis of pathophysiology, stress physiology, neurophysiology and biomechanics
- physical therapy interventions
 - purposeful use of manual therapy

Collaboration and social competence

- ability to work both independently and as a member of multi-professional teams, groups and expert networks
- active contribution to the development and provision of physiotherapy and related services to respond to the national and international challenges in rehabilitation, sports and in the health and social sector

· documentation and reporting skills

Technology competence

- ability to make use of the technological advances in the planning, implementation and evaluation of physiotherapy
- ability to apply technology in the assessment of mobility and function
- ability to use adaptive aids to support clients' mobility and function
- ability to plan free access environments in multi-professional collaboration
- ability to apply ergonomics to adapt work and living environments to match human needs and characteristics

Pedagogy and learning methods

Pedagogically, the degree programme in built on problem–based learning (PBL), whose philosophy is based on cognitive–constructivist and experiential learning. This means that learning is a result of the student's active processing of ideas, involving a dialogue between earlier and new experience.

Problem–based learning starts with experiences gained in working life. As the world of work does not follow a curriculum, the students must learn to solve problems in a natural way, in the form they appear in practical work. Consequently, in this curriculum, the individual subjects are integrated into central themes, which are closely connected with issues evolving from the practice and with the core competences required in the physiotherapist's profession. Education is not seen as giving information but as producing experiences and competences.

Professionals today are expected to be competent in information seeking and management, collaboration and problem solving; they should be committed to lifelong learning and know how to integrate information from a variety of sources into professional practice. In PBL, instead of learning by heart, the students explore professional problems with their peers and teachers together. The students are seen as responsible and information–seeking adults, who assume responsibility for their own learning and become committed to purposeful, self–directed studies. In this concept, teachers are facilitators and coordinators of learning. The studies consist of work in small groups, expert lectures, projects and practical training at the University and in real–life settings.

Access to further studies

The graduates will be eligible for a post–graduate degree in physiotherapy. (Legislation on Finnish polytechnics 351/2003).

Course structure

During the basic studies, the students will concentrate on the foundation of physiotherapy, on language studies and on interaction skills. During the professional studies, they will learn to assess, support and restore functional capacity. Finally, the students will specialize in one area of physiotherapy, eg. paediatric, adult or geriatric physiotherapy. They will write a final thesis to promote their research and development competence.

The programme includes 75 credits of supervised practical training in the health and social sector or in the municipal provision of sports services. Part of the practical training can be undertaken abroad.

Degree Programme in Physiotherapy (In Finnish), 210 cr (1.9.2008) FYSTER 2008

Code	Name	Stuc	ly Year	CR
		1. 2	. 3. 4.	
KG10A	BASIC STUDIES			47
KG10AP01	Development into the physiotherapistŽs profession	х		4
KG10AP04	English	х		3
KG10AP05	Swedish	х		3
KG10AP03	Native language and communication	X		3

KG10AP06	First aid	х				2
KG10AP02	Polytechnic studies in the degree programme in physiotherapy					7
KG10AP07	Physiotherapy as a part off the rehabilitation services					6
KG10AP08	The client in the health and social service	х				6
KG10APE1	Practical training as orientation to the profession I	x				3
KG10AP09	Human motion and function					10
KG10B	PROFESSIONAL STUDIES 13					136
KG10BP01	Observation and analysis of human motion and function	x				11
KG10BP02	Supporting and counselling clients on motion and health behaviour		x			15
KG10BPE01	Practical training as orientation to the profession II	х				3
KG10BP03	Adult physiotherapy		x			28
KG10BPE2	Practical training in adult physiotherapy		x			15
KG10BP04	Child and youth physiotherapy			x		15
KG10BPE3	Practical training in child and youth physiotherapy			x		9
KG10BP05	Physiotherapy old aging people			x		15
KG10BPE4	Practical training in the physiotherapy for aging people			x		9
KG10BP06	Elective professional studies				x	5
KG10BPE5	Practical training in elective professional studies				x	10
KG10BP07	Transition to working life				x	5
KG10D	FREE-CHOICE STUDIES					8
KG10F	FINAL THESIS AND MATURITY TEST					15

Study Descriptions

BASIC STUDIES, 47 op KG10A (study entity)

The purpose of Basic Studies is to familiarise students with the work of a physiotherapist and the social welfare and healthcare profession, as well as with rehabilitation. Students will learn about the person as a physical, emotional and social being. Students will know how to identify and analyse human movement and activity.

Development into the physiotherapistŽs profession, 4 op KG10AP01 (study unit)

Lecturers

Pirkko Mäntykivi, Riitta Kiili, Pia Haapala, Tellervo Pihlaja

Objectives The students will

- evaluate their learning and development into physiotherapists by constructing portfolios on their professional growth throughout the studies,
- learn to promote their personal professional development processes,
- prepare themselves for the demands of society and working life, and
- make use of the tutoring offered to them.

Content

The course introduces students to physiotherapy as a profession and professional ethics in physiotherapy. There will also be discussion about the role of the Finnish Physiotherapy Association with regard to the students' professional growth. Students will prepare a portfolio. The course also involves tutoring.

Literature / Study Material

• Janhonen, S. & Vanhanen- Nuutinen, L (eds.) 2005. Kohti asiantuntijuutta

- Nikko, A. 2001. Portfolio oppimisen avartajana. Tammi
- Talvitie, U. & Karppi, S–L & Mansikkamäki, T. 1999. Fysioterapia. Edita.

Learning Methods

Individual discussions about goals and development, lectures, group discussions, portfolio, Web-based learning

Assessment

Active participation in group and individual tutorials, portfolio

English, 3 op KG10AP04 (study unit)

Lecturers Mari Heinonen

Objectives

Students will develop their oral and written communication skills, and they will be encouraged to continue their language studies independently in the future.

Content

The course comprises revision of central structures and vocabulary, English for healthcare services and physiotherapy, communication in English–speaking cultures and academic English.

Literature / Study Material

Articles from the journals Physiotherapy and Physical Therapy. Other material provided by the lecturer.

Learning Methods Lectures, pair and teamwork, tutorials in English

Assessment Language aptitude test before the course, a summary of a Finnish text into English, oral test

Swedish, 3 op KG10AP05 (study unit)

Lecturers Jaana Store

Objectives

Students will revise grammar, learn vocabulary related to physiotherapy and healthcare services and advance their oral and writing skills.

Content

The course involves the revision of structures and vocabulary, Swedish for healthcare services and physiotherapy, communication in the Swedish culture, and academic Swedish.

Literature / Study Material

- Sjukgymnasten journal
- Other material provided by the lecturer

Learning Methods Lectures, pair and teamwork, tutorials in Swedish

Assessment Language aptitude test before the course, a summary of a Finnish text into Swedish, oral test

Native language and communication, 3 op KG10AP03 (study unit)

Lecturers Katariina Punkari

Objectives Students will

- learn purposeful communication required during studies and in the working world,
- gain an overall picture of the correct usage of Finnish,

- learn to understand the meaning of documentation in scientific communication and become familiar with various forms of documentation,
- become familiar with the features of various types of texts and their styles and with the foundation of scientific communication,
- learn to compile common documents,
- practice speaking, discussion and holding meetings and negotiations,
- learn to argue for their opinions and develop their thinking,
- know what media literacy involves.

Content

The contents of the course include:

- Planning, implementing and evaluating oral communication
- Interaction, verbal and non-verbal communication, forms of illustrating information
- Meetings, negotiations and other oral communication
- Media texts, authors, interpretation
- Writing: planning, the writing process, final edition, documentation, standard lay–outs, informative texts, business letters, texts for meetings and negotiations
- Scientific essay, report, summary, poster, learning and lecture diaries

Literature / Study Material

Repo, I & Nuutinen, T. 2003. Viestintätaito: Opas aikuisopiskelun ja työelämän vuorovaikutustilanteisiin. Otava: Helsinki. Other material selected by the lecturer

Learning Methods Lectures, oral and written assignments, essay, exam or journal

Assessment Active participation, assignments, exam and essay

First aid, 2 op KG10AP06 (study unit)

Lecturers Marja Toukola

Objectives

Students will learn to recognize the need for immediate first-aid, know how to administer first-aid in various situations and become motivated to keep their skills and knowledge up-to-date.

Content

• First-aid for acute illnesses and accidents.

Literature / Study Material

• First-aid. Latest edition. Finnish Red Cross

Learning Methods Lectures, practice

Assessment Written and practical examination

Polytechnic studies in the degree programme in physiotherapy, 7 op KG10AP02 (study unit)

Lecturers

Pia Haapala, Tellervo Pihlaja, Riitta Kiili, Pirkko Mäntykivi, Liisa Ketola, Petri Keskinen, Silja Saarikoski

Objectives The students will

- be introduced to their learning environment and studies in the Degree Programme in Physiotherapy at the university of applied sciences,
- get to know their fellow students individually and as group members,
- understand the life-long process and comprehensive nature of learning,

- be introduced to the theoretical foundation of learning and become prepared for Problem-based Learning (PBL),
- practice self-directed learning and learning in a group,
- learn to use information technology to support their studies,
- be prepared for computer-based learning,
- learn to use library and information services effectively, and
- be introduced to information sources in their own field and learn to search and apply the information independently.

Content

The topics discussed in the course include the students' role at the university of applied sciences and in the degree programme, and as a member of the student group. The course also introduces learning theories, life–long learning and prerequisites for learning PBL, mental information work and its tools, communication and databases, Internet and WWW services, computer–based learning, and sources of information and seeking information.

Literature / Study Material

- Fyrenius & Silen. 2003. Utgångspunkter för basgruppsarbete, PBL.
- Janhonen, S. & Vanhanen–Nuutinen, L. (ed.) 2005. Kohti asiantuntijuutta.
- Nummenmaa, A. & Virtanen, J. 2003. Ongelmasta oivallukseen, ongelmaperustainen opetussuunnitelma. Tampere University Press.
- Curriculum 2008–2009
- Study Guide
- Ongelmaperustainen pedagogiikka: teoriaa ja käytäntöä. Tampere University Press.
- Poikela S. 1998. Ongelmaperustainen oppiminen: uusi tapa oppia ja opettaa?. Dept. of Teacher Education: University of Tampere.
- Silvèn, M., Kinnunen, R. & Keskinen, S. 1991. Kohti itseohjautuvaa opiskelutaitoa.
- Centre for continuing education: University of Turku.
- Other material provided by the lecturer

Learning Methods

Lectures, tutorials, field trip arrangements, assignments, written test, seminar work and presentation, Web-based learning

Assessment

Active participation in tutorials, field trip arrangements, assignments, written test, seminar work and presentation

Further Information

Polytechnic Studies: 1.5 cr; Information Acquisition: 1.5 cr; Information Technology: 2 cr; Interaction and Collaborative Skills: 0.5 cr; Science of Education: 1.5 cr

Physiotherapy as a part off the rehabilitation services, 6 op KG10AP07 (study unit)

Lecturers

Riitta Kiili, Pia Haapala, Merja Finne, Minna Hautamäki, Tarja Svahn; Pirkko Mäntykivi

Objectives Students will

- study the development of rehabilitation and the legislation that regulates it to be able to grasp the role of rehabilitation in society,
- become familiar with the historical development of their education and future profession, including relevant legislation and central concepts in physiotherapy,
- explore the role and responsibilities of physiotherapists in multi-professional teams, rehabilitation and healthcare and social services,
- study the physiotherapeutic process and the work of physiotherapists as part of rehabilitation,
- learn what the concept 'internal entrepreneurship' involves in their future work,
- learn to apply research results to their work,
- learn to think critically, and
- study the concept 'evidence-based physiotherapy'.

Content

The topics discussed in the course include:

- the history of rehabilitation,
- rehabilitation as a concept, and relevant legislation,
- sub-areas of rehabilitation,

- rehabilitation plan,
- multi-professionalism in rehabilitation,
- physiotherapy in the rehabilitation process,
- history of physiotherapy,
- laws and concepts in the work of physiotherapists,
- internal entrepreneurship in the work of physiotherapists, and
- introduction to the research and development of physiotherapy, and the research process.

Literature / Study Material

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- Talvitie, U., Karppi, S-L., Mansikkamäki, T. 2006. Fysioterapia. Edita Prima Oy. Helsinki.
- Tenhunen 2004. Yrittäminen sosiaali- ja terveysalalla. Yrityssanoma.
- Viitanen, E. 1997. Fysioterapian ammattikulttuuri terveyskeskuksissa. University of Tampere.

Learning Methods

Lectures, tutorials, independent study, field trips, online learning

Assessment Written exam

Further Information

Rehabilitation: 1.5 cr; Introduction to Physiotherapy: 3 cr; Foundation of Examinations: 0.5 cr; Entrepreneurship: 1 cr

The client in the health and social service, 6 op KG10AP08 (study unit)

Lecturers

Pia Haapala, Kari Jokiranta, Minna Hautamäki, Pirkko Mäntykivi, Riitta Kiili ja Tarja Svahn

Objectives Students will

- learn to view patients/clients as experts of their own lives and resources,
- study the rights of patients and the responsibilities of professionals as regulated by Data Protection and Confidentiality legislation,
 - become familiar with the Finnish healthcare and social service system and the relevant regulations and healthcare and social policy programmes,
 - be introduced to various enterprises in the healthcare and social sectors, learn the special features of entrepreneurship in the healthcare and social sectors,
 - explore factors that influence the health and functional capacity of the Finnish population and understand the significance of those factors in public health, and
 - understand the role of the third sector as a complementary provider of healthcare and welfare services.

Content

The course comprises the following:

- Client-oriented approach to interaction
- Data protection legislation
- · Health and social service delivery system in Finland
- Entrepreneurship in the health and social service

- Legislation on entrepreneurship
- Public health
- Third sector/associations for the disabled

Literature / Study Material

- Aittasalo, M. 1999. Fysioterapian vaikuttavuudesta tärkeimmissä kansantaudeissa –käsitteitä, problematiikkaa ja tutkimustuloksia. Suomen Fysioterapeuttiliitto.
- Aromaa, A., Huttunen, J., Koskinen, S. & Teperi, J. 2005. Suomalaisten terveys. Duodecim, Kansanterveyslaitos, Stakes.
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- Kauhanen, J. et al. 1998. Kansanterveystiede. 2nd ed. WSOY. (assigned chapters).
- Kovalainen & Simonen 1996. Sosiaali– ja terveysalan yrittäjyys. WSOY.
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- Tenhunen 2004. Yrittäminen sosiaali- ja terveysalalla. Yrityssanoma.

Learning Methods

Lectures, tutorials, online learning, independent study, field trips, seminars

Assessment Online course, seminar work

Further Information

Social and Healthcare Services in Finland: 2.5 cr; Psychology: 0.5 cr; Public Health Science: 1.5 cr; Science of Education: 0.5 cr; Entrepreneurship: 1 cr

Practical training as orientation to the profession I, 3 op KG10APE1 (study unit)

Lecturers Pirkko Mäntykivi

Objectives

Students will understand the function of the health– and social–service system in practice, be introduced to the work of physiotherapists, explore a case study to learn what the dynamic physiotherapy process with the patient/client involves, study documentation practices, observe how ethical principles are visible in physiotherapy, and participate in assisting ward patients/clients with exercise and daily activities.

Learning Methods Practical training

Practical trainin

Assessment

- Journal based on themes as part of a portfolio
- Writing assignments pertaining to the achievement of set aims
- Group discussion on the themes of the journal at the end of the course

Prerequisites

• Physiotherapy as a part of rehabilitation services, the client in health and social services

Human motion and function, 10 op KG10AP09 (study unit)

Lecturers Riitta Kiili, Tarja Svahn, Pia Haapala, Minna Hautamäki, Pirkko Mäntykivi and an expert in anatomy

Objectives Students will

- be introduced to the life-span perspective,
- study the human body, its systems and vital functions and factors regulating the functions,
- learn the basics of the nervous system, its functions and significance,
- study the components of physical fitness and how they are physiologically affected by stress,
- learn about central mental processes and their role in behavior,
- become aware of their own bodies and the influence of feelings on their body functions,
- learn to assess aerobic endurance,
- learn the basic structure of the muscle, the function of the neuromusclular system and the basics of muscular control and movement mechanics, and
- learn how the environment and interactive relationships affect human functions and well-being.

Content

The topics discussed in the course include:

- human development and life span,
- human anatomy and physiology,
- the impact of stress on the components of physical fitness and bodily systems,
- aerobic endurance assessment instruments,
- sensory functions,
- the structure and function of the central nervous system,
- the classification and regulation of movements,
- the neuromuscular system and its functions.
- arousal, emotions, motivation, personality, and mental self-regulation,
- body image, feelings and bodily functions,
- factors promoting human functions, health and well-being.

Literature / Study Material

- Ahonen, J. et al. (ed.). 1998. Alaraajojen rakenne, toiminta ja kävelykoulu. VK-kustannus.
- Aspinwall, L., Staudinger, U.2006. Ihmisen vahvuuksien psykologia. Edita.
- Bjålie, J.G. et al. 1999. Ihminen. Fysiologia ja anatomia. WSOY.
- Budowick, M. et al. 1995. Anatomian atlas. WSOY.
- Dunderfelt, T. 1997. Elämänkaaripsykologia: lapsen kasvusta yksilön henkiseen kehitykseen. WSOY.
- Fogelholm, M., Vuori, I. 2005. Terveysliikunta- fyysinen aktiivisuus terveyden edistämisessä. Duodecim.
- Häkkinen, K. 1990. Voimaharjoittelun perusteet.
 Kapandji, I.A. 1997. Kinesiologia I, II, III. Medirehab.
- Keskinen, K., Häkkinen, K., Kallinen, M. 2004. Kuntotestauksen käsikirja. Tammer–paino Oy, Tampere.
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- Kronqvist, E–L.2007. Kehityspsykologia: matkalla muutokseen. WSOY.
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- Laukkanen, R. & Hynninen, E. (ed.). 1997. UKK:n kävelytestin ohjaajan opas. UKK-instituutti.
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- McArdle, W. & Katch, F. & Katch, V. 2001. Exercise physiology. 5th ed.
- Lippincott Williams & Wilkins. Mero, A., Nummela, A., Keskinen, K. & Häkkinen, K. 2004. Urheiluvalmennus. VK–kustannus OY. Gummerus kirjapaino Oy. Jyväskylä.
- Nienstedt, W. et al. 2002. Ihmisen fysiologia ja anatomia. pp. 12–14. WSOY.
- Nurmi, J-E. et al.2006. Ihmisen psykologinen kehitys. WSOY.
- Ruishalme, O., Saaristo, L. 2007. Élämä satuttaa: kriisit ja niistä selviytyminen.
- Trew. M. & Everett, T. (ed.). 2001. Human movement. 4th ed. Churchill Livingstone.
- Turunen, K.E. 2005. Ikävaiheiden kriisit. Atena.
- Vuori, I. & Taimela, S. 1999. Liikuntalääketiede. 2nd ed. Duodecim

Learning Methods

Tutorials, lectures, exercises and seminars, Web-based learning

Assessment

Written exams, seminar assignment, reports

Further Information

Anatomy and Physiology: 3 cr; Psychology: 1 cr; Biomechanics: 2cr; Stress Physiology: 2 cr; Examination of Patients/Clients: 2 cr

PROFESSIONAL STUDIES, 136 op KG10B (study entity)

The Professional Studies provide students with the readiness to support and guide people's normal movement and ability to function, as well as to prevent and remedy motoral disorders of people of all ages using physiotherapeutic methods. Students will develop their social and professional skills through theoretical studies and practical training. They will

learn to assess their work and the activities of the work community. Students will also receive tools for developing the field of physiotherapy.

Observation and analysis of human motion and function, 11 op KG10BP01 (study unit)

Lecturers

Tarja Svahn, Merja Finne, Pirkko Mäntykivi; Minna Hautamäki and anatomy expert

Objectives

The students will

- understand how physiotherapeutic assessment is part of the physiotherapy process,
- become familiar with the structure and function of the musculoskeletal system
- learn reliable, repeatable data collection techniques involving posture, motion and basic movements, learn to assess muscle strength and joint mobility, and
- be introduced to research methods in physiotherapy.

Content

The course comprises the following:

- Patient's/Client's physiotherapy process
- Anatomy of the musculoskeletal system
- Data collection techniques, their selection, reliability and repeatability in physiotherapeutic assessment
- Analysis of basic movements and gait
- Examination of posture
- Instruments for assessing functional capacity
- Muscle testing
- Testin joint mobility
- Scientific research in physiotherapy (experimental studies, case studies and action research)

Literature / Study Material

- Ahonen, J. et al. (eds.). 1998. Alaraajojen rakenne, toiminta ja kävelykoulu. VK-kustannus.
- Ahonen, J. et.al. (eds.). 1988. Kehon rakenne, toiminta ja lihashuolto. Valmennuskolmio.
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- Caillet, R. 1996. Soft Tissue Pain and Disability.
- Chaitow, L. 2003. Palpation and Assessment Skills. Churchill Livingstone.
- Gross, J. 2002. Musculoskeletal examination. Blackwell.
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- Häkkinen, K. 1990. Voimaharjoittelun perusteet. (assigned chapters).
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- Koistinen, J. et al. 1998. Selän rakenne, toiminta ja kuntoutus. VK-kustannus.
- Kuntotestauksen perusteet. 1998. Liikuntalääketieteen ja testaustoiminnan edistämisyhdistys.
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- Lippincott Williams & Wilkins. Nordin, M., Frankel, V. 2001. Basic Biomechanics of the Musculoskeletal System. Philadelphia.
- Lippincott Williams & Wilkins. Palmer, M. & Epler, M. 1998. Fundamentals of Musculoskeletal Assessment Tecniques. 2th ed.
- Lippincott. Plazer, W. 2004. Locomotor system. 5th ed. Thieme.
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- Talvitie, U. & Karppi, S.-L. & Mansikkamäki, T. 2006. Fysioterapia. Edita.
- Trew, M. & Everett, T. (eds.). 2001. Human Movement. 4th ed. Churchill Livingstone.
- Vuori, I. & Taimela, S. 1999. Liikuntalääketiede. 2nd ed. Duodecim.
- Ylinen. 2002. Venytystekniikat I. Lihas-jännesysteemi. Loimaan kirjapaino Oy.

Learning Methods

Lectures, tutorials, independent studies, exercises, seminars, online learning

Assessment

Theoretical and practical tests, work reports, seminar work

Prerequisites

• Human Motion and Function

Further Information Courses:

- Biomechanics: 2 cr
- Anatomy of the Musculoskeletal System: 4.5 cr
- Examination of the Patient/Client: 3.5 cr
- Introduction to Research Methods: 1 cr

Supporting and counselling clients on motion and health behaviour, 15 op KG10BP02 (study unit)

Lecturers

Pia Haapala, Merja Finne, Tarja Svahn, Minna Hautamäki, Pirkko Mäntykivi

Objectives

The students will

- practice the planning, implementation, evaluation and documentation of physiotherapy,
- learn to supervise individual clients and groups by applying the central concepts and principles of motor learning and sport didactics,
- know how to advise clients on a healthy lifestyle and how to devise purposeful exercise programs,
- learn to supervise basic movements and therapeutic training while supporting the clients' motor learning,
- use basic massage techniques and learn to mobilize and stabilize joints of limbs purposefully and safely, and
- use various relaxation techniques to reduce muscle tension and tension in general.

Content

The course comprises the following:

- Dynamic physiotherapy processes and documentation
- Motor learning
- Client counselling and healthcare counselling
- Principles of supervising individuals and groups, and planning and implementing purposeful exercise programs
- Health-enhancing exercise and supervising clients through various means
- Nutrition as a part of health promotion
- Therapeutic training, PNF LHT
- Basics of massage
- Mobilization and stabilization of joints and spine through various means
- Relaxation techniques
- Pool therapy

Literature / Study Material

- Aalto, R. 2008. Kuntoilijan lihashuolto-opas. WSOY.
- Aalto, R. 2007. Functional training: toiminnallisempaa lihaskuntoharjoittelua. WSOYpro: Docendo.
- Arponen, R.Airaksinen, O. 2001. Hoitava hieronta. WSOY.
- Autio, T. & Kaski, S. 2005. Ohjaamisen taito. Edita.
- Asmussen, P. et al. 1998. Lihashuolto. Hieronta, kuntosaliharjoittelu, teippaus ja venyttely. VK-kustannus.
- Bull, E. et al. 1985. Vapaana vedessä: vammaisten uinninopetus. Suomen uimaopetus- ja hengenpelastusliitto.
- Carr, J. & Shephed, R. 2000. Movement science. 2nd ed. Aspen.

- Delavier, F. 2003. Lihaskuntoharjoittelun anatomia. VK-kustannus.
 Delavier, F. 2006. Lihaskuntoharjoittelun perusteet. VK-kustannus, cop.
 Delavier, F. 2004. Belle Ligne: ryhtiä, kiinteyttä, voimaa. VK-kustannus.
- Durchman, K. & Jokitalo, M. 2004. Taitavaksi vedessä. Ruskeasuon koulu.
- Heikinaro–Johansson, P. et. al. 2007. Näkökulmia liikuntapedagogiikkaan. WSOY.
- Kataja, J. 2003. Rentoutuminen ja voimavarat. Edita.
- Ligne, B. 2004. Ryhtiä, kiinteyttä, voimaa. VK-kustannus.
- Niemi, A. 2006. Menestyjän kuntosaliharjoittelu & ravitsemus. Docendo.
- Palmer, M. & Epler, M. 1998. Fundamentals of musculoskeletal assessment techniques. 2nd ed. Lippincott.
- Prentice, W.E., Voight, M.L. 2001. Techniques in musculoskeletal rehabilitation. McGraw–Hill.
 Rehunen, S & Fogelholm, M. 1993. Ravitsemus, liikunta ja terveys. VK–kustannus Oy. Jyväskylä.
- Richardson, C. 2005. Terapeuttinen harjoittelu ja keskivartalon hallinta: motorisen kontrollin näkökulma alaselkäkivun hoidossa ja ennaltaehkäisyssä. VK-kustannus.
- Salakari, H. 2007. Taitojen opetus. Eduskills Consulting.
- Shumway-Cook, A. & Woollacott, M. H. 2001. Motor Control. Theory and Practical Applications.
- Lippincott Williams & Wilkins. Schmidt, R. & Lee, T. D. 1998. Motor control and learning. 3rd ed. Human Kinetics Publishers.

- Vertio, H. 2003. Terveyden edistäminen.
- Ylinen. 2002. Venytystekniikat I. Lihas-jännesysteemi. Loimaan kirjapaino Oy.
- Zimmer, R. 2001. Liikuntakasvatuksen käsikirja: didaktis-metodisia perusteita ja käytännön ideoita. LK-kirjat.

Learning Methods

Lectures, tutorials, independent study, exercises, project learning, seminars

Assessment

Theoretical and practical tests, project/seminar assignments

Prerequisites

- Human Motion and Function
- Observation and Analysis of Human Motion and Function

Further Information

Courses:

- Science of Education and Motor Learning: 1.5 cr
- Sport Didactics: 1.5 cr
- Biomechanics: 1 cr
- Therapeutic Training: 4 cr
- Manual Therapy: 5 cr
- Health Promotion: 2 cr

Practical training as orientation to the profession II, 3 op KG10BPE01 (study unit)

Lecturers Pirkko Mäntykivi

Objectives

Students will gain further insight into their future profession and study physiotherapy practices and multi–professional collaboration in their intern placements. They will practise the application of physiotherapeutic assessment techniques and assessing the clients'/patients' functional capacity: massage and palpation and documentation, and understand its importance in the planning, implementation and evaluation of physiotherapy.

Learning Methods

Practical training

Assessment

Journal based on themes as part of the portfolio, writing assignments pertaining to the achievement of set objectives, feedback from the clinical supervisor and physiotherapy teacher, group discussion on the themes of the journal at the end of the course

Prerequisites

- Human Motion and Function
- Observation and Analysis of Human Motion and Function

Adult physiotherapy, 28 op KG10BP03 (study unit)

Lecturers

Tarja Svahn, Merja Finne, Pia Haapala, Riitta Kiili, Kari Jokiranta, Pirkko Mäntykivi; Minna Hautamäki and anatomy and medical experts

Objectives Students will

- apply evidence-based knowledge when studying adult physiotherapy,
- supervise exercise groups for clients with special needs,
- learn to identify health–enhancing and health–jeopardizing factors related to the lives, exercise habits, work capacity and functions of adults in their working age,
- study common disorders, disabilities and illnesses in the working population,
- apply multiple examination techniques when assessing the work capacity and functioning of adults and learn to make conclusions on the basis of the results,
- practice the planning, implementation and evaluation of the adult physiotherapy process,

• be introduced to the principles of quantitative and qualitative research, gain experience in the application and analysis of qualitative research findings and learn to read various research articles.

Content

The course comprises the following:

- Planning and supervising exercise programs to maintain and promote work capacity
- Exercise for special-needs clients
- Pain and controlling pain through physiotherapy
- Physical therapy
- Disorders of the musculoskeletal system and physiotherapy (including sports injuries)
- Pre- and post-operative physiotherapy for surgical patients
- Disorders of the respiratory and circulatory systems and physiotherapy, internal disorders
- Mental disorders and physiotherapy
- Occupational physiotherapy
- Aids for daily activities and mobility
- R&D activities

Literature / Study Material

- Ahonen, M. (ed.). 1984. Työpaikan ergonominen selvitys. Työterveyslaitos.
- Alaranta, H. et al. (ed.). 1997. Fysiatria. Duodecim.
- American College of Sports Medicine. 2003. Exercise Management for People with Chronic Disease and Disabilities. Human Kinetics.
- Basmajian, J. & Wolf, S. 1990. (ed.) Therapeutic exercise.
- Williams & Wilkins. Caillet, R. 1996. Soft Tissue Pain and Disability. F. A. Davis.
- Dropsy. 1994. Den harmoniska kroppen. Natur och kulturen.
- Huttunen, M. et al. 1999.
- Hollis M. & Fletcher-Cook, P. 1999. Practical exercise therapy.
- Ilanne-Parikka et al. 2006. Diabetes. Duodecim ja Suomen Diabetesliitto.
- Ketola, Ritva (ed.)
- Hongisto Valtteri et al. 2007. Toimiva toimisto.
- Koistinen, J. et al. 1998. Selän rakenne, toiminta ja kuntoutus. VK-kustannus.
- Kukkonen, R. & Lampi, R-L. (ed.). 1992. Toimiston työolot. Työterveyslaitos.
- Kukkonen, R. et al. (ed.). 2001. Työfysioterapia. 2nd ed. Työterveyslaitos.
- Lindholm, T. S. (ed.). 1994. Kirurginen potilas. Tampereen lääketieteen kandidaattiseura.
- Lönnqvist, J. et al. (ed.) 1999 or later edition. Psykiatria. Duodecim.
- Matikainen, E., Aro, T., Huunan-Seppälä, A., Kivekäs, J., Kujala, S. & Tola, S. 2004. Toimintakyky -arviointi ja kliininen käyttö. Duodecim.
- Monsen, K. 1992. Psykodynaaminen fysioterapia. Otava.
- Mälkiä, E. & Rintala, P. 2002. Uusi erityisliikunta. Liikuntatieteellinen seura.
- Olsen, L. & Wollmer, P. 2003. Sjukgymnastik vid nedsatt lungfuntion.
- Robertson, V., Ward, A., Low, J., Reed, A. 2006. Electrotherapy Explained: Principles and Practice. Elsevier Ltd
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- Rokkanen, P. et al. 1995. Traumatologia. 6th ed. Kandidaattikustannus.
- Roxendahl, G. & Winberg, A. 2002. Levande människa. Basal Kroppskännedom för rörelse och vila. Natur och kultur 2002.
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- Sandström, M. et al. 1991. Fysikaaliset syvälämpö- ja sähköhoidot. Valmennuskolmio.
- Selkävaivat, 16/1999. Duodecim: medical journal 115.
- Sepelvaltimokuntoutujan käsikirja. 2006. Šuomen Sydänliitto ry.
- Sepelvaltimotauti ja liikunta –opas. 2006. Suomen Sydänliitto ry.
- Suositus sepelvaltimopotilaan kuntoutuksesta. 2006. Suomen Sydänliitto ry.
- Sydämen läppäviat ja liikunta –opas. 2007. Suomen Sydänliitto ry.
- Sydämen rytmihäiriöt ja liikunta –opas. 2007. Suomen Sydänliitto ry.
 Sydämensiirto ja liikunta –opas. 2007. Suomen Sydänliitto ry.
- Sydämen vajaatoiminta ja liikunta –opas. 2006. Suomen Sydänliitto ry.
 Sydänpotilaan suorituskyvyn arviointi. 2007. Suomen Sydänliitto ry.
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- Talvitie, U. & Karppi, S.–L. & Mansikkamäki, T. 1999 and 2006. Fysioterapia. Edita.
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- Vaittinen, E. 1996. Kirurgia. 4th ed. WSOY. (assigned chapters).

Learning Methods

Lectures, tutorials, exercises, independent study, project work, R&D activities, web-based learning

Assessment

Written and practical tests, project report, R&D activities

Further Information Courses:

- Physiotherapy: 10 cr
- Physiotherapeutic Assessment: 4.5 cr (body image, pain, physical capacity)
- Physical Therapy: 3 cr
- Surgery and Traumatology: 1.5 cr
- Musculoskeletal Disorders: 1.5 cr
- Internal Disorders and Psychiatry: 1.5 cr
- Sports Injuries: 1.5 cr
- Neuroanatomy: 0.5 cr
- Foundation of Assessment Techniques: 1 cr
- Exercise for Special-needs Clients: 1.5 cr
- Adaptive Aids: 0.5 cr
- R&D activities 1 op

Practical training in adult physiotherapy, 15 op KG10BPE2 (study unit)

Lecturers

Pia Haapala; Riitta Kiili; Minna Hautamäki ; Tarja Svahn ; Pirkko Mäntykivi

Objectives Students will

- practice the assessment of the working population to learn to detect dysfunction,
- learn to plan and use various tools in physiotherapy to maintain and promote functional capacity and to evaluate their actions in individual and group therapy,
- gain further practice in therapeutic training to be able to evaluate the appropriateness of set exercises and, if necessary, to choose a different approach,
- advancetheir skills in collaborating and interacting with patients, families and other staff members,
- learn to use various techniques for acquiring information, and
- pay attention to ergonomics in all areas of their work.

Learning Methods

Practical training in the working world + report, online learning

Assessment

Journal based on various themes as part of the portfolio, writing assignments on the achievement of objectives, feedback from the clinical supervisor and physiotherapy teacher, group discussion based on the themes in the journal at the end of the course

Prerequisites

• Adult Physiotherapy

Child and youth physiotherapy, 15 op KG10BP04 (study unit)

Lecturers

Minna Hautamäki; Merja Finne, Pia Haapala, Kari Jokiranta, Pirkko Mäntykivi and anatomy and medical experts

Objectives

The students will

- learn to apply evidence-based knowledge in child and adolescent physiotherapy,
- study the growth and development stages in children and adolescents,
- learn how to meet children and adolescents and learn to observe and analyze their motion and functioning,
- understand the importance of interaction and physical exercise to the overall development of children and adolescents,
- learn to supervise children's play and exercise individually and in groups,
- study common disorders in moving and functioning in children and adolescents,
- learn to apply various forms of exercise with special-needs clients,
- become familiar with the possibilities offered by physiotherapy in the maintenance and improvement of functional capacity in children and adolescents,

- learn to plan, implement and evaluate physiotherapy while considering the needs and resources of the families,
- gain further knowledge of rehabilitation by studying the multi-professional rehabilitation process of disabled children, and
- become better qualified for project work, quantitative and qualitative research and its analysis and for reading scientific articles.

Content

The course comprises the following:

- Growth and development of children and adolescents
- Meeting children and adolescents and analyzing and assessing of their functioning in various situations
- Actions supporting the growth and development of children and adolescents
- Health counselling for families in various life situations
- Supervising play and exercise
- Disorders of the nervous system and physiotherapy
- Disorders of the musculoskeletal system and physiotherapy
- Disorders of the respiratory and circulatory system and physiotherapy
- Mental disorders and physiotherapy
- Adaptive aids for disabled children
- Quantitative research and statistical methods
- Introduction to project work
- R&D activities

Literature / Study Material

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- Saunders, W. B., Ernvall, R., Ernvall, S. & Kaukkila, H.-S. 2002. Tilastollisia menetelmiä sosiaali- ja terveysalalle. WSOY.
- Koivikko, M. & Sipari, S. 2006. Lapsen ja nuoren hyvä kuntoutus. Vajaakiikkeisten kunto ry.
- Hirsjärvi, S. & Remes, P. & Sajavaara, P. 2000 or later. Tutki ja kirjoita. 6th ed. Tammi.
- Kannas, L. (ed.). 2004. Koululaisten terveys ja terveyskäyttäytyminen muutoksessa. WHO-koululaistutkimus 20 vuotta. University of Jyväskylä. Terveyden tutkimuskeskus.
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- Koivikko, M. & Sipari, S. 2006. Lapsen ja nuoren hyvä kuntoutus. Vajaaliikkeisten kunto ry.
- Koskiniemi, M–L. & Donner, M. 2004. Lapsen neurologinen kehitys ja tutkiminen. Kandidaattikustannus Oy.
- Levitt, S. 2003. Treatment of Cerebral Palsy and Motor Delay. Blackwell Publishing.
- Malila, M. 2006. Kehitysvammaisten lasten psykomotoriset valmiudet: arviointilomake fysioterapeuteille. UAS thesis. Savonia University of Applied Sciences publications.
- Matikainen, E., Aro, T., Huunan–Seppälä, A., Kivekäs, J., Kujala, S. & Tola, S. 2004. Toimintakyky –arviointi ja kliininen käyttö. Duodecim.
- Mälkiä, E. 1990. Kuntoutus lihastaudeissa. Lihastautiliitto.
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- Sillanpää, M. et al. (eds.). 1996. Lasten neurologia. Duodecim.
- Talvitie, Ú et al. 1998. Lasten karkeamotoristen taitojen arviointi fysioterapiassa. Jorvin karkeamotorinen testi 5-vuotiaille. Dept. of Health Science publication, 7/1998. University of Jyväskylä.
- Teclin, J. 1999. Pediatric Physical Therapy. 3rd ed.
- Lippincott Williams & Wilkins

Learning Methods

Lectures, tutorials, independent study, exercises, project work, field trips, seminars, R&D activities, web-based learning

Assessment

Written tests, seminar work, practical exercises in the supervision of clients, project work, R&D activities

Further Information

- Physiotherapy: 7 cr
- Social Policy: 0.5 cr
- Medical Science: 1 cr
- Sport Didactics: 1 cr
- Motor Learning: 0.5 cr
- Rehabilitation: 0.5 cr
- Exercise for Special-needs Clients: 1.5 cr
- Introduction to Research Methods: 2 cr
- R&D activities: 1 cr

Practical training in child and youth physiotherapy, 9 op KG10BPE3 (study unit)

Lecturers

Pia Haapala, Minna Hautamäki, Merja Finne, Pirkko Mäntykivi

Objectives

The students will

- gain further knowledge and skills in the observation and analysis of the psychomotor development in children and adolescents,
- learn to define disorders in the clients' mobility and functional capacity, to plan and apply physiotherapy techniques for maintaining and promoting the clients' functional capacity and to evaluate their own actions critically,
- improve their skills in collaborating and interacting with children/adolescents, their parents and other staff members, and
- make use of the available techniques for acquiring information when faced with new situations.

Learning Methods

Practical training in the working world + report, online learning

Assessment

Journal based on various themes as part of the portfolio, writing assignments on the achievement of objectives, feedback from the clinical supervisor and physiotherapy teacher, group discussion based on the journal's themes at the end of the course

Prerequisites

• Child and Adolescent Physiotherapy

Physiotherapy old aging people, 15 op KG10BP05 (study unit)

Lecturers

Riitta Kiili, Pia Haapala, Pirkko Mäntykivi, Ilkka Loukola, and medical experts

Objectives

The students will

- learn what physical, mental and social changes aging entails,
- learn to identify health-promoting and health-jeopardizing factors in the lives of the elderly population,
- learn to identify the effects of neurological diseases on the aging clients' functional capacity
- study the effects of physical exercise on the aging organism,
- study the disorders, disabilities and illnesses in various bodily systems in older people and learn about the effect of relevant medication,
- understand problems caused by pain and illness in the lives of older clients, learn to apply a number of techniques to assess the functional capacity and independent coping of aging clients,
- learn to plan, implement and evaluate physiotherapy for aging clients,
- study what assistive technology or aids can be used to promote the functional capacity of their clients to be able to give advice on the choice, purchase, use and maintenance of aids, and
- be able to make an expert contribution to rehabilitation teams and to teams planning public buildings and housing for the elderly population.

Content

The course comprises the following:

- Physical, mental and social changes throughout people's life span
- The effects of neurological diseases on aging clients`functional capacity

- Health promotion and aging
- Physical exercise for aging clients
- · Promotion of motor skills through various sensory channels
- Physiotherapy and the effects of medication
- Effects of the impaired function of the cardiovascular, respiratory, musculoskeletal, sensory and neuromuscular systems on the elderly clients' functional capacity
- Tools for assessing the functional capacity and independent coping of elderly clients
- Physiotherapeutic techniques in the alleviation of pain and promotion of functional capacity
- Adaptive aids and modifications in the housing/living environment
- R&D activities

Literature / Study Material

- Ahvo, L. et al. 2001. Ikääntyvien liikunta, terveys ja toimintakyky. VK-kustannus.
- Bromley, I. 1998. Tetraplegia and paraplegia. 5th ed. Churchill Livingstone.
- Carr, J. & Shepherd, R. 1989. Toispuolihalvauspotilaan liikkeiden uudelleen oppiminen. Valtion painatuskeskus.
- Era, P. 1997. Ikääntyminen ja liikunta. Likes.
- Forsborn, M.-B. et al. 2001. Aivovauriopotilaan kuntoutus. Tammi.
- Heikkinen, E. and Rantanen, T. (eds.). 2007. Gerontologia. Duodecim.
- Heikkinen, E. and Marin, M. 2003. Vanhuuden voimavarat.
- Hietanen, A. and Lyyra, T–M. (eds.). Läkkään väestön terveyden ja toimintakyvyn ylläpitäminen ja edistäminen. Sosiaali- ja terveysministeriön selvityksiä 2003:2.
- Hirsjärvi, S. & Remes, P. & Sajavaara, P. 2000 or later. Tutki ja kirjoita. (6th ed. or newer). Tammi.
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- Mälkiä, E. & Rintala, P. 2002. Uusi erityisliikunta. Liikuntatieteellinen seura.
- Ranta, S. 2004. Toimintakyky voi parantua vielä korkeassakin iässä. Dissertation, University of Jyväskylä.
- Salminen, A-L. toim. 2003. Apuvälinekirja. Kehitysvammaliitto.
- Soinila, S. et al. (eds.). 2001. Neurologia. Duodecim.
- Sihvonen, S. 2004. Postural Balance and Aging. University of Jyväskylä.
- Soinila, S. & al. (eds.). 2001. Neurologia. Duodecim.
- Suominen M,. ym. 2001. Ikääntyvien liikunta, terveys ja toimintakyky. VK-kustannus Oy. Jyväskylä.
- Yksilölliset palvelut, toimivat asunnot ja esteetön ympäristö -vammaisten ihmisten asumispalveluiden laatusuositus. Sosiaali- ja terveysministeriön oppaita 2003:4. Sosiaali- ja terveysministeriö, Suomen Kuntaliitto.
- Vallejo-Medina, A. & al. 2007. Vanhusten hoito. WSOY.
- Voutilainen, P. (ed.). 2004. Dementoituvan ihmisen kuntoutuksen lupaus. Tammi. Helsinki.

Learning Methods

Lectures, tutorials, exercises, independent study, seminars, R&D activities, online learning

Assessment

Written tests, seminar work, R&D activities

Prerequisites

- Adult Physiotherapy
- Child and Adolescent Physiotherapy

Further Information Courses:

- Physiotherapy: 7 cr
- Community Planning: 2 cr
- Adaptive Aids: 0.5 cr
- Neurology: 1.5 cr
- Gerontology and Geriatrics: 1.5 cr
- Exercise for Special-needs Clients: 1.5 cr
- R&D activities: 1 cr

Practical training in the physiotherapy for aging people, 9 op KG10BPE4 (study unit)

Lecturers Pia Haapala, Riitta Kiili, Pirkko Mäntykivi *Objectives* The students will

- examine and assess the functional capacity of the elderly population and identify disorders in the patient's/client's functional capacity,
- plan and apply various physiotherapy techniques to maintain and promote the clients'/patients' functional capacity which paying special attention to the elderly client's home and environment,
- advance their skills in collaborating and interacting with patients, families and other staff members,
- use various techniques for acquiring information.

Learning Methods

Practical training in the working world + report, online learning

Assessment

Journal based on various themes as part of the portfolio, writing assignments on the achievement of objectives, feedback from the clinical supervisor and physiotherapy teacher, group discussion based on the journal's themes at the end of the course

Prerequisites

• Physiotherapy for the Elderly

Elective professional studies, 5 op KG10BP06 (study unit)

Lecturers

Merja Finne ja Minna Hautamäki

Objectives

Students will become familiar with the theoretical foundation and practical applications of their line of specialization. They will also be introduced to patient administration, learn the objectives and components of personnel administration, study the development of the work community and the principles of quality assurance.

Content

The topics discussed in the course include theoretical underpinning and practical applications of the line of speciaization in physiotherapy chosen by the student, efficiency and management in service organizations, the objectives and components of personnel administration, and staff and work community development plans.

Literature / Study Material

According to the choice of the student and lecturer:

- Holma, T. et. al. 2001. Kirkasta ja uudista laadunhallintaa –kehitä laatutalo.
- Opas sosiaali- ja terveydenhuollon organisaatioille. Stakes.
- Holma, T. 2003. ITE 2 opas uudistuneen itsearviointi– ja laadunhallintamenetelmän käyttöön. Suomen Kuntaliitto.
- Laaksonen, H. & Niskanen, J. & Ollila, S. & Risku, A. 2005. Lähijohtamisen perusteet terveydenhuollossa. Edita.
- Loppela, K. 2003. Ihminen ja työ -keskustellen työkuntoon. Acta Universitatis Tamperensis 1003.
- Suomen Fysioterapeuttiliitto ry. 2004. Laadun suunta fysioterapiassa.

Learning Methods

Tutorials, independent study, lectures, seminars, online learning

Assessment Written test, seminar work

Prerequisites

- Adult Physiotherapy
- Child and Adolescent Physiotherapy
- Physiotherapy for the Elderly

Practical training in elective professional studies, 10 op KG10BPE5 (study unit)

Lecturers Merja Finne ja Minna Hautamäki

Objectives

Students will become familiar with the theoretical foundation and practical applications of their chosen line of speciaization.

Content

Practical training: Students will actively contribute to the choice of the intern placement. The placement can be situated outside the Seinäjoki Hospital District, if no suitable placement is available or if the practical training period is essential for future employment.

Learning Methods

Practical training in an intern placement chosen by the student, administrative development project in the placement, written report about the internship, online learning

Assessment

Journal based on themes as part of the portfolio, writing assignments pertaining to the achievement of set objectives, feedback from the clinical supervisor and physiotherapy teacher, group discussion on the journal's themes at the end of the course

Prerequisites

• Elective Professional Studies

Transition to working life, 5 op KG10BP07 (study unit)

Lecturers Minna Hautamäki, Merja Finne, Kari Jokiranta, and other experts

Objectives The students will

- be introduced to labor legislation,
- study collective labor agreements and terms of employment in their own field,
- understand the role of labor market organizations in Finnish society,
- learn to market their expertise and qualifications,
- learn to provide physiotherapy services,
- study the establishment of a private enterprise, and
- understand the meaning of internationalization and learn to work as physiotherapy professionals in an increasingly international environment, both in Finland and in other countries.

Content

The course comprises the following:

- Labor legislation
- Municipal labor agreements
- Labor market organizations
- Curriculum vitae and job applications
- Physiotherapists as entrepreneurs
- Establishing a physiotherapy practice
- Development trends and international collaboration in physiotherapy
- Physiotherapy education in other countries
- National and international physiotherapy organizations
- · Project studies

Literature / Study Material

- Asikainen J.1993. Kansantalous. 2nd ed. Kustannuskiila.
- Fysioterapeutin yrittäjäopas 2004. Suomen fysioterapeuttiliitto ry.
- Koskela, M. & Ojala, T. 1992. Taloustietoa terveydenhuolto- ja sosiaalialalle. WSOY.
- Kovalainen & Simonen 1996. Sosiaali- ja terveysalan yrittäjyys. WSOY.
- Tenhunen 2004. Yrittäminen sosiaali- ja terveysalalla. Yrityssanoma.
- Yrityksen perustamisopas. Käytännön perustamistoimet 2002. TE-keskus. Yritysosasto.
- National and international physiotherapy journals

Learning Methods

Online learning, lectures, tutorials, independent study

Assessment

Online assignments, examination, seminar assignment

Further Information Courses:

- Entrepreneurship: 1 cr
- Introduction to the Working World: 1.5 cr
- International Studies: 1.5 cr
- Project Studies: 1 cr

FREE-CHOICE STUDIES, 8 op KG10D (study entity)

- Lecturer(s): Physiotherapy teachers and various experts
- Objectives: The Elective Studies must fulfill the criteria set for university of applied sciences studies, and advance students' professional qualifications. Elective Studies also involve practical training. Students may choose elective courses from any of the faculties/units at the Seinäjoki University of Applied Sciences, as well as at other institutions of higher education. Using an internal (School of Healthcare and Social Work) or external menu on the Internet, students select courses that promote their professional knowledge and skills. The courses are organized in the faculties from which the students have selected their courses. For further information, students may contact the guidance counsellors.

FINAL THESIS AND MATURITY TEST, 15 op KG10F (study entity)

- Lecturer(s): Merja Finne, Pia Haapala, Minna Hautamäki, Riitta Kiili, Pirkko Mäntykivi, Tarja Svahn
- Objectives and course contents: Students will apply information-seeking techniques independently and critically, demonstrating a research-minded approach. They will integrate theoretical knowledge and skills to benefit the working world. They will be prepared to participate in research and development projects and know how to apply research findings in the development of their future profession. Students will sit a maturity test to demonstrate that they master the contents of their final thesis and are capable of expressing themselves in appropriate style in their native language. The final thesis requires both independent work and active participation in individual/group tutorials and seminars. Students are expected to produce a plan and a research report in writing.

Degree Programme in SME Business Management (In Finnish)

Head of degree programme: Ms Anmari Viljamaa, Tel. + 358 40 830 2397, E–mail: anmari.viljamaa@seamk.fi Student counsellor: Ms Raija Rauma, Tel. + 358 40 830 4214, E–mail: raija.rauma@seamk.fi ECTS/International coordinator: Ms Marjo Arola, Tel. + 358 40 830 4216, E–mail: marjo.arola@seamk.fi

Degree, degree title, and acquired qualifications

Bachelor of Business Administration

Entrance requirements

The entrance requirements for young students can be found in the Study Guide on pages 5–8 and 24. Related information for students in adult education will be announced separately.

General description of the degree programme

The Degree Programme in SME Business Management focuses on entrepreneurship, business management and international activities. The purpose of the programme is to train students to be proficient in languages, internationally oriented business professionals who work as experts and managers in small and medium–sized enterprises (SME). Further, the purpose is to help the students to develop the entrepreneurial attitudes necessary for working in SMEs or establishing their own enterprise.

The programme takes a holistic approach to learning. Studies focus on developing students' overall perspectives of business and the command of complex interconnections. The perspective is that of a business manager. International activities are also highly regarded in the programme. Global business calls for language skills and the ability to work successfully in a multicultural environment. There are a number of job titles available to students after they have completed the programme: entrepreneur, managing director, development manager, logistics director, financial manager, marketing planner, etc.

Track alternatives

In addition to the focus on holistic skills, the programme also offers students the opportunity to specialise in an area of interest, which is beneficial to their career path. Students may choose one or two out of four specialization Modules.

The *Production Economics Module* focuses on the development of materials and financial administration as well as cost leadership. The Module includes studies in logistics, purchasing and production management.

Studies in the Marketing Module provide students with comprehensive knowledge of planning and executing marketing activities as well as current issues in marketing. Studies focus on business–to–business, services and relations marketing.

Studies in the *Business Development Module* support students' orientation in the production and development of consultation services. Studies focus on the funding of development work, project work and consultation work.

The *Commercial Law Module* provides students with the readiness to work in positions relating to management and consultation in SMEs, which call for knowledge of legal issues in trade and commerce. Areas pertaining to commercial law include contractual laws, taxation laws, marketing and competition laws, labour laws and organisational laws.

International activities

Students have the opportunity to spend one semester in a university abroad during their third year of study. The extent of the studies in a foreign university amounts to $15\hat{y}30$ credits. There is an extensive network of universities to choose from in Europe, the Americas, Australia and Asia. Students may also apply to a foreign university that is not a part of Seinäjoki UAS's university network.

Students in this programme also have the opportunity to complete a double degree: a Finnish bachelor's degree in Kauhajoki and a BBA degree in Hanover, Germany. In practice, this means that a student studies in the Degree Programme in SME Business Management for three years and then studies for one year in Fachhochschule Hannover (University of Applied Sciences and Arts). Students write their final thesis in English, which is supervised by two supervisors. Students may do their practical training in Germany or somewhere else abroad.

Students who do not wish to do a double degree may also do their practical training abroad. The degree programme's excellent language courses, courses taught in English and the multicultural atmosphere created by foreign exchange students and guest lecturers strongly promote internationality.

Learning objectives

- *Extensive competency in business:* Students learn to identify and describe the core processes in an enterprise and to understand the various sub-areas of business and the influence those areas have on each other. Students also learn about the interaction between business activities and the business environment, and they acquire a business-oriented way of working. Students are introduced to the principles of profitable business and they know how to analyse a business's activities and risks. They understand the impact each individual has on the work community and the significance of communication. Students are also able to actively create communicative relationships between both internal and external interest groups in Finland and in the global business environment.

- *Competence in entrepreneurship:* Students are capable of creating, analysing and developing new lines of business and of developing and managing SME activities. They understand what is involved in defining an SME's strategy and the significance of making a business plan, of planning and analysing profitability and solvency issues, and of managing networks. Students are familiar with the purposes and procedures of financial administration and production economics, and they understand the significance and procedures of marketing in an SME. As entrepreneurs, they will possess the necessary social skills for co-operation and making presentations, for example. Students learn to handle pressure and take advantage of available opportunities.

- Competence in international affairs: Students have command of two or three foreign languages necessary in managing and developing executive duties. They are familiar with and accept different types of cultures, and they are able to work in collaboration with people from different cultures. Students also understand the development of international affairs especially from the point of view of the future of their own field of business.

- Competence in practical methods for business: Students are knowledgeable in the research and development activities necessary for acquiring and understanding business affairs. They know how to apply business mathematics and statistical methods utilising data processing systems, and they possess sufficient knowledge of how to apply qualitative and quantitative research methods to their work.

- Competence in applied business: Students know how to apply theories of business and possess problem-solving skills, e.g. in practical training, project studies and final thesis. They also know how to apply the latest knowledge in the field of business to the work community. Students know how to development business processes and think and work in a quality-oriented manner.

Teaching methods and learning

More and more, running a business requires skills in the acquisition and processing of information, collaboration, problem–solving, continuous learning, and the ability to combine various types of information and disciplines in practical work. Teaching in the SME programme focuses on the constructivist theory of learning whereby the active role of the students plays a significant part in learning. The teacher functions as a guide and co–ordinates learning.

Learning in the programme involves work in small groups, visits by expert lecturers, visits to various companies, assignments, projects, and practical training in an authentic environment in the working world. A study or practical training period abroad supports not only students' foreign language skills, but also their development into independent decision–makers.

Studies for the young students in the university primarily involve teamwork, which is associated with long-standing co-operation with partner companies. Students do several extensive assignments for their focal SMEs, which helps them grasp the connections between the various business functions right from the beginning of their studies. Working with partner companies and teamwork, together, provide students with a foundation for developing their professional and social skills as well as their personal attributes to perform as an executive in or owner of an SME. This learning approach prepares for and draws upon post–graduate working life while the students are still studying.

Qualifications for post-graduate studies

Students may apply to complete their master's degree in social sciences and business and administration. (See act 351/2003 pertaining to universities of applied sciences, in Finnish).

Structure of the programme

The programme contains 60 credits of courses per year. The extent of the programme is 210 credits in total and it takes about 3.5 years to complete. The programme comprises Basic Studies, Language Studies, and Professional Studies, international or entrepreneurial studies, practical training, Advanced Professional Studies and a final thesis.

Regulations pertaining to performance and assessment

Regulations pertaining to the operations in universities of applied sciences

Degree Programme in SME Business Management (In Finnish), 210 cr (1.9.2008) LIIKJOHT 2008

Code	Name				Study Y		Yea	ar	CR
					1.	2.	3.	4.	-
EPERUS	BASIC STUDIES				i —	i —	i	<u> </u>	30
KE16A081100	Introduction to business economics			х				9	
KE16A081110	Introduction to	economics			х				2
KE16A081120	Business mathe	ematics			х				3
KE16A081130	Introduction to	information technology			x				3
KE16A081140	Learning skills	Learning skills			x				2
KE16A081150	Viestintä yritys	Viestintä yritystoiminnassa			x				5
KE16A081160	Ekologia ja ku	lutus			x				6
EYAMMATTIOP	YHTEISET AMN	IATTIOPINNOT							57
KE16B082100	Projektinhallin	nan menetelmät			x				3
KE16B082110	Financial and o	operational planning			x				9
KE16B082120	International b	usiness (In English)			x				9
KE16B082130	Tutkimus ja analyysi					х			6
KE16B082140	Yrittäivys ja liiketoiminta					x			12
KE16B082150		Johtaminenble>	Х	9					
	KE16B082160	Company Legislation	х	9					
	EVAMMATTIOP	VALINNAISET AMMATTIOPINNOT		12					
	KE16C082200	Quality management (In English)	х	3					
	KE16C082210	Marketing communication	Х	3					
	KE16C082220	Immaterial law	Х	3					
	KE16C082230	Project management	Х	3					
	KE16C082240	SME networking (In English)	х	3					
	EKIELIOP	LANGUAGE STUDIES		18					
	KEENGLANTI	ENGLISH		6					
	KE16A084100	Introduction to business English	x	3					
	KE16A084110	Business communication	x	3					
	KE16D084600	English, preparatory study unit	x	č					
		unit							

KERUOTSI	SWEDISH		6
KE16A084200	Swedish, business communication I	х	3
KE16A084210	Swedish, business communication II	х	3
KE16D084500	Swedish, preparatory study unit	Х	
KESAKSA	GERMAN		
KE16C084300	Saksa I, alkeet	Х	3
KE16C084310	Saksa II, jatkokurssi	х	3
KE16C084320	Saksa, liikeviestintä I	х	3
KE16C084330	Saksa, liikeviestintä II	х	3
KEVENAJA	RUSSIAN		
KE16C084400	Venäjä I, alkeet	Х	3
KE16C084410	Venäjä II, jatkokurssi	х	3
EHOPSOSAKOK	VAIHTOEHTOISET HOPS–OSAKOKONAISUUDET		30
EKANVÄLIST	Kansainvälistyminen		
KE16D085100	Studies abroad	х	30
KE16D085110	Gateway	х	30
EYRITTÄJYYS	Yrittäjyys		
KE16D085120	Lisäkokonaisuus valinnaisista erikoistumiskokonaisuuksista ja muita opintoja	x	30
KE16D085130	Projektityö liike–elämälle	х	
KE16D085140	Muita opintoja	х	30
ЕТҮӦНА	PRACTICAL TRAINING		30
KE16E086100	Practical training	х	30
EVAERIKOI	VAIHTOEHTOISET ERIKOISTUMISKOKONAISUUDET		18
KETUOTANTO	Tuotantotalous		18
KE16C083100	Logistics (In English)	х	3
KE16C083110	Purchasing management		x 3
KE16C083120	Yrityssuojelu		x 3
KE16C083130	Tuotannonohjaus ja simulointi		х б
KE16C083140	Tuotantotalouden workshop		x 3
KEMARKKIN	Markkinointi		18
KE16C083200	Markkinoinnin projekti I	х	3
KE16C083210	Current issues in marketing		x 3
KE16C083220	Business–to–business marketing (In English)		x 3
KE16C083230	Service and relationship marketing (In English)		x 3
	Markkinoinnin projekti II		x 6
KE16C083240	Markkinoninin projeku n		
KE16C083240 KEYRITYSTOI	Yritystoiminnan kehittäminen		18
KE16C083240 KEYRITYSTOI KE16C083300	Yritystoiminnan kehittäminen Projektipeli	X	18 3
KE16C083240 KEYRITYSTOI KE16C083300 KE16C083310	Yritystoiminnan kehittäminen Projektipeli Kehitystoiminnan rahoitus	x	18 3 x 3

1		
KE16C083330	Palvelun tuotteistus ja konsultointi	x 3
KE16C083340	Liike–elämän asiantuntijatyö	x 6
KEYRITYSJUR	Company Legislation	18
KE16C083400	Contract law x	3
KE16C083410	Markkina– ja rahoitusoikeus	x 3
KE16C083420	Organisaatio–oikeus	x 3
KE16C083430	Yrityksen ympäristöoikeus	x 3
KE16C083440	Kirjanpito- ja vero-oikeus	x 6
EOPINNÄ	BACHELOR'S THESIS	15
KE16F087100	Thesis	x 15
EVAPVALIT	VAPAASTI VALITTAVAT OPINTOJAKSOT	
KE16D088100	Intercultural skills in business communication (In English)	3
KE16D088110	Doing business in English (In English)	3
KE16D088120	Doing business in Swedish	3
KE16D088130	Doing business in German	3
KE16D088140	Doing business in Russian	3
KE16CYVO190	Basic Spanish	3
KE16CYVO840	Continuation Course in Spanish	3
KE16D088150	Venäläistä tapakulttuuria suomalaisille	3
KE16D088160	Svenska på nätet –virtuaalikurssi	3
KE16D088170	Ruotsi, suullinen viestintä	3
KE16D088180	Englanti, suullinen viestintä (In English)	3
KE16D088190	Spoken German	3
KE16D088200	Spoken Russian	3
KE16D088210	Operations of Retail Trade and 'the Commodity Game'	3
KE16D088220	Securities and Investment Activities	3
KE16AYPE180	Information management in enterprises	3
KE16D088230	Transitional economies –business areas and cultures (In English)	3
KE16D088240	Introduction to the European Union (In English)	3
KE16D088250	European economic integration (In English)	3
KE16D088260	Entrepreneurship in the Nordic context –case study (In English)	3
KE16D088270	SME operations in international environment –project (In English)	3
KE16D088280	Dimensions of entrepreneurship (In English)	3
KE16D088290	Cross cultural management (In English)	3
KE16D088300	Internalisation of small and medium–sized firms (In English)	3
KE16D088310	Projektityö liike–elämälle	

Study Descriptions

BASIC STUDIES, 30 op EPERUS (study entity)

The purpose of the Basic Studies is to provide students with the fundamental knowledge necessary for further studies and to prepare students for their professional studies. The module also provides students with knowledge for establishing their own business. All students studying at the Finnish School of SME Business Administration must take obligatory courses in foreign languages (a total of 24 ECTS) to gain adequate language skills and facilities for communication.

Introduction to business economics, 9 op KE16A081100 (study unit)

Lecturers

- Tero Turunen, MA
- Jorma Imppola, MSC (Eng.)
- Anmari Viljamaa, DSc (Econ. and Bus. Adm.)

Objectives

Upon completion of the course, students will understand the significance of commerce in society and entrepreneurship and a diverse phenomenon. Students will be familiar with the concepts of commerce, marketing, and production and understand the relationships between the various functions in a business. They will have command of some basic tools used in business planning and management and possess a comprehensive understanding of business. Students will be aware of the interdependency of a company and its interest groups and be able to evaluate the relationship of a single company to its operational environment.

Content

Part 1: Entrepreneurship and Business

- Significance of entrepreneurship and business to society and the economy, entrepreneurial atmosphere, internal entrepreneurship
- Methods in the EU and Finland to promote entrepreneurship
- Areas of a company's operations
- Business ideas, innovations, establishing a business, tangible and intangible resources
- Planning and managing a business: strategic, tactical and operative planning, SWOT
- Types of company organisations (e.g. franchising, family business), legal types of companies

Part 2: Marketing

- Developing a marketing way of thinking
- Competition and competitive tools in marketing, marketing environment
- Customer-oriented marketing
- Segmentation
- Purchasing behaviour

Part 3: Industrial Economy

- Production systems
- Production planning systems
- Ideal factory
- Types of production
- Definition, concept and flow of logistics
- Domestic and international logistics
- Contributing factors and purposes of logistics systems
- Logistics parametres
- Significance of logistics in the national economy

Literature / Study Material

- Bergström S. & Leppänen A. 2003. Yrityksen asiakasmarkkinointi. Helsinki: Edita.
- Viitala R. & Jylhä E. 2006. Liiketoimintaosaaminen. Helsinki: Edita.
- Sartjärvi T. 1992. Logistiikka kilpailutekijänä. Keuruu: SKY.
- Other material as indcated by the lecturer
- Lecture notes

Learning Methods

- Lectures
- Group work
- Independent study

Assessment

- Moodle exams for each part of the course (30 %)
- Group report and presentation of it (50 %)
- Self- and peer-evaluation and evaluation by the lecturer

Languages of Instruction

Finnish and possibly English in part

Further Information

The course yields some credit for research and development.

Introduction to economics, 2 op KE16A081110 (study unit)

Lecturers

Jorma J. Imppola, MSc (Eng.)

Objectives

Upon completion of the course, students will understand the concepts associated with national economy and be familiar with the basic structures, current situation and status of Finland's national economy in the global economy. Students will understand the relationship between SME operations and the national economy.

Content

- Basic concepts of national economy
- Growth in the economy and economic fluctuations
- Economic policies
- International trade as a phenomenon of the economy
- Development of Finland's national economy

Literature / Study Material

- Pekkarinen J. & Sutela P. 2004. Avain kansantaloustieteeseen. Juva: WSOY.
- Other material as indicated by the lecturer.

Learning Methods

- Lectures
- Independent study
- Group work

Assessment

- Exam: 70 %
- Group report: 30 %

Business mathematics, 3 op KE16A081120 (study unit)

Lecturers Leo Sippola, MA, MSc (Eng.)

Objectives

Students will be competent in business mathematics and know how to apply their knowledge in their professional studies. They will understand the concepts associated with business mathematics and the common methods of calculation. Students will have command of indices, calculating percentages and credit. They will also be competent in calculating various investment calculations.

Content

- Percentages
- Indices
- Interest

- Credit
- Investment calculations
- Securities

Literature / Study Material Lecture handout or textbook as indicated by the lecturer

Learning Methods

Lectures and assignments

Assessment

The course has two exams each of which accounts for 50 % of the grade for the course. Both exams must be passed to receive a grade for the course.

Introduction to information technology, 3 op KE16A081130 (study unit)

Lecturers

Hannu Palomäki, MSc (Econ. and Bus. Adm.)

Objectives

Upon completion of the course, students will be competent in creating various types of documents using a word processing programme. They will also know how to make spreadsheets for various purposes, such as budgeting, investment calculations, and invoicing.

Content Word processing

- Formating fonts, paragraphs and documents
- Using templates
- Creating a table of contents list of charts and diagrams
- Using various styles
- Dividing a document into parts
- Using graphics

Spreadsheets

- Managing spreadsheets
- Formulas and functions
- Three-dimensional charts
- Diagrams

Literature / Study Material As indicated by the lecturer

Learning Methods

- Lectures + exercises: 40 h
- Independent study: 40 h

Assessment Exams

Learning skills, 2 op KE16A081140 (study unit)

Lecturers

Several different lecturers * Raija Rauma is co-ordinator for the course.

Objectives

Students will be familiar with the practices at the university of applied sciences, the learning environment and community, as well and the degree programme and learning methods. They will understand the structure of the degree programme and apply that knowledge to their own learning. Students will be aware of their responsibility as learners and members of the learning community. They will have command of computer skills that they will use in their studies and know how to obtain needed information, which they will critically evaluate. Students will be competent in planning their own studies and developing their methods of learning. They will also be aware of the caeer opportunities available to them.

Content

- ammattikorkeakoulu opiskeluympäristönä
- tukitoiminnot: terveydenhuolto, opintotuki ym.
- Various learning methods, evaluation and development of one's own learning
- Team work in education
- Library services and information acquisition systems
- Characteristics of scientific information
- Personal Study Plan
- Lectures by representatives of the working world

Literature / Study Material Material as indicated by the lecturers

Learning Methods

- Active participation
- Completion of assignments

Assessment Pass/fail

Viestintä yritystoiminnassa, 5 op KE16A081150 (study unit)

Lecturers Saija Råtts, MA

Objectives

Students will acquire a comprehensive understanding of how to plan and implement communications in an SME. They will be aware of the ways various communities manage internal and external communication, and they will be competent in utilising their communication skills as a company's resource. Additionally, students will be competent in acting appropriately when interacting with others. They will know how to take others into consideration and heed to the demands of the situation and professional field communicating coherently, convincingly and clearly. Students will have the desire to develop their Finnish language skills and skills in communication as part of their professional know-how.

Content

The course is divided into two parts Communication Skills in the Working World (3op)

- Communication in groups: verbal and non-verbal communication, feedback, negotiations, meetings, presentation techniques, management skills, evaluating situations.
- Communication as experts: types of texts, various sources of information and utilisation of them, editing and revision.

Business Communications (2op)

- Business communication: internal and external communication, notifications, support of basic functions, profiling, tools for planning and implementing communications, various communication cultures,
- Communication as a manager: intercultural communication as a part of business communication.

Literature / Study Material

- Juholin E. 2006. Communicare! Viestintä strategiasta käytäntöön
- Other material as indicated by the lecturer

Learning Methods

- Lectures (active attendance is required to complete the course)
- Exercises (independent study and group work)

Assessment

- Active participation
- Compulsory written and oral assignments/exercises

Further Information Research and development: 1 cr

Ekologia ja kulutus, 6 op KE16A081160 (study unit)

Lecturers

- Jorma Imppola
- Kimmo Kulmala

Objectives

Students will gain basic knowledge of the environmental factors influencing people and the environment they live in, the relationship between production and the environment, as well as the impact of production on the environment on the local, regional and global levels. Students will be aware of the ways to reduced the harmful impact people and production have on the environment. They will understand the significance on consuming in society and the purchasing behaviour of consumers. Students will be able to apply information concerning consumer behaviour to decision–making in marketing.

Content

Module 1:

- Concepts pertaining to the environment and sustainable development
- Renewable and non-renewable resources, consuming and impacts of consuming
- Energy production and the impacts of traffic and control of those impacts
- Finland's waterways and protection of bodies of water, handling of sewage
- Protecting the air
- Environmental protection legislation and norms, recycling

Module 2:

- Consumer needs and surveying them
- Factors affecting the purchasing behaviour of consumers
- Consumer decision-making
- Households and consuming
- Impact of various gorups and sub-cultures
- Consumers and innovation
- Social dimension of the consuming culture

Literature / Study Material

- Tahvonen O. 1991. Ympäristö, hyvinvointi ja talous.
- Heinonen et al. 2005. Kuluttajaekonomia: kotitalous ja kulutus. Helsinki: WSOY. (assigned parts)
- Lecture material
- Other material as indicated by the lecturer

Learning Methods

- Lectures
- Seminars
- Assignment
- Field trip

Assessment

- Exams in each module (25 % + 25 %)
- Group report and seminars (50 %)

Prerequisites Introduction to Business Operations

Further Information

The course may yield some credit for research and development.

Projektinhallinnan menetelmät, 3 op KE16B082100 (study unit)

Lecturers Leo Sippola, MA & MSc (Eng.)

Objectives Students will possess basic knowledge and skills in planning and carrying out various projects. They will understand the concepts associated with project work, know what a project plan should include, be familiar with project schedules and dealines and project management. They will also understand the relationship between the duration of a project, the amount of work in it, and the amount of resources for a project, and they will know how to estimate and calculate them. Students will also know how to develop a project and how the evaluation of the technological and economical aspects work.

Content

- Concepts associated with projects and utilising them
- Project plans
- Dividing projects into parts (stages)
- Planning schedules
- Planning resources
- Computer-based project management

Literature / Study Material As indicated by the lecturer.

Learning Methods

- Lectures
- Exercises on computer
- Assignment

Assessment

- Exam (50 %)
- Assignment (50 %)

* Both parts must be successfully completed to receive a grade for the course.

Financial and operational planning, 9 op KE16B082110 (study unit)

Lecturers

- Economist Raija Rauma
- Another lecturer to be announced at a later date

Objectives

Students will be familiar with the purposes and methods of external accounting, accounting legislation, and computer–based accounting. They will have commmand of accounting techniques, the concepts associated with operative and strategic accounting, and essential accounting models. Students will be competent in creating a strategy–based control system, including metres, and know how to analyse a company's profitability, economic and decision–making status using financial statements.

Content Module 1:

- Accounting techniques
- Specifications for entering data in the books
- Financial statements
- Accounting legislation

Module 2:

• Profitability, economy, concepts associated with profit and costs, calculating gross margin, accounting by type of costs, investment calculations

Module 3:

- Developing a control system for management, measuring profitability and solvency and metres
- Traditional parameter analysis and cash flow calculations

Literature / Study Material

- Ihantola & Leppänen: Yrityksen kirjanpito
- Neilimo & Uusi-Rauva: Johdon laskentatoimi

- J. R. Dyson: Accounting for Non-accounting Students
- Other material as indicated by the lecturer

Learning Methods Lecture and assignments

Assessment Exams and assignments

Prerequisites Introduction to Business Operations: either completed or on-going

International business, 9 cr KE16B082120 (study unit)

Lecturers

- Marjo Arola, MSc (Econ.)
- Guest lecturers from Finland and abroad

Objectives

Upon completion of the course, students will be familiar with the essential aspects of international business and ways SMEs can become international, especially in Finland. They will understand the process of planning, carrying out and managing export marketing and international operations. Students will have good command of international business practices as well as export and import documentation. They will also be competent in intercultural communication and in working in different countries.

Content

Part 1: Introduction to International Trade, 3 cr

- Arguments and prerequisites for international trade
- Organizations promoting international trade and information sources
- Competitive tools in international trade
- General view of export activities and other international operations; internationalisation process of SMEs
- International trade and its systems in general
- Structure, development and prospects of Finnish foreign trade

Part 2: Cross Cultural Management, 3 cr

- Awareness of the hidden influence of culture with emphasis on management and business practices
- · Awareness of the type of challenges and problems when working internationally
- Understanding and appreciation of working in other cultures

Part 3: Internationalization of small and medium-sized firms, 3 cr

- Planning the internationalization of an SME (international market surveys, selection and segmentation of international markets, etc.)
- Implementation of internationalization of an SME (means and methods, modes, documentation, etc.)
- Management of internationalization

Literature / Study Material

Lectures, articles, information obtained online, literature announced by the lecturer.

Learning Methods

Lectures, literature, articles, information obtained online, assignments, case studies.

Assessment

Assignments, case studies and/or examination.

Languages of Instruction English

Further Information

Exchange students may complete parts 2 and 3 as parts of the NBD programme.

Tutkimus ja analyysi, 6 op KE16B082130 (study unit)

Lecturers

- Leo Sippola, MA & MSc (Eng.)
- Other lecturers to be announced at a later date

Objectives

Upon completion of the course, students will understand the concepts associated with research work and the use of research in business. They will have command of the concepts of qualitative and quantitative research and possess readiness to apply them to descriptive research and to evaluate empirical research. Students will also be competent in academic/scientific writing, and they will have command of the basic stages of the research process. Students will be required to carry out a small–scale study for a company to show they master the planning, implementation and reporting of research.

Content

- Basic concepts in research
- Various qualitative research methods
- Statistics and the presentation of them
- Correlations, estimations, interpretation of results
- Obtaining and utilising data
- Interviews, observation, questionnaires
- Use of SPSS software
- Reporting research results and presenting them
- Academic writing

Literature / Study Material

- Lecture material
- Literature as assigned by the lecturers

Learning Methods

- Lectures
- SPSS exercises
- Seminars
- Project work in groups (research plan, implementation and reporting for a company)
- Working as an opponent for another group

Assessment

- Exam (30 %)
- Research plan (20 %)
- Research report (50 %)
- Working as an opponent (pass/fail)

Prerequisites

- Introduction to Business Operations
- Business Mathematics
- Introduction to Information Technology
- Business Communications
- Methodology in Project Management

Further Information

The course yields credit for research and development.

Yrittäjyys ja liiketoiminta, 12 op KE16B082140 (study unit)

Lecturers To be announced.

Objectives

Students will become familiar with the essential tools for and challenges in planning and development of business, especially from the point of view of SMEs. They will be competent in analysing business as an integrated entity and

possess basic skills in carrying out the strategic processes of an SME. Students will also be competent in utilising various sources of information and support organisations in the development of and existing company or in the establishment of a new company. Students will understand the concepts associated with product development and productization and the interdependenct between market research and peoduct development. They will have skills in planning business operations on the strategic and operative levels and in compiling a marketing plan. Students will also be competent in evaluating a company's competitive status in relation to the market situation and applying their knowledge in planning to achieve competitive advantage.

Content

- Tools and methods for planning business operations
- Analysing the starting point for business operations
- Internal and external groeth strategies, challenges and management of growth
- · Product development and productization as processes
- Positioning
- Marketing planning

Literature / Study Material As indicated by the lecturers

Learning Methods

- Lectures
- Group work
- Independent study

Assessment

- Exam (30 %)
- Business and marketing plans and presentation of them (50 %)
- Self– and peer–evaluation + evaluation by the teacher (20 %)

Prerequisites Introduction to Business Operations

Languages of Instruction Finnish

Further Information The course yields credit in research and development.

Johtaminen9 op KE16B082150 (study unit)

Lecturers Beata Taijala, LSc (Econ. and Bus. Adm., Eng.)

Objectives

Students will have a general understanding of organisational research, management, and the history and theory of human resource management (HRM). They will be familiar with various styles of management and be more aware of themselves as independent employees and as members of a group. Students will have command of various concepts of management and be able to identify characteristics of a leader. Upon completion of the course, students will have an understanding of hoewto plan, manage and monitor human resources. They will be competent in creating CVs, job applications, advertisements for job openings, and job descriptions. Students will also practise skills in being supervisors and working with subordinates and in giving job interviews.

Content

Part 1: History of Organisational Research

- Classic school of research (Taylor, Fayol, etc.)
- Change theories (e.g. relationships)
- System-theoretical and contingency approaches

Part 2: Self-awareness and Team Work

- Personality theories
- Motivation
- Dimensions of creativity

- Teams: formation and the individual's role in them
- Learning and the learning organisation

Part 3: Human Resources Management

- Role of HRM in a company
- Planning human resources
- Effective personnel management
- Compensation/benefits
- Productive work community
- International HRM

Part 4: Managing People and the Supervisor's Job

- Characteristics of a leader, examining leadership
- Styles of management (Lewin, White & Lippitt, Tannenbaum & Schmidt, Blake & Mouton, Reddin)
- Interaction between the supervisor and subordinates
- Development discussions

Literature / Study Material As indicated by the lecturer.

Learning Methods Lectures and assignments

Assessment Exams, assignments, and a portfolio

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Languages of Instruction Finnish, English (in part)

Company Legislation, 9 op KE16B082160 (study unit)

Lecturers

- Mika Kärkkäinen, LSc (Econ. and Bus. Adm.)
- Other possible lecturers to be announced at a later date

Objectives

Students will be familiar with the characteristics, significance and tools of jurisprudence, as well as the legislation associated with various types of companies and labour laws. Upon completion of the course, students will understand the relationships between the norms of law and the system they form. Students will have command of the legal issues involved in establishing and managing a company. They will understand the essential regulations associated with marketing, foreign trade, and international agreements. Students will be familiar with the various forms of taxation for entrepreneurs and business operations, as well as tax–related issues associated with financial statements. Students will be competent in dealing with personal tax issues and those associated with running a business.

Content

Module 1:

- Essential concepts in law
- Finland's legal system
- Acquiring information pertaining to law
- Legislation pertaining to various types of companies
- Norms pertaining to employment agreements
- Legal issies pertaing to financing

Module 2:

- Regulations pertaining to marketing
- Legal problems associated with logistics
- International agreement laws

- Special issues pertaining to internaitonal trade laws
- EU legislation

Module 3:

- Personal income tax
- Planning financial statements and taxation
- Income tax for businesses
- Value Added Tax

Literature / Study Material

- Kivelä & Nordell: Yrittäjän oikeutta
- Paanetoja: Työoikeus tutuksi
- Sorsa: Suomen markkinointioikeus
- Saarnilehto: Sopimusoikeuden perusteet
- Erma & Lehtinen & Tolonen: Ülkomaankaupan käsikirja
- Niskakangas: Johdatus Suomen vero-oikeuteen
- Other material as indicated by the lecturers

Learning Methods Lectures, assignments

Assessment

- Exams in each module
- Approved assignments

Prerequisites Introduction to Business Operations

Languages of Instruction Finnish

Quality management, 3 cr KE16C082200 (study unit)

Lecturers Jorma Imppola, MSc (Eng.)

Objectives

Upon completion of the course, students will be familiar with various ideologies pertaining to quality and quality control systems. They will understands the basic concepts of quality control and know how to use the more common quality control tools and statistical process control. Students will also be familiar with the structure of quality control systems, quality awards and their criteria.

Content

- Factors affecting quality
- History of quality control
- Measuring quality and quality meters
- Service quality
- Seven basic tools of quality
- ISO 9000, and quality awards (Malcolm, Balridge, EQA)
- Quality control costs (internal and external)
- Total Quality Management TQM

Literature / Study Material Lectures, articles and other material announced by the lecturer.

Learning Methods Lectures and exercises

Assessment Participation in lectures, course assignment, written examination

Languages of Instruction English
Further Information NBD Programme

Marketing communication, 3 op KE16C082210 (study unit)

Lecturers To be announced.

Objectives

Students will be competent in purposefully planning and evaluating marketing communications on the operational and strategic levels in an SME. They will understand the significance of the various sub–sectors of marketing communications and integrated marketing communications. Students will possess the readiness needed in carry out marketing communications in an SME.

Content

- Significance and sub-sectors of marketing communications
- Objectives and planning marketing communications
- Integrated marketing communications
- Implementing and evaluating marketing communications
- Roles of advertising agencies and other sub-contractors

Literature / Study Material

• Lecture material

EITHER

• Vuokko P. 2003. Markkinointiviestintä -merkitys, vaikutus ja keinot. Helsinki: WSOY.

OR

- Salin V. 2002. Pk-yrittäjän opas kokonaisviestintään. Juva: WS Bookwell.
- Other material as indicated by the lecturer.

Learning Methods

- Lectures
- Planning marketing communications for a company in small groups
- Exercises with the CorelDraw programme

Assessment

- Exam (40 %)
- Assignment (60 %)
- Assessment by the client and teacher + self-evaluation

Prerequisites Introduction to Business Operations

Languages of Instruction Finnish

Further Information The course yields credit for research and development.

Immaterial law, 3 op KE16C082220 (study unit)

Lecturers To be announced.

Objectives

Students will be familiar with regulations pertaining to industrial property rights and copyrights as the promoter and sponsor of marketing production and other business.

Content

- Copyrights
- Rights to patents, maskwork, business names, and trademarks
- Protection of designs and inappropriate proceedings in business and industry

Literature / Study Material Haarman: Immateriaalioikeuden oppikirja

Learning Methods Lectures, assignment

Assessment Exam

Prerequisites Introduction to Business Operations

Languages of Instruction Finnish

Project management, 3 op KE16C082230 (study unit)

Lecturers

Engineer Beata Taijala, LSc (Econ. and Bus. Adm.)

Objectives

Students will be familiar with the problematics of project management concerning just one project, multiple projects or in companies that specialise in project work. Upon completion of the course, students will have command of the duties and dimensions of project managers. They will also be aware of the latest trends in project research.

Content

- Multi-project environments and project business
- Business expertise: managing project portfolios
- Social and organisational expertise
- Technical expertise
- Project management: standards, guidebooks and other project documentation

Literature / Study Material Artto K., Martinsuo M. & Kujala J. 2006. Projektiliiketoiminta.

Learning Methods Lectures, assignment

Assessment

- Exam (50 %)
- Assignment (50 %)

Prerequisites Methodology in Project Management

Languages of Instruction Finnish

SME networking, 3 cr KE16C082240 (study unit)

Lecturers To be announced

Objectives

Upon completion of the course, students will be familiar with the basic concepts and models of networking in the SME sector and understand their role in emerging and developing of businesses.

Content

- Concepts of networking
- Core competences and networking
- Bi– and multilateral models
- Added value of networking in different phases of a business's lifespan
- Beginning and developing of networking
- Conditions for success and failure
- Management of networks

Literature / Study Material Material as indicated by the lecturer.

Learning Methods Lectures, workshops, presentations and final report.

Assessment Lectures, workshops, presentations and final report.

Languages of Instruction English

Further Information NBD Programme

LANGUAGE STUDIES, 18 op EKIELIOP (study entity)

In the Finnish School of SME Business Administration, all students are required to take 24 ECTS (16 CR) in foreign language courses. During the first and second years of study, students must study 3 ECTS (2 CR) credits in English and Swedish and also German or Russian. During the second year of study, students must also choose one additional course worth 3 ECTS (2 CR) in English, Swedish and German or Russian. The choice must be made based on the country the student wishes to go to during the third term. For example, if a student wants to go to Germany for the exchange period, he/she must choose the German language. During the fourth year of study, students must choose once again one additional course worth 3 ECTS (2 CR) either in English, Swedish and German or Russian. In addition to the compulsory language studies, students may also take optional language courses, e.g. in Russian, Spanish or French depending on the courses offered each year.

Introduction to business English, 3 op KE16A084100 (study unit)

Lecturers Päivi Alaniska

Objectives

Students will develop their oral and written communication skills. They will have command of basic business terminology, and they will be competent in telling about their studies, work and company in writing and orally.

Content

- Business-related concepts
- Development of reading, writing, listening and oral skills
- Searching for a job
- Job applications

Literature / Study Material Airas & Junkkari: New Business Friend (WSOY)

Learning Methods

- Oral and written assignments
- Pair and group work

Assessment

- Active participation in contact teaching
- Approved written and oral assignments
- Exam

* All parts must be successfully completed to receive a grade for the course.

Languages of Instruction English

Business communication, 3 op KE16A084110 (study unit)

Lecturers Kajia-Lijsa Kivimi

Kaija–Liisa Kivimäki, MA

Objectives

Students will acquire comprehensive knowledge and skills in business communications and understand differences in communication in different cultures. Students will practise their oral presentation skills.

Content

- Various business communications situations and documents
- Intercultural communication
- Oral presentations

Literature / Study Material Airas & Junkkari: New Business Friend 3. WSOY.

Learning Methods

- Oral and written exercises
- Work in pairs and groups

Assessment

- Active participation in contact teaching
- Completion of oral and written assignments
- Exam
- Portfolio

* All parts of the course must be successfully completed to receive a grade for the course.

Prerequisites Introduction to Business English

Languages of Instruction English

English, preparatory study unit KE16D084600 (study unit)

Lecturers Päivi Alaniska

Objectives

This is a preparatory course for studies in English on the university of applied sciences level. Students will enhance their basic language skills and develop their communication skills.

Content

- Basic grammatical structures
- Studies
- Exchange programmes
- Hobbies
- Travelling
- Information technology
- Working
- Talking on the telephone

Literature / Study Material Eskola & Iikkanen: Way to Go (OTAVA)

Prerequisites

The course is recommended to students who have not taken the matriculation exam in A-level English or who have

received a grade of A or B on their matriculation exam for English. The course is also recommended to those who have not studied or used English in a long time.

Swedish, business communication I, 3 op KE16A084200 (study unit)

Lecturers Päivi Uitti, MA

Objectives

Students will be competent in using Swedish in the labour market. They will possess skills in actively communicating with customers and in obtaining and utilising field-related information. Upon completion of the course, students will

- be competent in obtaining field-related information in Swedish,
- be competent in telling about themselves, their education and job experience in Swedish,
- be able to seek a job requiring Swedish,
- be able to write a CV in Swedish,
- be competent in telling about their work environment, functioning as a representative of their company and telling about the company's product range,
- know how to have a presentation in Swedish, and
- know how to communicate with customers in Swedish in person and on the telephone.

Content

- Telling about oneself and one's education
- Job seeking, interviews, CVs
- Describing one's work environment, conditions and duties
- Describing a company and its operations
- Small talk, teklephone conversations, meetings, guiding others, giving opinions and arguing in favour of those opinions
- Customer–service situations
- Presentation of products

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Oral exercises: dialogues, group discussions and presentations
- Written assignments
- Participation of a partner company in exercises

Assessment

- Active participation in contact teaching
- Active use of oral skills (oral presentations and dialogues)
- Written exercises and assignments
- Exam

* All parts must be successfully completed to receive a grade for the course.

Prerequisites Command of the more significant structures of Swedish

Languages of Instruction Finnish, Swedish

Swedish, business communication II, 3 op KE16A084210 (study unit)

Lecturers Päivi Uitti, MA

Objectives

Students will be competent in communivation in Swedish, obtaining and utilising field-related information and mediating it to others. Upon completion of the course, students will,

• be competent in acting as host to Swedish-speaking guests in a company

- be competent in giving short speeches, comprehensive presentations of products and companies,
- be able to write e-mails and business-related documents in Swedish,
- be competent in using tools to look for information from various sources in Swedish, and
- be familiar with the differences in the business cultures in Finland and Sweden.

Content

- Situations pertaining to company visits
- Writing e-mails and documents
- Differences between the business cultures in Finland and Sweden
- Business to business communication (e.g. trade fairs, sales, telephone sales), reclmation

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Oral exercises: dialogues, group discussions and presentations
- Written assignments
- Participation of a partner company in exercises

Assessment

- Active participation in contact teaching
- Active use of oral skills (oral presentations and dialogues)
- Written exercises and assignments
- Exam

* All parts must be successfully completed to receive a grade for the course.

Prerequisites Swedish Business Communications I

Languages of Instruction Finnish/Swedish

Swedish, preparatory study unit KE16D084500 (study unit)

Lecturers Päivi Uitti, MA

Objectives

Students will have command of the essential structure of and basic vocabulary in Swedish. They will be competent in using the appropriate methods for learning Swedish.

Content

- Revising basic grammatical structures
- Revising basic vocabulary
- Practising learning strategies

Literature / Study Material As indicated by the lecturer.

Learning Methods

- Spoken and written exercises
- Independent revision in Moodle

Further Information

This is an elective course to complement students' studies. There are no credits available for this course.

Saksa I, alkeet, 3 op KE16C084300 (study unit)

Lecturers Tanja Lehtomaa, MA

Study Descriptions

Objectives

Students will acquire basic knowledge of German, which they will be able to use in everyday situations.

Content

- Basic grammar
- Dialogues
- Telling about oneself and one's education
- Reading comprehension
- Geographical and cultural information
- Listening comprehension
- Writing exercises

Literature / Study Material Kauppi & Simon: Fahrplan (Tammi)

Learning Methods

- Oral exercises such as dialogues and group discussions
- Written assignments

Assessment

- Active participation in class
- Active demonstration of oral skills
- Completion of written assignments
- Exams

* All parts must be successfully completed to receive a grade for the course.

Languages of Instruction Finnish, German

Saksa II, jatkokurssi, 3 op KE16C084310 (study unit)

Lecturers Tanja Lehtomaa, MA

Objectives

Students will advance their basic German language skills and learn the basics of business communication in German. Upon completion of the course, students will be competent in using German in everyday situations and business discussions.

Content

- Expanding basic knowledge of grammar and vocabulary
- Dialogues
- Reading comprehension
- Austria and Switzerland, geography and culture
- Listening comprehension
- Writing assignments

Literature / Study Material Kauppi & Simon: Fahrplan (Tammi)

Learning Methods

- Oral exercises such as dialogues and group discussions
- Written assignments

Assessment

- Active participation in class
- Active demonstration of oral skills
- Completion of written assignments
- Exams

* All parts must be successfully completed to receive a grade for the course.

Prerequisites German I or basic knowledge of German

Languages of Instruction Finnish, German

Saksa, liikeviestintä I, 3 op KE16C084320 (study unit)

Lecturers Tanja Lehtomaa, MA

Objectives

Students will learn German language skills needed in the business world. Students will be competent in customer–oriented, spoken and written business communication. They will also be competent in acquiring and utilising field–related information in German. Upon completion of the course, students will

- be competent in telling about themselves, their education and their job experience,
- be competent in telling about their work community and the society in which they live,
- communicate in a customer-oriented manner, and
- identify and use field-related terminology.

Content

- Telling about oneself and one's education
- Describing one's work environment and duties
- Small talk, telephone conversations, meetings, company visits, trade fairs
- Written communication: e-mails, programmes for guest, telling about one's company, obtaining contacts in the target country, enquiries

Literature / Study Material

Rakkolainen & Tuomiala-Mäkelä & Bürkel: Deutsch im Berufsleben (Edita)

Learning Methods

- Oral exercises such as dialogues, group discussions, and presentations
- Written assignments

Assessment

- Active participation in class
- Active demonstration of oral skills (oral presentatins and dialogue exercises)
- Completion of written assignments and exercises
- Exam
- Portfolio

* All parts must be successfully completed to receive a grade for the course.

Prerequisites Command of the essential structures of German

Languages of Instruction Finnish, German

Saksa, liikeviestintä II, 3 op KE16C084330 (study unit)

Lecturers Tanja Lehtomaa, MA

Objectives

Students will advanced their knowledge of vocabulary pertaining to economic life in German. Upon completion of the cuorse, students will be able to successfully use the German language, both spoken and written skills, in various situations in the business world. They will be competent in writing business letters and understanding and dealing with differences in cultures.

Content

- · Writing and understanding business texts
- Dialogues in the work environment and working world
- Listening comprehension
- Written communication: business letters
- Telling about a company in writing and orally

Literature / Study Material

Rakkolainen, Tuomiala, Mäkelä & Bürkel: Deutsch im Berufsleben (Edita)

Learning Methods

- Oral exercises such as dialogues, group discussions and presentations
- Written assignments

Assessment

- Active participation in class
- Active demonstration of oral skills (oral presentations and dialogue exercises)
- Completion of written assignments and exercises
- Exam
- Portfolio

* All parts must be successfully completed to receive a grade for the course.

Prerequisites

- Command of the essential structures of German
- German Business Communication

Languages of Instruction Finnish, German

Venäjä I, alkeet, 3 op KE16C084400 (study unit)

Lecturers Tanja Kuivinen

Objectives Students will acquire basic knowledge of the Russian language, which they will be able to use in everyday situations.

Content

- Basic grammar
- Dialogues
- Telling about oneself and one's education
- Reading comprehension
- Geography and culture
- Listening comprehension
- Written assignments

Literature / Study Material

- Maria Nikiforow, Riitta Keränen, Valeri Alikov: Saljut! Venäjän alkeiskurssi 1 (OTAVA)
- Maria Nikiforow: Saljut! Venäjän alkeiskurssi 1 LISÄHARJÕITUKSIA
- Other material as indicated by the lecturer

Learning Methods

- Oral exercises such as dialogues and group discussions
- Written assignments

Assessment

- Active participation in class
- Active demonstration of oral skills

- Completion of written assignments
- Exams

* All parts must be successfully completed to receive a grade for the course.

Languages of Instruction Finnish, Russian

Venäjä II, jatkokurssi, 3 op KE16C084410 (study unit)

Lecturers

Tanja Kuivinen

Objectives

Students will advance their basic German language skills and learn the basics of business communication in Russian. Upon completion of the course, students will be competent in using German in everyday situations and business discussions.

Content

- Expanding basic knowledge of grammar and vocabulary
- Dialogues
- Reading comprehension
- Geography and culture
- Listening comprehension
- Writing assignments

Literature / Study Material

- Maria Nikiforow, Riitta Keränen, Valeri Alikov: Saljut! Venäjän alkeiskurssi 1 (OTAVA)
- Maria Nikiforow: Saljut! Venäjän alkeiskurssi 1 LISÄHARJÕITUKSIA
- Other material as indicated by the lecturer

Learning Methods

- Oral exercises such as dialogues and group discussions
- Written assignments

Assessment

- Active participation in class
- Active demonstration of oral skills
- Completion of written assignments and exercises
- Exams

* All parts must be successfully completed to receive a grade for the course.

Prerequisites Russia I (beginner course)

Languages of Instruction Finnish, Russian

VAIHTOEHTOISET HOPS-OSAKOKONAISUUDET, 30 op EHOPSOSAKOK (study entity)

In addition to their practical training during their third year, students are required to complete 30 credits of coursework according to their Personal Study Plan. The degree programme offers four alternatives to students, two of which focus on internationlaisation and two on entrepreneurship. The alternatives pertaining to internationalisation include studies abroad or Gateway. The alternatives pertaining to entrepreneurship involve either a project in the business world or a project chosen by the student.

Studies abroad, 30 op KE16D085100 (study unit)

Objectives

After having spent a semester abroad, students will be fluent in at least one foreign language (either the language of the

country where they were or the language of teaching in the university where they studied). Students will understand the existence of different cultures. During their semester abroad, students will acquire personal contacts there, which they will be able to use when they begin working. A semester abroad provides students with new perspectives of the contents of their professional studies and of learning.

Content

Students will complete 15–30 credits of coursework abroad according to their Learning Agreement. Studies abroad comprise elective courses applicable to the degree programme, which are accepted as completed courses for the students' degree. Students are required to write three reports during the exchane using the provided templates.

Literature / Study Material

As indicated by the courses at the foreign institution of higher education the students attend.

Learning Methods

As indicated by the courses at the foreign institution of higher education the students attend. Students integrate into the institution as a member of the student body.

Assessment

Approved grades given in the institution abroad may also be given as approved grades in the Degree Programme in SME Business Administration. Additionally, a maximum of 3 credits may be given to students for their approved reports as part of the studies completed abroad.

Prerequisites

Students are required to complete 100–120 credits of coursework before going on an exchange and possess a sufficient level of language skills approved by the university of applied sciences.

Languages of Instruction

Language of teaching in the institution abroad: English, German, Swedish, Russia, French, or Spanish.

Gateway, 30 op KE16D085110 (study unit)

Lecturers

Various lecturer and professors from Finland, Estonia, Lithuania, Latvia, Russia, Germany and the USA.

Objectives

Upon completion of the Gateway programme, students will possess the readiness needed to engage in trading and other business activities with companies in the Russian and Baltic markets. Students will acquire a comprehensive view of the history, culture and economy of these countries. They will also be familiar with the special features of doing business in the mentioned markets.

Content

The Gateway programme comprises five modules, which are worth 6 credits each: MODULE: Basic Language and Culture Studies (6 ECTS) OPTION 1: Finnish and Russian Language and Culture Studies *)

- Basic Finnish Language (2 ECTS)
- Finnish Culture and Society (2 ECTS)
- Basic Russian Language (2 ECTS)

OPTION 2: Russian Language and Finnish Culture Studies *)

- Basic Russian Language (2 ECTS)
- Finnish Culture and Society (2 ECTS)
- Russian Language, intermediate level (2 ECTS)

OPTION 3: Finnish Language and Culture Studies *)

- Basic Finnish Language (2 ECTS)
- Finnish Culture and Society (2 ECTS)
- Finnish Language, intermediate level (2 ECTS)

Option 1 is meant for foreign students without Russian language skills, option 2 is meant for Finnish students and option 3 is meant for foreign students with good Russian language skills. Each student may choose intermediate–level courses in the Finnish and Russian language as elective courses. MODULE: Doing Business in Russia (6 ECTS)

- Russia: Target for Business Operations (2 ECTS)
- Business Environment in Russia (2 ECTS)
- Financial Accounting in Russia (2 ECTS)

MODULE: Doing Business in the Baltic States (6 ECTS)

- Business Environment and Operations in Estonia (2 ECTS)
- Business Environment and Operations in Lithuania (2 ECTS)
- Business Environment and Operations in Latvia (2 ECTS)

MODULE: International Business Expertise (6 ECTS)

- Cross-cultural Management (3 ECTS)
- European Economic Policies (3 ECTS)

MODULE: Field Studies: Applications in Practice (6 ECTS)

- Study Tour *) (3 ECTS)
- Project Work (3 ECTS)

*) The study tour can be replaced with the course:

• Doing Business in the St Petersburg Region (3 ECTS)

Literature / Study Material

The literature and other required material for the courses in the Gateway programme are available in the Gateway Study Guide.

Learning Methods

- Lectures
 - Literature
 - Articles
 - Assignments
 - Presentations
 - Visits to companies
 - Study tours
 - Exams

Assessment

The requirements for attendance, assignments, presentations and exams are indicated in the Gateway Study Guide.

Languages of Instruction English

Further Information

The Gateway programme takes place each year in the spring semester from March to May. The Gateway programme is intended for students in the Degree Programme in SME Business Administration as one elective for a Personal Study Plan module. However, exchange students from foreign institutions of higher education are also welcome to take the module.

Lisäkokonaisuus valinnaisista erikoistumiskokonaisuuksista ja muita opintoja, 30 op KE16D085120 (study unit)

Lecturers

Lecturers as stated in the Personal Study Plan

Objectives

The degree programme has one module of specialisation, which usually takes place in students' fourth year of study. By completing an additional module of specialisation and elective supplementary courses with it, students will expand their overall expertise and acquire stronger readiness to manage an SME.

Content

The content is based on the module and other courses students choose.

Learning Methods As indicated for the courses chosen.

Assessment As indicated for the courses chosen.

Further Information

The specialisation module is worth 18 credits. In addition, students are required to complete a total of 12 credits of other courses.

Projektityö liike-elämälle KE16D085130 (study unit)

Lecturers

Co-ordinator Tero Turunen, MA

Objectives

Students will develop their relations with the business world and/or public sector. They will be competent in producing consultancy services for businesses and in working responsibly in projects, from start to finish. Students will be encouraged to create new projects and in this way to apply their creativity and problem–solving skills.

Content

The contents of the project work will be determined together with the commissioner of the project. It may entail a marketing report, the organisation of an event, planning of various measures and implementation, or producing marketing material for a company.

Learning Methods

Students will carry out the project either alone or in a group. After the innovation phase, students will compile a short project plan. The lecturer will then approve the start of the project based on the project plan and estimate the extent of the project. Students will write a final report about the project.

Assessment

The lecturer evaluates the contents and extent of the project work based on the student's final report. The lecturer gives a statement about the approval of the work and including it in the student's studies.

Further Information

The extent of the project work is 0-10 credits. In addition, students are required to complete other courses totalling 20-30 credits.

Muita opintoja, 30 op KE16D085140 (study unit)

Lecturers

Lecturers for other courses as stated in the Personal Study Plan

Further Information

In addition to the project work, students are required to complete other courses totalling 20–30 credits.

PRACTICAL TRAINING, 30 op ETYÖHA (study entity)

Objectives and content of the study module: The aim of the study module is to familiarise students with the tasks central to their professional studies in practice under supervision, and provide students with an opportunity to apply their knowledge and skills in practice. Learning methods and assessment:

- Practical training may take place in Finland or abroad. The placement must be carefully selected to ensure that it can be integrated into the students' studies as a whole.
- The placement must be approved by the school at least two weeks before the beginning of the training.
- If a student wishes to do his/her practical training in their own company or a company own by his/her family, the school requires a statement on the completion of the training from an external party considered competent in monitoring the training period.
- The director of the degree program will accept a maximum of 15 ECTS (10 cr) for work experience acquired in the field before the beginning of the studies.
- Practical training shorter than four weeks will not be accepted.
- Students must write a report on the training period using the appropriate forms available at the school. Students must also write a report on the training they received before beginning their studies.
- Students must present a certificate at the end of the training period

Literature/Study material:

• Instructions provided by the faculty

Practical training, 30 op KE16E086100 (study unit)

Objectives

Practical training orientates students into practical job duties. During their practical training, students will gain a diverse understanding of the duties in their professional field especially. They will apply the knowledge and skills they have learned in their studies to the working world.

Content

- Searching for a place to do one's practical training
- Compiling a practical training plan
- Completing the practical training and reporting about it

* Adult education students may complete their practical training at their workplace.

Literature / Study Material Guidelines for the degree programme's practical training

Learning Methods

- Learning while working
- Compilation of reports

Assessment Pass/fail

Logistics, 3 cr KE16C083100 (study unit)

Lecturers

Jorma J. Imppola, MSc (Eng.)

Objectives

Students will deepen their knowledge of logistics, logistics customer service and recycling. Upon completion of the course, students will possess a comprehensive viewpoint of material flows and their optimal planning and control both operationally and economically. Furthermore, students will be knowledgeable of the various aspects of logistics research.

Content

- Transportation and its significance, logistics chain and distribution
- Strategies in logistics and distribution
- Dynamic distribution channels, packing
- Inventories and their economical and operational
- Forecasting tools
- Storage, the connection between storage and logistics
- Significance, agility and costs of customer service
- Customer service strategies and service pricing
- Improving service
- Logistics and recycling

Literature / Study Material

- Lecture materials
- Ballou R. H. 1999. Business Logistics Management. Fourth edition.

Learning Methods Lectures, excursion, writing assignment and seminars

Assessment Examination (50 %) and writing assignment (50 %)

Prerequisites Introduction to Business Operations or equivalent

Languages of Instruction English *Further Information* NBD Programme

Purchasing management, 3 op KE16C083110 (study unit)

Lecturers Jorma J. Imppola, MSc (Eng.)

Objectives

Students will become familiar with the industrial and organisational purchasing of materials and services and the impacts purchasing has on the operations, economics and quality production of a company. Upon completion of the course, students will have a comprehensive understanding of how to manage and optimise a company's material and information flow. Students will also possess readiness in planning and developing the purchasing for the private and public sectors as well as businesses.

Content

- Make or Buy programme
- Sub-contracting
- Concept of purchasing
- Organisational purchasing behaviour
- Strategic planning of purchases
- Purchasing process
- Impact of a company's various activities on purchasing
- Purchasing strategies
- Marketing research and purchasing
- Purchasing and ADP
- International purchases
- Hiring personnel = recruitment

Literature / Study Material

- Sakki J. 1982 or later. Ostotoiminnan kehittäminen. Ekonomia-sarja. Espoo.
- Lecture handout

Learning Methods

- Lectures
- Approved assignment

Assessment

- Exam (50 %)
- Seminar (50 %)

Yrityssuojelu, 3 op KE16C083120 (study unit)

Lecturers

Engineer Beata Taijala, MSc (Econ. and Bus. Adm.)

Objectives

Students will be familiar with various production facilities and official specifications that regulate operations in them. Upon completion of the curse, students will have command of the basis and various sub–sectors of safety planning and know how to compile and update a company's safety plan. They will also be familiar with current trends and future prospects within the field.

Content

- Safety plans
- Structural safety
- Labour protection and ergonomics
- Fire protection
- Civic defence
- Data protection
- Special protection
- Standby protection

- Protection of operations abroad
- Product safety

Literature / Study Material As indicated by the lecturer.

Learning Methods Lectures and group work

Assessment Group exam + exercises

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Tuotannonohjaus ja simulointi, 6 op KE16C083130 (study unit)

Lecturers Jorma J. Imppola, MSc (Eng.)

Objectives

Students will acquire basic knowledge of production and production management. They will possess an understanding of the impact of production management on quality, flexibility, and profitability. Students will acquire the readiness needed in holistically managing production and storage. They will also become familiar with one–off production through simulation and factory models.

Content

- Concept of production management
- Materials management and control
- Just On Time
- Synchronization of production
- Categorisation of types of production (V, A and T factories)
- Production control and quality control
- Internal customer relations
- Impact of other business operations on production control
- Theory of simulation; why do we simulate
- Using simulation in the designing of work stations, workshops and industrial production
- Lay-out of simulation, materials flow, logistics, capacity, degree of use, and automation in planning
- Bottle–neck theory
- Choosing appropriate simulation techniques and programmes, evaluation of decisions about simulation tools (what if techniques)

Literature / Study Material

- Lapinleimu I., Kauppinen V. Torvinen S. 1997. Konepajan tuotantotekniikka. Kone- ja metalliteollisuuden tuotantojärjestelmät. Werner Söderström Osakeyhtiö.
- Tersine R. J. Production Operations Management: Concepts, Structure & Analysis, 2nd Edition.
- Lecture material.

Learning Methods

Lectures and approved assignment

Assessment

- Exam (50 %)
- Seminar (50 %)

Tuotantotalouden workshop, 3 op KE16C083140 (study unit)

Lecturers

Engineer Beata Taijala, MSc (Econ. and Bus Adm.)

Objectives

Students will apply their previous theoretical knowledge to complex practical situations. They will be familiar with technical specification systems and know how to apply them to simple situations.

Content

- Various short-term and long-term plans for a company
- Compilation and operative procedures
- Technical drawing: projections, measurements and scales

Literature / Study Material

As indicated by the lecturer.

Learning Methods

- Lectures
- Workshops

Assessment

Alternatives for completing the course: 1. Participating in group work durig lessons (75 % of the grade) and completing independent exercises in Moodle (25 % of the grade). 2. Participating in an exam (75 % of the grade) and completing independent exercises in Moodle (25 % of the grade). * Students can make up for absences by exam exercises. Some of the group work can be replaced with an exam.

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Markkinoinnin projekti I, 3 op KE16C083200 (study unit)

Lecturers

Kimmo Kulmala, MSc (Econ. and Bus. Adm.)

Objectives

Students will have the readiness to carry out a small-scale marketing project for an actual client and know how to act responsibly in a project group.

Content

- Sales promotion project OR
- Similar marketing project

Literature / Study Material

- Material as indicated by the lecturer
- Material as indicated by the client

Learning Methods

- Lectures
- Project work in groups
- Reporting about the project work

Assessment Project work: assessment by the client and teacher + self-evaluation

Prerequisites Introduction to Business Operations

Current issues in marketing, 3 op KE16C083210 (study unit)

Lecturers To be announced.

Objectives

Students will be familiar with current issues in marketing and know how to critically evaluate the significance of the latest research to a company's marketing. They will be competent in following trends and the latest developments and applying new information to their professional expertise.

Content

- Managing relationships with interest groups
- Sustainable marketing
- Impact of information technology on marketing
- Current issues in globalisation
- Current issues in the strategic planning of marketing
- Current issues in segmentation
- Other current issues in marketing

Learning Methods

- Lectures
- Group work
- Assignment
- Journal

Assessment

- Group work, assignment and presentation of it (100 %) and journal (pass/fail) OR
- Exam (50 %) and written assignment (50 %)

Prerequisites

- Basic Studies
- Common Professional Studies

Business-to-business marketing, 3 cr KE16C083220 (study unit)

Lecturers

To be announced.

Objectives

Upon completion of the course, students will have a thorough understanding of the importance of business–to–business marketing activities and purchasing behaviour in various business–to–business contexts and environments. Students will be aware of the challenges of marketing in a global context and of the business–to–business customer's value chain.

Content

Characteristics of B-to-B marketing:

- Organisational marketing
- Structure of organisational purchasing
- Purchasing processes and decision-making
- Organizational purchasing and marketing strategy

Literature / Study Material Material as indicated by the lecturer.

Learning Methods Lectures, exercises

Assessment Active participation, exercises

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Languages of Instruction English

Further Information NBD programme

Service and relationship marketing, 3 cr KE16C083230 (study unit)

Lecturers To be announced.

Objectives

Students will be familiar with the major theories of service and relationship marketing and understand their practical significance in business–to–business and consumer contexts. Students will apply the principles of service and relationship marketing to a small– and medium–sized business setting.

Content

- Service quality models and their application in service/non-service settings
- Relationship marketing in business and consumer marketing contexts
- Practical applications of relationship marketing

Literature / Study Material

Articles as indicated by the lecturer.

Learning Methods Lectures, group discussions, exercises

Assessment

- Activity in participation (30%)
- Journal (70%)

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Languages of Instruction English

Further Information

- NB! Pre-course reading assignment
- NBD Programme

Markkinoinnin projekti II, 6 op KE16C083240 (study unit)

Lecturers

Anmari Viljamaa, DSc (Econ. and Bus. Adm.) & MSc (Political Science)

Objectives

Students will have command of planning marketing on the operative and sreategic levels in an SME. They will be competent in assessing the competitive status of a company in relation to the market situation and in applying their knowledge in marketing planning to achieve competitive advantage. Students will also be competent in acquiring necessary information for marketing planning, compiling a marketing plan and carrying it out. Students will be capable of taking initiative when working in a project group.

Content

- Analysing the market situation
- Setting operative and strategic goals for marketing
- Planning procedures and evaluation for marketing
- Compiling a marketing plan
- Implementation of the marketing plan, solutions and problem areas

Literature / Study Material

• Material as indicated ny the lecturers

• Material as indicated by the client

Learning Methods

- Lectures
- Assignment: compilation of a marketing plan and implementation of it in groups

Assessment

- Exam (30 %)
- Marketing plan (40 %)
- Implementation of procedures (30 %)
- Assessment by the client and teacher + self–evaluation

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Projektipeli, 3 op KE16C083300 (study unit)

Lecturers

Engineer Beata Taijala, LSc (Econ. and Bus. Adm.)

Objectives

Students will be familiar with the documentation pertaining to project work and be competent in creating such documentation. They will be competent in working in a project group for a company network; they will have command of their role in the group and be aware of the duties of the other members in the group.

Content

- Contents and compilation of a project guidebook
- Carrying out and documenting (portfolio) an example project of a company network

Literature / Study Material

- Material as indicated by the lecturer
- Risto Pelin: Projektinhallinnan käsikirja (or equivalent)

Learning Methods

- Lectures
- Project practice (100 % attendance required)

Assessment

- Completed project guidebook (50 %)
- Project portflio (50 %)

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Kehitystoiminnan rahoitus, 3 op KE16C083310 (study unit)

Objectives

Students will have command of basic concepts in financing and the various sub–areas of financing theory. They will be familiar with various sources of financing in Finland and abroad, the risks and opportunities involved in them. Students will also be aware of the special features of and forms of support for financing small businesses.

Content

- Sources of financing
- Instruments for financing
- Structure of financing

• Risk and profit

Literature / Study Material As indicated by the lecturer.

Learning Methods Lectures and assignment

Assessment Exam and assignment

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Asiantuntijaorganisaation toiminta, 3 op KE16C083320 (study unit)

Lecturers To be announced.

Objectives

Students will be familiar with the special features and operations of expert organisations. They wull have command of the principles and sub–areas of expert management.

Content

- Various forms of operations of expert organisations
- Roles of consultants
- Working as an instructor and service researcher
- Tools for development and change

Literature / Study Material

- Material assigned by the lecturer
- Sipilä. 1991. Asiantuntija ja johtaja: Miten hallitsen nämä kaksi roolia? Ekonomia–sarja. Weilin & Göös: Espoo.

Learning Methods

- Lectures
- Work i small groups

Assessment Exam and assignment

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Palvelun tuotteistus ja konsultointi, 3 op KE16C083330 (study unit)

Objectives

Students will be familiar with the business practices of consultation agencies and the productization of expertise.

Content

- Productization of services
- Added value for the customer
- Pricing a service product
- Consultation

Literature / Study Material

• Material as indicated by the lecturer

• Sipilä. 1996. Asiantuntijapalvelujen tuotteistaminen. Ekonomia-sarja.WSOY. Porvoo.

Learning Methods

- Lectures
 - Work in small groups

Assessment

- Exam
- Assignment

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Liike-elämän asiantuntijatyö, 6 op KE16C083340 (study unit)

Lecturers

To be announced at a later date.

Objectives

Students will apply their previous knowledge to carry out an extensive study or training project. Upon completion, students will have command of the planning, scheduling, content and financial requirements for the mentioned assignments.

Content

Students will compile and carry out a research or training commission for a partner company.

Literature / Study Material As indicated by the lecturer.

Learning Methods

- Small group work
- Guided lectures

Assessment

- Plan (50 %)
- Implementation (50 %)

Prerequisites

- Basic Studies
- Common Advanced Professional Studies

Contract law, 3 op KE16C083400 (study unit)

Objectives

Upon completion of the course, students will possess the readiness needed to independently utlise various types of agreements. They will be familiar with contractual norms, sources of information pertaining to law, and argumentation.

Content

- Making agreements: content, liability and legal consequences
- · Liability for damages

Learning Methods Lectures

Assessment Exam and assignment **Prerequisites** Introduction to Business Operations

Markkina- ja rahoitusoikeus, 3 op KE16C083410 (study unit)

Objectives

Students will be familiar with the laws and norms of marketing and financing, and understand the significance of various fields of law in financing and marketing.

Content

- Regulation of advertising
- Consumer protection
- Limitations on competition
- General regulations and regulations pertaining to agreements and corporations

Literature / Study Material

- Castren EU-suomen markkinaoikeus
- Mika Hemmo: Pankkioikeus

Learning Methods Lectures

Assessment Exam and assignment

Prerequisites Introduction to Business Operations

Organisaatio-oikeus, 3 op KE16C083420 (study unit)

Objectives

Upon completion of the course, students will be familiar with the legislation and regulations of commercial organisations.

Content

- General partnership firms
- Limited partnership firmsLimited liability companies
- Co-operatives
- Foundations
- Oraganisations

Literature / Study Material

- Limited Liability Companies Act
- Helminen & Ossa: Yritysmuodot ja verotus

Learning Methods Lectures

Assessment Exam and assignment

Prerequisites Introduction to Business Operations

Yrityksen ympäristöoikeus, 3 op KE16C083430 (study unit)

Objectives

Students will be familiar with legislation pertaining to property and environmental protection.

- Transfer of ownership
- Subdivision of real estates
- Real estate trade
- Receipt of possession
- Environmental administration and permit proceudres

Literature / Study Material

- Kuusniemi: Ympäristöoikeuden perusteet
- Other material as indicated by the lecturer

Learning Methods Lectures

Assessment Exam and assignment

Prerequisites Introduction tyo Business Operations

Kirjanpito– ja vero–oikeus, 6 op KE16C083440 (study unit)

Objectives

Students will be familiar with the legislation pertaining to accounting, financial statements and auditing. They will understand business taxation to an extent that they will be competent in duties pertaining to accounting, business management and business operations.

Content

- Accounting and auditing
- Business taxation
- Income and capital taxation pertaining to businesses

Literature / Study Material

- Andersson & Ikkala: Elinkeinoverolainsäädännön kommentaari
- Järvinen, Prepula, Riistama & Tuokko: Uusi kirjanpitolainsäädäntö

Learning Methods Lectures

Assessment Exam and assignment

Prerequisites Introduction to Business

BACHELOR'S THESIS, 15 op EOPINNÄ (study entity)

- The thesis is both a process and a product: the aim is to develop students' expertise and skills, to apply and deepen professional studies and to offer solutions to the practical situations in business life. At its best, the study will link the student to the working world, and therefore it is a good idea if the study is completed as an assignment for a company or other organization.
- The thesis functions as a threshold into professional growth. It develops skills in cooperation, project management, languages and interaction. The thesis also demonstrates expert knowledge and independent thinking; it requires students to master the principles of research and development, logic, methods and communication. At its best, the thesis also creates new dimensions for students, as they obtain new skills during the process, e.g. interviewing or creating a CD–ROM.
- Learning methods and assessment: In practice, a thesis is a research or development project completed by one or two students together. Students are encouraged to plan and carry out common projects together with the students of other schools in the Seinäjoki University of Applied Sciences, in which case the thesis may involve a larger, multi-discipline entity.

Below is a list of previous thesis topics, which may be expanded or combined:

- Business plan for a developing or potential business project
- Mapping of the situation of a company or region with regard to a certain phenomenon or problem
- Market or marketing research
- Application of general, previously accredited or new method to a certain environment (for instance, a company)
- Development of an operative or strategic solution model or option
- Project or development plan
- Planning work
- Development of a prototype
- An event
- A video, ADP program, a book, etc.

It should be remembered that a thesis could also be, for example, a plan or realization of a concrete or immaterial product, an event or a project. The core of the thesis would consist of a presented product and of a logically report. Evaluation would be based on the foundation, phases and results of the work. The type of the thesis is often affected by the needs and hopes of a dean or other supervisor. In addition to independent work, the thesis process involves selecting of the advisor, meetings with the student, meetings between dean and advisor, seminars where students report on the progress of their work, an exam on the literature and academic proficiency test. The thesis is generally written during the third and fourth year of studies, but preparation (i.e. considering topics, looking for cooperation partners and gathering source material) should begin at an early stage of the student's studies. The general instructions for writing a thesis at the Seinäjoki University of Applied Sciences obtained from http://intra.seamk.fi.

VAPAASTI VALITTAVAT OPINTOJAKSOT EVAPVALIT (study entity)

The purpose of the elective courses is to expand and deepen students' individual professional expertise. Students may choose elective courses from those offered in various degree programmes in the university of applied sciences, in the open university, or they may be corresponding courses that students have completed elsewhere, which must be approved by the head of degree programme. The head of degree programme must approve students' chosen electives before they can take part in the courses.

Intercultural skills in business communication, 3 cr KE16D088100 (study unit)

Lecturers Sanna Valkosalo, MA, language instructor, NBD co-ordinator

Objectives Students will possess basic knowledge of intercultural communication.

Content The basics of intercultural communication for international business operations.

Literature / Study Material Material provided by the lecturer.

Learning Methods Lectures, group work, essays, active participation, self evaluation.

Assessment Active participation, journal, essay and oral presentation.

Languages of Instruction English

Doing business in English, 3 cr KE16D088110 (study unit)

Lecturers Kaija–Liisa Kivimäki, MA

Objectives

Students will further develop their business communication skills.

Content

- Case studies of companies doing business in the intercultural environment
- Written and oral presentations
- Negotiations and meetings

Literature / Study Material Material provided by the lecturer.

Learning Methods Learning by doing

Assessment Peer assessment, self-evaluation

Prerequisites Introduction to Business English and Business Communication

Languages of Instruction English

Doing business in German, 3 op KE16D088130 (study unit)

Languages of Instruction German / Deutsch

Doing business in Russian, 3 op KE16D088140 (study unit)

Lecturers Tanja Kuivinen

Objectives

Students will acquire knowledge of the terminology associated with the working world and business communication in Russian. The purpose of the course is to further students' knowledge of vocabulary and strengthen their skills in writing and speaking Russian and their command of business Russian. The course is intended for students who have been on exchanges in Russia to enable them to manitain and practise spoken and written skills. Upon completion of the course, students will be competent in communicating in Russian in demanding situations.

Content

- Texts pertaining to economy and business
- Small talk, meetings
- Business letters
- Business documents
- Russian markets and business life
- Various dialogues for business situations such as negotiations, conferences, etc.

Literature / Study Material As indicated by the lecturer.

Learning Methods

- Oral exercises such as dialogues, group discussions and presentations
- Written assignments

Assessment

- Active participation in class
- Active demonstration of oral skills (oral presentations and dialogues)
- Completion of written assignments
- Exams

* All parts must be successfully completed to receive a grade for the course.

Prerequisites Command of essential structures in Russian.

Languages of Instruction Finnish, Russian

Basic Spanish, 3 op KE16CYVO190 (study unit)

Lecturers

Julio Vallejo Medina

Objectives

Students will acquire basic knowledge of the Spanish language. They will understand and use essential vocabulary and structures when speaking and writing. Upon completions of the course, students will

- know how to introduce themselves,
- have command of everyday written and spoken communication,
- know how to describe their environment and express their opinions,
- know how to give instructions in everyday situations, and
- know how to tell about their native country and hometown.

Content

- Telling about oneself, one's family and future profession
- Situations in shops, restaurants and asking for directions
- Telling about one's country and hometown
- Giving advice and instructions
- Vocabulary pertaining to business and entrepreneurship

Literature / Study Material Kautto–Laine–Lehmussaari: Entre Amigos 1

Learning Methods

- Contact teaching
- Written and oral assignments

Assessment

- Completion of assignments
- Written exam

Continuation Course in Spanish, 3 op KE16CYVO840 (study unit)

Lecturers

Julio Vallejo Medina

Objectives

Students will expand their knowledge of basic Spanish. They will understand and use more complex vocabulary and structures in speaking and in writing. Upon completion of the course, students will

- know how to discuss issues pertaining to travel,
- know how to discuss things that have happened in the past, and
- know how to discuss health and illnesses. sairaudesta

Content

- Past tense structures
- Additional practice pertaining to shopping
- Situations pertaining to travel
- Vocabulary pertaining to Finland
- Health and illnesses

Literature / Study Material Kautto – Laine – Lehmussaari: Entre Amigos

Learning Methods

- Contact teaching
- Written and oral exercises
- Practisig communication with a native speaker of Spanish

Assessment

- Active participation in lessons
- Completion of written assignments and exercises
- Written and oral exam

Prerequisites Spanish I

Further Information

Teaching may take place in another location (to be announced at a later date).

Venäläistä tapakulttuuria suomalaisille, 3 op KE16D088150 (study unit)

Lecturers Tanja Kuivinen

Objectives

The course is intended for all students who are interested in the language, customs and geography of Russia. Upon completion of the course, students will be familiar with the customs in Russia and be able to communicate with others in simple, everyday situations.

Content

- Customs, and geography of Russia
- Differences in the ways Finns and Russian communicate
- Cyrillic alphabet: pronunciation, reading, basic structures, vocabulary
- Simple written and spoken exercises
- Greeting people
- Introducig oneself
- Asking the time
- Telling about one's level of language skill and one's family
- Asking for directions
- Restaurant situations
- Shopping, etc.

Literature / Study Material As indicated by the teacher.

Learning Methods

- Lectures
- Presentations
- Oral and written assignments

Assessment

- Active participation in contact teaching
- Presentations and active demonstration of oral skills
- Completion of written exercises and assignments
- Exam

* All parts must be successfully completed to receive a grade for the course.

Prerequisites No previous knowledge of Russian required.

Languages of Instruction

Finnish, Russian

Svenska på nätet –virtuaalikurssi, 3 op KE16D088160 (study unit)

Lecturers Päivi Uitti, MA

Objectives

Students will develop their skills in electronic business communication in Swedish. They will be competent in distinguishing between the special features of the language and communication used in the Internet and in applying their knowledge to their own use of the language when they are online. They will acquire confidence in their writing skills and know how to create appropriate websites and e-mails in Swedish.

Content

- Designing and implementing electronic communication either with an example company or a partner company (website, electronic document templates)
- Analysing the special features of electronic communication
- Writing e-mails
- Discussion forums
- Chatting in Swedish

Literature / Study Material As indicated by the teacher.

Learning Methods

- Various written assignments
- Discussion in discussion forums

* The course is carried out in its entirety in Moodle.

Assessment

- Active participation in discussions
- Written assignments

Prerequisites

• Business Swedish I or equivalent knowledge

Languages of Instruction Swedish, Finnish

Ruotsi, suullinen viestintä, 3 op KE16D088170 (study unit)

Lecturers Päivi Uitti, MA

Objectives

Students will be fluent in various communicative situations in the working world and everyday life, and they will understand the differences in the ways Finns and Swedes communicate. Students will expand their vocabulary and gain confidence in using their oral skills. They will be competent in orally summarising general and field–related texts, and in actively participating in discussions in Swedish.

Content

- Practising various dialogues from everyday situations and the business world
- Orally summarising articles and radio programmes
- Speeches
- Presentations
- Discussions
- Debates
- Small talk

Literature / Study Material As indicated by the lecturer

Learning Methods

Oral exercises such as dialogues, group discussions, speeches and presentations

Assessment

• Active participation in contact teaching

- Active demonstration of oral skills (oral presentations and dialogues)
- Oral exam

Prerequisites Business Swedish I

Languages of Instruction Finnish, Swedish

Englanti, suullinen viestintä, 3 cr KE16D088180 (study unit)

Objectives Students will enhance their abilities to communicate in English.

Content Focus in the course is placed on oral communication in business situations.

Literature / Study Material Material announced by the teacher

Learning Methods Lectures

Assessment Oral exam

Languages of Instruction English

Spoken German, 3 op KE16D088190 (study unit)

Lecturers Tanja Lehtomaa, MA

Objectives

Students will enhance their spoken German language skills. The purpose of the course is to expand students' knowledge of vocabulary with emphasis on situations in the working world and everyday life. The course is intended primarily for students going on an exchange to Germany, but students who wish to practise their oral skills are also welcome to take the course. Students will have command of communicative situations in the working world and everyday life, and they will understand the differences between Finns and Germans when they communicate.

Content

- Telling about oneself and one's education
- Academic vocabulary
- School systems in Finland and Germany
- Describing one's work environment and job duties
- German labour market
- Small talk, telephone conversations, meetings
- Everyday communicative situations, shopping, restaurant situations, asking for directions, etc.

Literature / Study Material As indicated by the teacher.

Learning Methods

- Oral exercises such as dialogues, group discussions and presentations
- Written assignments

Assessment

- Active participation in contact teaching
- Active demonstration of oral skills (oral presentations and dialogues)
- Oral exam

* All parts must be successfully completed to receive a grade for the course.

Prerequisites Command of essential structures of German.

Languages of Instruction Finnish, German

Spoken Russian, 3 op KE16D088200 (study unit)

Lecturers Tanja Kuivinen

Objectives

Students will enhance their spoken Russian language skills. The purpose of the course is to expand students' knowledge of vocabulary with emphasis on situations in the working world and everyday life. The course is intended primarily for students going on an exchange to Russia. Students will have command of communicative situations in the working world and everyday life, and they will understand the differences between Finns and Russians when they communicate.

Content

- Telling about oneself and one's education
- Academic vocabulary
- School systems in Finland and Germany
- Small talk, telephone conversations
- Everyday communicative situations, shopping, restaurant situations, asking for directions, hotels
- Russian customs for Finns

Literature / Study Material As indicated by the teacher

Learning Methods

- Oral exercises such as dialogues and group discussions
- Written assignments

Assessment

- Active participation in contact teaching
- Active demonstration of oral skills (oral presentations and dialogues)
- Oral exam

* All parts must be successfully completed to receive a grade for the course.

Prerequisites

Command of essential structures of Russian.

Languages of Instruction Finnish, Russian

Operations of Retail Trade and 'the Commodity Game', 3 op KE16D088210 (study unit)

Objectives

Students will be familiar with retail trade, goods and chain operations, as well as the structures of central corporations, and the critical success factors of individual companies. They will understand the role of central corporations and chains, as well as decision–making processes in doing business.

Content

- Factors influencing retail trade
- Critical success factors for retail trade: chains, product selections, management of product groups in chains, data processing systems to support decision-making and as mediator of information, marketing chains
- Possibilities for suppliers to give added value to retail trade and chains

Literature / Study Material

- Lecture material
- Articles

• Other material provided by the lecturer

Learning Methods

- Lectures
- Assignments
- Group work
- Exam (emphasis on practical applications learned by doing assignments and working in groups)

Assessment

- Exam
- Assignment

Securities and Investment Activities, 3 op KE16D088220 (study unit)

Lecturers

Juhani Paavola, MSc (Econ. and Bus. Adm.)

Objectives

Students will be familiar with the various forms of direct financing and understand how the financing markets work. Students will also be aware of the various instruments pertaining to securities.

Content

- Function and structure of the financing markets
- Debt instruments and derivative instruments
- Shares and the stock market
- Investing and investment strategies

Literature / Study Material As indicated by the lecturer.

Learning Methods Lectures and exam

Assessment Exam

Information management in enterprises, 3 op KE16AYPE180 (study unit)

Lecturers

Engineer Beata Taijala, MSC (Econ. and Bus. Adm:)

Objectives

Students will be prepared to participated in the overall development of data processing and the organisation and management of information management.

Content

- Current situation of and developmental outlook for data processing
- Relationship between data processing and business
- Strategic development of information management

Literature / Study Material As indicated by the lecturer.

Assessment Exam and assignment

Languages of Instruction Finnish

Further Information This is an online course, which can be taken in semesters 2 or 3. See Moodle in the Degree Programme for SME Business Administration.

Transitional economies –business areas and cultures, 3 cr KE16D088230 (study unit)

Lecturers Ms Ilona Baumane

IVIS Hona Dauman

Objectives

Students will be aware of the basic differences in business practices and human values among post–Soviet countries and Western Europe. They will develop develop skills necessary to work in business in a modern world.

Content

- Main stages of Soviet economic development and reasons for the failure of the Soviet model and brief comparison with economic development of USA, Japan and Western Europe
- Impact of culture on business practices and management
- Human values in different cultures
- Tools for comparing cultures
- Special features business cultures in transitional economies

Literature / Study Material Material provided by the lecturer.

Learning Methods Lectures and group work (paper and presentation)

Assessment Written exam

Languages of Instruction English

Introduction to the European Union, 3 cr KE16D088240 (study unit)

Lecturers Michael Schleicher, PhD

Objectives

This course provides students with basic knowledge of EU institutions. Upon completion of the course, students will have basic knowledge and skills required in different international projects of the EU.

Content

- Basics about EU institutions
- Decision-making processes
- Economic policies, e.g. in the field of competition or structural aid

Literature / Study Material Material announced by the lecturer.

Learning Methods Lectures and project work, distant learning.

Assessment Project work

Languages of Instruction English

European economic integration, 3 cr KE16D088250 (study unit)

Lecturers Michael Schleicher, PhD

Objectives This course provides students with basic knowledge of European Economic Integration. *Content* Goods, services, free movement and the euro area.

Literature / Study Material Material announced by the lecturer.

Learning Methods Lectures and project work, distance learning

Assessment Written exam

Languages of Instruction English

Entrepreneurship in the Nordic context –case study, 3 cr KE16D088260 (study unit)

Lecturers Tero Turunen, MA

Objectives

Students will be familiar with the special features of the SME sector in the Nordic countries as well as with the business environments and opportunities there. The purpose of the course is to enhance students' previous knowledge they acquired in other NBD courses.

Content

- Nordic countries as a cultural/business environment
- State and development of national economics
- Developing role and prospects of the SME sector in different countries
- Examples of successful and failed businesses and analyses of them

Literature / Study Material

Material provided by the lecturer.

Learning Methods Lectures, workshops, presentations and final report

Assessment Lectures, workshops, presentations and final report

Languages of Instruction English

SME operations in international environment –project, 3 cr KE16D088270 (study unit)

Lecturers Tero Turunen, MA

Objectives

Students will enhance their knowledge and skills acquired in other modules in the NBD programme.

Content

Students will prepare a final report of their interest (5-10) pertaining to their NBD studies. The report will be based either on an actual assignment done with an organisation of the students' choice or an actual project (e.g. a marketing study, observation in the organisation in the chosen subject, interviews in the organisation). Detailed information will be provided at the beginning of the course.

Literature / Study Material Material provided by the lecturer.

Assessment Lectures, workshops, presentations and final report

Languages of Instruction English

Study Descriptions

Dimensions of entrepreneurship, 3 cr KE16D088280 (study unit)

Lecturers Tero Turunen, MA

Objectives

Upon completion of the course, students will be knowledgeable of the basic implications and environment of entrepreneurship in society and in the national and global economy. Additionally, students will be familiar with the concepts of business idea and innovation, and consder their resources when planning and establishing a business. They will be introduced to organisational models and specific characteristics of entrepreneurship.

Content

Entrepreneurship is considered as a vast, complex phenomenon, which involves the entire society, its culture, organisations and individuals along with the business itself.

Literature / Study Material Material announced by the lecturer

Learning Methods Lectures

Assessment Written assignments

Languages of Instruction English

Further Information NBD or similar only

Cross cultural management, 3 cr KE16D088290 (study unit)

Lecturers Cory Isaacs

Objectives

Upon completion of the course, students will possess the knowledge, skills and understanding required to work with people from different cultures and to work in different countries.

Content

- Awareness of the hidden influence of culture with emphasis on management and business practices
- Awareness of the type of challenges and problems when working internationally
- An understanding and appreciation of working in another cultures

Literature / Study Material

- Adler N. T.: International. Dimensions of Organization Behaviour. Second Edition (partly).
- Harris, Philip, Moran, Robert: Managing Cultural Differences. Second Edition.
- Articles
- Other material announced by the lecturer

Learning Methods Lectures, literature, assignments and exam.

Assessment Assignments and exam.

Languages of Instruction English

Further Information NBD or similar only.

Internalisation of small and medium-sized firms, 3 cr KE16D088300 (study unit)

Lecturers

To be announced.

Objectives

Students will be familiar with the planning, implementation and management of export marketing and international business operations. They will also have good command of international business practices as well as export and import documentation.

Content

- Planning of international marketing (international market surveys, selection and segmentation of international markets, etc.)
- Implementation of international marketing (international marketing means and methods, modes of internationalisation, documentation, etc.)
- Management of international marketing

Literature / Study Material To be announced.

Learning Methods Lectures, literature, articles, assignments, case studies and exam.

Assessment Assignments, case studies and exam.

Languages of Instruction English

Further Information NBD programme only.

Projektityö liike-elämälle KE16D088310 (study unit)

Lecturers

- Co-ordinator Tero Turunen, MA
- Other lecturers as indicated in the Personal Study Plan

Objectives

Students will gain experience in co-operating with professionals in the business world or public sector. They will be competent in producing consultancy services for businesses and in working responsibly in projects, from start to finish. Students will be encouraged to create new projects and in this way to apply their creativity and problem-solving skills.

Content

The contents of the project work will be determined together with the commissioner of the project. It may entail a marketing report, the organisation of an event, planning of various measures and implementation, or producing marketing material for a company.

Learning Methods

Students will carry out the project either alone or in a group. After the innovation phase, students will compile a short project plan. The lecturer will then approve the start of the project based on the project plan and estimate the extent of the project. Students will write a final report about the project.

Assessment

The lecturer evaluates the contents and extent of the project work based on the student's final report. The lecturer gives a statement about the approval of the work and including it in the student's studies.

Further Information

The extent of the project work is 0-10 credits. The course yields credit for research and development.
Degree Programme in Social Work (In Finnish)

Head of degree programme: Ms Päivi Rinne, Tel. +358 20 124 5122, Gsm +358 40 830 4190, E-mail: paivi.rinne@seamk.fi Student counsellor: Ms Katriina Honkala, Tel. +358 20 124 5108, Gsm +358 40 830 4186, E-mail: katriina.honkala@seamk.fi International coordinator: Ms Helena Järvi, Tel. +358 20 124 5125, Gsm +358 40 830 4276, E-mail: helena.jarvi@seamk.fi

Degree and qualification awarded

The Polytechnic Degree in Social Services and Health Care, Bachelor of Social Services

Access requirements

Please see the Applicant's Guide or the website www.seamk.fi.

General description of the degree programme

The aim of the degree programme in social work is to educate cognitively, skilfully and ethically qualified professionals for expertise demanding tasks in social services and social welfare field, in public social sector, in private social services and in voluntary organizations. In the study programme, client's needs and perspectives are regarded as the primary basis of practice development. Practical client–centred methods and services are studied and developed, e.g. client–centred sources of information and needs analysis. Students should learn to make methodological choices, which meet client's needs and which strengthen person's individual capacities.

The professional profile consists of different tasks in social welfare work.

- 1. Educational and pedagogical tasks in childcare services, child protection and youth work. The professional worker aims at promoting growth and socialization and enhancing preconditions for them. He/she supports parents in their parenthood and aims at creating safe growing circumstances.
- 2. Social support, social rehabilitation and social guidance. The professional worker uses his/her expertise to strengthen client's autonomous life capacities, to support client's social networks and to construct client-based service chains. Professional areas are e.g. social welfare work and social insurance, social work with the elderly, handicapped persons, mentally ill, unemployed, immigrants, drug abusers, marginalized groups and criminals.
- 3. Service management, leadership and development. The graduates from the degree programme have organisational expertise, they can evaluate and develop client-based activities and strengthen the skills and capacities of the working community. Service management, leadership and development tasks are carried out in social service organizations, project organizations and entrepreneurial activities.
- 4. Social work activities. In the field of professional social work the expertise of the polytechnic graduate focuses his/her work on family work, case management, social rehabilitation and social welfare guidance. He/she brings non-institutional, functionally activating and preventive methods to social work practices.

Subject specific competencies

Ethical competences in social work

A Bachelor of Social Services has adopted the ethical principles of the profession and is committed to implement them in professional practice. He or she is able to pursue ethical reflection required by the professions within social work. He or she is able to take the clients' individual needs into consideration and to work in situations which involve conflicting values. A Bachelor of Social Services promotes equality and tolerance and strives for the prevention of marginalisation at social, community and individual level.

Client work

A Bachelor of Social Services is able to create an interactive, professional relationship with the client which enables client participation. He or she understands the clients' needs and resources in a particular context. A Bachelor of Social Services is able to implement a variety of theoretical approaches and working methods in an appropriate way and to assess their success. He or she is able to support and guide individuals and groups of clients in their daily activities in a goal–oriented way taking into consideration the different stages of growth and development and personal contexts.

Social services

A Bachelor of Social Services knows the organisation and legislation of the services which support well-being and social security. He or she is able to perceive changes in the services and to participate in their development in a variety of ways. He or she is able to select the appropriate services to support clients in a variety of situations. A Bachelor of Social Services is able to work in multidisciplinary networks and is competent in case management.

Social analysis

A Bachelor of Social Services understands the relationship between an individual and society and is able to approach and analyse it from a variety of theoretical perspectives. He or she knows the connection between the prerequisites for functioning socially and decision-making in society. A Bachelor of Social Services can analyse social problems within the social-structural framework.

Reflective development and management

A Bachelor of Social Services has adopted a reflective and explorative approach to work. He or she is able to evaluate the theoretical points of departure for his or her actions and, as required, to implement alternative approaches so as to change his or her actions. A Bachelor of Social Services has evidence–based theoretical knowledge and he or she is able to produce new knowledge. A Bachelor of Social Services is able to work as a manager with initiative and as an active member of the work community. He or she is able to lead experts in social work, work communities and services in cooperation with a multidisciplinary group.

Community and society

A Bachelor of Social Services understands the functional principles and characteristics of communities. He or she is able to cooperate with concerned parties to strengthen and create community spirit and participation. A Bachelor of Social Services is able to participate in social discussion on values and to influence decision–making in cooperation with clients and other actors. He or she can identify constructions which produce inequality and is able to act so as to deconstruct them.

Educational approach and learning methods

The Degree Programme in Social Work is built on the theories of constructivist learning, which means that the student is actively developing his/her structures of knowledge. He/she has skills to evaluate his/her learning needs and capacities and he/she is willing to set goals to achieve them. While studying professional social work, it is important to develop reflective thinking. Every student has his/her personal way to learn. For this reason several pedagogical methods are applied. The pedagogical choices in the programme become concrete in the following pedagogical principles:

- 1. The study modules are based on competencies in professional, practical social work.
- 2. The degree programme is built on pillars, which are
 - a. relation between individual and society
 - b. social work methods
 - c. social research skills

d. professional growth reflection. These central topics deepen and broaden while studying in the programme proceeds.

- 3. Learning is carried out by combining theory and practice.
- 4. The students reflect their views by participating in different groups, giving and receiving feedback to each other.
- 5. The study methods are diversified and they depend on the content and the nature of the topic and on the students' learning needs. Examples of most commonly used study methods are: Lectures and independent study, problem–based learning, web–based learning and learning by researching.

Degree Programme in Social Work (In Finnish), 210 cr (1.9.2008) SOSALA 2008

Code	Name	<u>S</u>	tudy 2.	7 Yea 3.	ar 4.	CR
KF08A	BASIC STUDIES					62
KF08AOA	Learning skills					8
KF08AOA0110	Studying at Polytechnic	x				3
KF08AOA0211	Sosiaalialan tiedonhankinta	х				2

KF08AOA0310	Information technology	х				3
KF08AVK	Language studies					
KF08AVK0110	English	x				3
KF08AVK0310	Swedish		x			3
KF08AVI	Finnish language and communication skills					
KF08AVI0500	Basics of written and oral communication	x				2
KF08AVI0600	Oral communication		x			2
KF08AVI0700	Academic writing and documents				x	2
KF08BAK	Professional development					12
KF08AAK0110	Professional development	x				3
KF08AAK0210	Professional fields of social work and social services	x				3
KF08AAK0311	Analysis of contemporary practices in social work		x			3
KF08AAK0700	Ethics of social work	x				3
KF08AHO	Social welfare and social participation					12
KF08AHO0110	Individual in society	x				6
KF08AHO0121	Sosiaaliset, kansanterveydelliset ja mielenterveydelliset ongelmat	x				6
KF08ASP	Social services providing social security					
KF08ASP0110	Finnish society and economy	x				3
KF08ASP0410	Public, private and community-based social welfare services	x				4
KF08ASP0310	Legislation and social welfare	x				3
KF08ESP0810	Practical field period: Social services providing social security	x				8
KF08B	PROFESSIONAL STUDIES					135
KF08B KF08BHO	PROFESSIONAL STUDIES Social welfare and social participation					135 12
KF08B KF08BHO KF08BHO0510	PROFESSIONAL STUDIES Social welfare and social participation Childhood and youth as a phase of life		x			135 12 9
KF08B KF08BHO KF08BHO0510 KF08BHO0610	PROFESSIONAL STUDIES Social welfare and social participation Childhood and youth as a phase of life Work, living and basic security		x x			135 12 9 9
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KF08BYL0900	Creative activities 2		x			4	
KF08BYL0510	Project work		x			3	
KF08BYL0610	Social work with groups			х		3	
KF08BYL0710	Community work			x		3	
KF08EYL0810	Practical field period: Community work and creative methods in social work			x		9	
KF08BOK	Organizing, managing and developing social services						
KF08BOK0110	Organizing social services			x		3	
KF08BOK0210	Development, quality management and evalution skills			x		5	
KF08BOK0310	Management and leadership			x		4	
KF08BOK0400	Entrepreneurship in social services			x		3	
KF08EOK0410	Practical field period: Organizing, managing and developing social services			x		12	
KF08BVS	Empowerment methods in social work					12	
KF08BVS0130	Social work and multicultural groups			x		3	
KF08BVS112	Social work and multicultural groups (In English)			x		3	
KF08BVS0210	Critical and radical social work				x	3	
KF08EVS0310	Practical field period: Empowering methods in social work				x	6	
KF08BST	Social research 2						
KF08BST0110	People and community as source of information	x				2	
KF08BST0210	Qualitative research methods	x				3	
KF08BST0310	Quantitative research methods		x			3	
KF08BST0510	Action research			x		2	
KF08BST0600	Professional essay (Ps)		x			3	
KF08BST0710	Thesis			х		15	
KF00D	OPTIONAL STUDIES					13	

Study Descriptions

Learning skills, 8 op KF08AOA (study entity)

Objectives: Students will be familiar with the study methods that are used in the social services programme at the Seinäjoki UAS. They will be aware of the current issues concerning the social work and health programme in their school and in Seinäjoki UAS in general. Students will be adept in applying their skills in information retrieval and IT to their studies and work.

Studying at Polytechnic, 3 op KF08AOA0110 (study unit)

Lecturers Group supervi

Group supervisors

Objectives

Students will become familiar with the information significant to the progress of their studies, to compiling a personal study plan and studying in university of applied sciences community. Students shall also be aware of the qualifications required in their profession and issues concerning employment.

- Structure of the Degree Programme in Social Work
- Pedagogical guidelines and individual opportunities to construct a personal study plan

- Current issues in the School of Healthcare and Social Work in Seinäjoki
- Current issues concerning the Bachelor of Social Services programme
- Students affairs
- Applying for a job and information concerning the labour market
- Familiarisation with the tools needed in online communication: Moodle, e-mail, and Winha

Literature / Study Material

Study Guide, curriculum and additional materials, 'network rucksack'

Learning Methods

- Lectures, online teaching, group work, field trips, participation in events in the school and at Seinäjoki UAS
- Moodle

Assessment Active participation in all areas of the course: pass/fail

Sosiaalialan tiedonhankinta, 2 op KF08AOA0211 (study unit)

Lecturers Leena Elenius, MA

Objectives

Upon completion of the course, students will understand the information retrieval process as a whole such that they will be competent in analysing their information needs and choosing appropriate sources of information. They will hace command of the basic techniques for obtaining information and know how to apply their knowledge.

Content

- Library and information services at Seinäjoki UAS
- Information and producers of information in the field of social services
- Databases
- Online information searches
- Evaluating and using information

Some of the first-year studies have been integrated into the Social Services as a Profession course. Third-year course studies take place at the beginning stages of the thesis writing process and concentrates on the theory and research information needed for it.

Literature / Study Material Material distributed by the lecturer

Learning Methods Lectures, discussion, group and pair work, assignments

Assessment Assignments and active participation: pass/fail

Languages of Instruction Finnish

Further Information Teaching is divided into two parts, R&D course

Information technology, 3 op KF08AOA0310 (study unit)

Lecturers Latva–Somppi Hilkka, MA

Objectives

Students will become acquainted with data processors used in the unit, the basics of data processing, word processing, Excel, the online learning environment and various online services. Upon completion of the course, students will have command of e-mails, Winha, Microsoft Word, Excel and Power Point, and Moodle. They will also be able to apply their basic data processing skills to new equipment and programme environments, they will promote the use of data processing later on in their professional field.

Content

- Data processors used at the unit, classes, procedures and agreements
- Using equipment, adaptation of user environment
- E-mail, Winha, Moodle, Internet, search engines, Microsoft Word, Excel and Power Point

Literature / Study Material Hand–outs and online material

Learning Methods Lectures, online teaching and assignments

Assessment

- Lectures, online exercises, online teaching (50 %)
- Grading based on a scale of 1–5

Language studies, 6 op KF08AVK (study entity)

Objectives: Students will develop their oral and written skills in the English and Swedish languages. They will become especially acquainted with the concepts of language related to the central themes of social welfare work, and they will acquire language skills required for their professional development.

English, 3 op KF08AVK0110 (study unit)

Lecturers

Mari Heinonen, MA

Objectives

Students will develop and strengthen their English language skills in oral communication, listening comprehension and writing. They will learn the essential professional vocabulary and understand texts concerning the social welfare field. They will be able to discuss social welfare issues in English.

Content

- Presentation of one's education, their professional field and the Finnish social welfare system in English
- Articles related to different age groups and their social problems
- International and cultural understanding from the point of view of social welfare
- Essay, oral presentation

Literature / Study Material

- Saarinen Kirsi&Saarinen Juha 2008. Way to Welfare: English for Social Services. Helsinki: Tammi.
- Lecturer's material
- Newspapers, magazines, AV material, Social Welfare in Finland brochure

Learning Methods

Contact teaching, independent study, oral and writing tasks

Assessment

- Active participation in the study process. Tests in reading comprehension, oral communication, essay
- Grading based on a scale of 1–5

Swedish, 3 op KF08AVK0310 (study unit)

Lecturers Jaana Store, MA

Objectives

During the course, the students will strengthen their Swedish language skills in oral and written communication, increase their Swedish vocabulary and develop their grammatical skills. Students will understand texts related to social welfare and learn more professional vocabulary. They will be able to discuss the substance of social welfare work in Swedish. Students will complete an official Swedish test that has both written and oral skills sections.

Content

- Presentation of the student's present education, their professional field and the Finnish social welfare system in Swedish
- Articles pertaining to social welfare work and writing summaries of the articles in Swedish
- Discussions based on themes given by the teacher and the students
- Official language test in Swedish

Literature / Study Material

- Tuunanen Maria & Wallinheimo Kirsi. 2008. Flexsocial. Svenska för högskolor. Helsinki: Otava.
- Material provided by the lecturer
- AV material, newspapers and professional magazines

Learning Methods

Contact teaching, independent study, drama presentations

Assessment

- Active participation, tests in oral and written communication
- Grading based on a scale of 1–5

Finnish language and communication skills, 6 op KF08AVI (study entity)

Objectives: Students will be expected to interact objectively in communicative situations associated with study and work. They will be familiar with grammatical correctness, academic writing and compiling documents. They will be competent in interacting during discussions, meetings and negotiations. Students will recognize the communicative environment in professional social work and social services.

Basics of written and oral communication, 2 op KF08AVI0500 (study unit)

Lecturers Katariina Punkari

Objectives

Upon completion of the course, students will be competent in communicating objectively about study and work. They will demonstrate knowledge and understanding of grammatical norms, the processive character of writing, and of various characteristics of texts and styles. Students will be familiar with the basics of academic communication and documents and be able to compile the more common documents. Students will also be competent in participating in discussions, meetings and negotiations in a proper way.

Content

- Preparing to communicate through speech
- Acting in communicative situations
- Evaluating the communication process
- Interaction, verbal and nonverbal communication, demonstrative techniques
- Argumentation, meetings, negotiations
- Planning a text, the writing process, revising texts
- Citation and the bibliography

Literature / Study Material

- Repo & Nuutinen. 2003. Viestintätaito. Opas aikuiskoulutuksen ja työelämän vuorovaikutustilanteisiin. Helsinki: Otava. pp. 1–140.
- Additional material annonced by the lecturer

Learning Methods

Lectures, oral and written exercises, writing an essay

Assessment

The grade for the course will consist of taking part in lectures, completing exercises, writing an essay and an exam. Evaluation is based on a scale of 1 to 5.

Oral communication, 2 op KF08AVI0600 (study unit)

Lecturers

- Riitta Laru, LA (group 15a)
- Katariina Punkari (groups 14b, 14c and as12)

Objectives

Upon completion of the course, students will understand communication as a multi-faceted phenomenon. They will be capable of diversely utilising their communication skills, and functioning in meetings and negotiations. Students will have command of argumentation in individual and group situations. They will approach communicative situations with clients from various different perspectives.

Content

- Oral skills: communication in groups, democratic dialogues, argumentation, speeches, debates, meetings, discussions, charasteristics of the language used in social work
- Issues in professional communication: significance of oral skills when working with clients, in the community and society and when looking for a job
- Other issues: speech development in children, speech and interaction in special education, media skills, reporting

Literature / Study Material

- Repo & Nuutinen. 2003. Viestintätaito. Opas aikuisopiskelun ja työelämän vuorovaikutustilanteisiin. Helsinki: Otava, pp. 141–306.
- Lecturer's material

Learning Methods

Contact teaching, oral exercises, independent study, and exam

Assessment

- Participation in introductory lectures, independent and group work, exam
- Grading based on a scale of 1–5

Academic writing and documents, 2 op KF08AVI0700 (study unit)

Lecturers

Riitta Laru, LA

Objectives

Having succesfully completed this course, Student will be competent in writing academic texts and using the concepts related to social work. They will be familiar with the special characteristics of academic texts and the writing process. Students will have command of the grammatical forms of language. They will also be familiar with the foundations of managerial communication.

Content

- Scientific thinking and common sense
- Types of academic texts
- Argumentation and grounds for it
- Writing process
- Editing research for publication
- Grammatical norms in the Finnish language
- Documentation of decisions
- Job applications
- Conventions for the Maturity Test

Literature / Study Material

- Hirsjärvi, Remes & Sajavaara. 2007 or earlier edition. Tutki ja kirjoita. Helsinki: Tammi.
- Repo & Nuutinen. 2003. Viestintätaito. Helsinki: Otava.

Learning Methods

- Chiefly online learning
- Lectures, journal
- Independent information searches related to the field
- Assignments

Assessment

- Active participation in lectures
- Online assignments and exercises
- Journal

Prerequisites

Taking part to the course requires that students possess basic knowledge of working online.

Further Information R&D course

Professional development, 12 op KF08BAK (study entity)

Objectives: Students will recognize the developmental features and stages of professional social work and social services. They will be able to reflect on their personal, professional development and set personal objectives and challenges to enhance their professional growth. Students will be well–educated in basic ethical concepts and will be able to state reasons for the decisions they make by applying arguments arising from professional ethics. They will be competent in analyzing the elements, which frame contemporary working practices, especially in their chosen area of social services. Students will also be capable of showing their professional skills.

Professional development, 3 op KF08AAK0110 (study unit)

Lecturers Group supervisors

Objectives

Students will comprehend the reflective character of social work. They will acquire the capability to understand and to set objectives for their professional development during their studies and later on in the working world. Students will possess facilities for reflective thinking, and they will practise giving and receiving feedback and being a participating member of a group.

Content

- Self-knowledge
- Participation in a group
- Professionalism
- Expertise and job descriptions for Bachelor of Social Services
- Chrystallizing one's personal and professional strengths, innovating future career paths and recruitment into the working world

Literature / Study Material

- Material distributed by the lecturer in addition to material students have acquired themselves
- Moodle

Learning Methods

Orientation lectures, group sessions, discussions with supervisong teacher, personal portfolio and presentation of it

Assessment

Active participation in group sessions, preparation for personal discussions and target-oriented construction of portfolio. The course is evaluated on a pass/fail basis.

Professional fields of social work and social services, 3 op KF08AAK0210 (study unit)

Lecturers Group supervisors

Objectives

Students will be able to analyse the development of social work practices within a historical framework and recognize Study Descriptions

the processes in society to which professional practices are connected. They wil be able to situate their education, and the qualifications it renders, to the professional field of social work and social services. They will be well-educated in all of the professional areas associated with their degree program and the qualifications it renders.

Content

- History of professional work
- Work of a professional in social services
- Familiarisation with the typical areas of practical social services work

Literature / Study Material

- To be announced at the beginning of the course
- Instructions for filling out a professional analysis you can find http://Intra

Learning Methods

- Introductory lectures
- Filling out professional analysis and discussing it in a seminar,
- Visits to various social institutions
- Moodle

Assessment

- Active participation, filling out and presenting a professional analysis
- Familiarisation with the work of a social services professional as agreed upon with the supervisor
- Pass/fail

Analysis of contemporary practices in social work, 3 op KF08AAK0311 (study unit)

Lecturers

Lecturers in the social services sectors

Objectives

Students will possess the capacity to analyze contemporary working practices in social work and social services, e.g. from the perspective of the goals of social work, working methods and the work environment. They will also have the facilities to analyze how selected working methods correspond to and reflect the needs of clients. The analysis pertains especially to the field of profession chosen by the student.

Content

- Analysis of work processes: target, methods, ethics, cooperative organisations, legislation, resources
- Evaluation of professional processes
- Analysis of contemporary work processes is associated with the practical training period: psychosocial and interactive social work methods
- Analysis as a learning assignment during the practical training

Literature / Study Material

- To be announced at the beginning of the course
- Instructions for doing the assignment (in Finnish): http://intra.epedu.fi/sosiaali-ja terveysala/Kampus/Ammatillisuuden kehittyminen

Learning Methods

- Introductory lectures, filling out and presenting a professional analysis in a seminar in the sector group
- Students in the English group will do their studies in English
- Moodle

Assessment Pass/fail

Prerequisites

- Domain of the Social Services Profession
- Studies pertaining to social services sectors

Ethics of social work, 3 op KF08AAK0700 (study unit)

Lecturers

- Mirva Siltakorpi, MSSc (groups 15a and as15)
- Eeva-Kaija Martin, MA (group 15c)
- Arja Haapaharju, BA (group 15b)

Objectives

Having succesfully completed this course, students will understand basic ethical themes and recognise their significance. They will have command of basic ethical concepts and theories and the development of morality, and principles of professional ethics. Students will be used to diversity and thinking independently.

Content

- Ethics, morale, values
- Ethical theories
- Development of morality
- Professional ethics
- Personal ethics
- Experiences by students

Literature / Study Material

- Juujärvi S., Myyry L., and Pesso K. 2007. Eettinen herkkyys ammatillisessa toiminnassa. Helsinki: Tammi.
- Arki, arvot, elämä, etiikka. Sosiaalialan ammattieettiset ohjeet. 2005. www.talentia.fi.
- Lastentarhanopettajan ammattietiikka. 2004. www.lastentarha.fi
- Lecturer's material

Learning Methods

- Lectures, discussions and excercises in small groups, guest speakers
- Onlone learning with Moodle, based on themes

Assessment

- Active participation, exam (50 % of assessment) and preparation of group assignments and excercises
- Online studies: active participation
- Grading based on a scale of 1–5

Social welfare and social participation, 12 op KF08AHO (study entity)

Objectives: Students will have command of the more important theoretical concepts concerning the relationship between the individual, community and society. They will be familiar with the more common social problems and the national health and mental health issues, which hinder the various areas of well–being, cause disability in functioning and passiveness.

Individual in society, 6 op KF08AHO0110 (study unit)

Lecturers

- Riitta Ranta, MSc (Health)
- Mirva Siltakorpi, MSSc
- Kerttu Veikkola, MSSc

Objectives

Upon completion of the course, students will be familiar with basic theoretical concepts associated with the relationship between the individual and society, e.g. welfare, course of life, socialization, social participation and citizenship. Students will be capable of identifying people's needs from many perspectives and understand how the relationship between the individual and society is manifested in different contexts. The student has conceptual tools to analyse phenomena in modern society.

• Relationship between individual and society and the needs of people: growth and development, socialization, well-being and life course, health and ability, social participation and citizenship

Literature / Study Material

- Lyytinen, Korkiakangas & Lyytinen. (eds.). 1995. Näkökulmia kehityspsykologiaan: kehitys kontekstissaan. Porvoo. Helsinki. Juva: WSOY (sin part) OR
- Pulkkinen. (ed.). 1996. Lapsesta aikuiseksi. Jyväskylä: Atena.
- Jokinen & Saaristo. 2004. Sosiologia. Helsinki: WŠOY
- Järvikangas & Härkäpää. 2004. Kuntoutuksen perusteet. WSOY. (pp. 76–102).
- Jyrkämä. 2003. Ikääntyminen, toimintakyky ja toimintatilanteet. In Marin & Hakonen (eds.). 2003. Seniori– ja vanhustyö arjen kulttuurissa. (pp. 94–103).
- Heikkinen. 2002. Sairauksista roimintakykyyn. In Heikkinen & Marin (eds.). Vanhuuden voimavarat. Tammi. (pp. 13–33).
- Lyyra, Pikkarainen & Tiikkainen (eds.). 2007. Vanheneminen ja terveys. Hoitotieto. (pp. 16–26).

Learning Methods

- Lectures, working in small groups (drama included), reflection, learning circle and independent assignment
- Adult study group learns through the web

Assessment

- Active participation during the course
- Grading based on a scale of 1–5

Sosiaaliset, kansanterveydelliset ja mielenterveydelliset ongelmat, 6 op KF08AHO0121 (study unit)

Lecturers

- Kristiina Järvi, MSSc
- Riitta Ranta, MSc (Health)
- Kerttu Veikkola, MSSc

Objectives

Students will become familiar with the mechanisms causing social, physical and psychological problems and the impact of those mechanisms on the well-being of one's immediate community, daily activities and ability to function. Students will understand the impacts of social, physical and psychological problems on the individual, community and society. They will be aware of the factors that influence preventive work.

Content

- Marginalisation, poverty, deviant behaviour
- Illness (e.g. diabetes, dementing illnesses, cardiovascular illnesses, cancers, accidents) and pain
- Depression, neurosis, psychosis, psychopathy, burn-out
- Promoting good health and mental health and prevent social problems

Literature / Study Material

- Ennakkodialogeja huolten vyöhykkeeltä. Stakes 2008. (in part)
- http://www.stakes.fi/verkkojulkaisut/tyopaperit/T29-2006-VERKKO.pdf
- Kortteinen & Tuomikoski. 1998. Työtön: tutkimus pitkäaikaistyöttömien selviytymisestä. Helsinki: Tammi.
- Wennberg, Oosi, Alavuotunki, Juutinen & Pekkala. 2008. Sosiaalialan kehittämishankkeen loppuarviointi. Osa raportti 2.(in part)
- Reports by the Ministry of Social Affairs and Health. 2008:7.
- Finnish Government's decision in principle about the Terveys 2015 programme. 2001. Publication of the Ministry of Social Affairs and Health. 2001:4
- Sosiaali- ja terveyskertomus 2006. Publication of the Ministry of Social Affairs and Health. 2006:4
- Aromaa, Huttunen, Koskinen & Teperi. (eds.). 2005. Suomalaisten terveys (pp.153–177, 190–199, 222–228, 242–257). Helsinki: Duodecim.
- Jaatinen & Raudasoja. 2007. Kansamme taudit (pp. 7–29). Helsinki: WSOY.
- Saarelainen, Stengård & Vuori–Kemilä. 2007. Mielenterveys– ja päihdetyö: yhteistyötä ja kumppanuutta. Helsinki: WSOY

Learning Methods

Lectures, group work, guest speakers and field trips

Social services providing social security, 18 op KF08ASP (study entity)

Objectives: Students will understand the model for producing social welfare services and its traditions in Finnish society as well as for financing these services in a global environment. They will perceive the roles of social insurance, social welfare and social services as part of the realm of social security. With regard to social welfare, students will be familiar with private and third–sector operations models, and they will understand the essential parts of social welfare legislation. During practical training, students will gain a comprehensive understanding of social security, how sufficient it is and how well it works with regard to customer needs.

Finnish society and economy, 3 op KF08ASP0110 (study unit)

Lecturers

Katriina Honkala, MSc (Econ. and Bus. Adm.)

Objectives

Upon completion of the course, students will be aware of the development of Finnish society and social policy and identify the structures and mechanisms, which create or have created social problems in different historical periods. Students will be competent in analysing the factors that have affected the development of society and social policy. They will have command of the more significant concepts in social policy and the national economy. Students will understand the basic theories associated with national economy, know how to apply them economic decision–making and to the evaluation of the development of the national economy. Students will also learn about cause and effect relationships in the national economy and understand economic phenomena in social policy.

Content

- Historical development of Finnish society and social policy
- Areas of social policy
- Implementing social policy
- Economic policy
- Structure and function the national economy
- Public economy
- Current issues in social policy
- · Economic policy in various sources of information

Literature / Study Material

- Karisto & Takala & Haapola. 1998. Matkalla nykyaikaan. Elintason, elämäntavan ja sosiaalipolitiikan muutos Suomessa. Porvoo, Helsinki, Juva: WSOY.
- Raunio. 1995. Sosiaalipolitiikan lähtökohdat. Helsinki: Gaudeamus.
- Pekkarinen & Sutela. 2000. Mikrosta makroon. Helsinki: WSOY.
- Talouden kieli video series (partly)
- Current issues in social policy and economics

Learning Methods

- Contact teaching, working in small groups, videos
- Course may be completed independently in groups 15b and 15c

Assessment

- Essay based on current news, group work
- Grading based on a scale of 1–5

Public, private and community-based social welfare services, 4 op KF08ASP0410 (study unit)

Lecturers

- Arja Haapaharju, BA (Soc.Sc.) (groups 15a,, as15, 15c)
- Elina Kangasluoma, MA (Soc.Sc.) (group 15b)

Objectives

Upon completion of the course, students will identify the roles of social insurance, social welfare and social services in the framework of social security. They will be able to distinguish public, private, and third sector services as entities providing security and their relationship to each other. They will possess knowledge of the contents, extensiveness, principles and operation models of those entities. Students will be aware of the importance of various service providers

as a part of a functional service system.

Content

- Perception of the social security system as a whole
- Social welfare and social services
- Principles applied in social welfare
- Public services
- Private services
- Third sector as provider of services

Literature / Study Material

- Kari. 2005. EU ja jäsenmaiden sosiaaliturvajärjestelmät. Online publication
- Matthies, Kotakari & Nylund (eds.). 1996. Välittävät verkostot (pp. 11–29)
- Niemelä & Dufva. (eds.). 2003. Hyvinvoinnin arjen asiantuntijat. Sosiaali– ja terveysjärjestöt uudella vuosituhannella. Juva: PS-kustannus
- Puurunen. 2004. Suomalainen hyvinvointiyhteiskunta tienhaarassa. University of Joensuu, Karelia Centre of Expertise.
- Sosiaali- ja terveydenhuollon lakisääteiset palvelut. Brochure of the Ministry of Social Affairs and Health. 2005:7.
- Sosiaalihuolto Suomessa. Brochure of the Ministry of Social Affairs and Health. 2006:11.
- Sosiaalipalvelut kunta- ja palvelurakenneuudistuksessa. Kuntaliitto. Online publication, 2006.
- Suomen sosiaaliturvan pääpiirteet. Brochure of the Ministry of Social Affairs and Health. 2007:9.
- Toimeentuloturva kehdosta keinutuoliin. Brochure of the Ministry of Social Affairs and Health. 2007:10.

Learning Methods

- Lectures, group work, field trips, guest speakers
- Students in the adult group do an asignment in advance

Assessment

- Literary and lecture material, group work, independent study, participation in field trips
- Grading based on a scale of 1–5

Legislation and social welfare, 3 op KF08ASP0310 (study unit)

Lecturers

- Elina Kangasluoma, MSSc (group 15c)
- Marja–Liisa Saariaho, MSSc (group as15)
- Arja Haapaharju, BA (groups 15a and 15b)

Objectives

Upon successful completion of the course, students will be familiar with the main concepts and the most essential points of legislation in Finland's social welfare field. Students will also be familiar with legislation processes, finding legislative information and applying the more common laws in practise as a social services profesional.

Content

- Finding and using legislative information
- Legislative principles in social welfare
- Duty of secrecy
- Social Welfare Act, legislation pertaining to cusotmers in social welfare, legislation pertaining to welfare subsidies, legislation pertaining to services for the disabled, Mental Health Act, legislation pertaining to rehabilitation for substance abusers, legislation pertaining to paternity, child support, custody, visiting rights and child protection legislation, EU's social policy legislation

Literature / Study Material

- Narikka. (ed.). 2006. Sosiaali- ja terveyspalvelujen lainsäädäntö käytännössä(partly). Helsinki: Tietosanoma Oy.
- Taskinen S. 2007. Lastensuojelulaki (417/2007): application guide (partly). Helsinki: Stakes.
- Tuori. 2004. Sosiaalioikeus (partly). Helsinki: WSOY lakitieto.
- Sorvari. 2001. Asiakastiedon suoja sosiaalihuollossa. Helsinki: Tammi
- Pahlman. (edt). 2005. Asiakirjajulkisuus ja tietosuoja sosiaali- ja terveydenhuollossa. Helsinki: Edita

- Pajukoski. 2004. Sähköinen asiointi sosiaali- ja terveydenhuollossa.
- Lainsäädännön rajat ja mahdollisuudet. STAKES report 283. Saarijärvi: Gummerus.
- Additional material announced by the teacher

Learning Methods

- Lectures, independent study, small-group work, guest speakers
- Online studying: contact teaching and excercises in the online environment

Assessment

- Active participation, exam
- Online assignments

Practical field period: Social services providing social security, 8 op KF08ESP0810 (study unit)

Lecturers

- Group 15a: Arja Haapaharju, BA (Soc. Ser.) Mirva Siltakorpi, MSSc
- Groups 15b and 15c: Kristiina Järvi, MSSc, Eeva-Kaija Martin, MA (Edu.) and Riitta Ranta, MSc (Health)
- Group AS15: Arja Haapaharju, BA (Soc. Ser.)

Objectives

Upon completion of the practical training, students will have an understanding of the issues that influence people's everyday life, the circumstances in which they live, and their types of needs they have as regards support and assistance. They will be familiar with the available support systems and professional principles to meet the needs of individuals and how public, private and community–based services respond to these needs. Students will be capable of viewing services as a whole, how they function, and whether or not they are carried out ethically.

Content

- Familiarisation with the organisation in which one is training: operative idea, structures and settings for operation, legislation, personnel
- Familiarisation with the range of clients and how they use the services
- Familiarisation with the everyday life, social networks and participation of clients and service users
- Social services and social welfare operations available to clients in their home community

Literature / Study Material

Practical training instructions (in Finnish): http://intra.epedu.fi/sosiaali- ja terveysala/Kampus/Harjoittelu

Learning Methods

Introductory lectures, completion of the practical training, assignments and feedback discussions

Assessment

Assessment is carried out following the objectives that each student has set for her/his practical training and those which are stated in the curriculum. The training is graded on a pass/fail basis.

Social welfare and social participation, 12 op KF08BHO (study entity)

- Objectives: Students will gain insight into the factors that influence the social welfare, ability to function and active participation of people, how these factors manifest in people's lives, and the threats to these factors. Students will be competent in professionally understanding a person's social circumstances and needs for support. They will be familiar with the significance of services and benefits it supporting various types of clients. Students will form a point of view about the factors influencing individuals' relationship to society in the light of current social theory.
- Students choose a sector of social welfare in which to study. These sectors are described hereafter. Students also study in the following courses, which are connected to the sector they have chosen: Writing a Professional Essay (KF08BST0600), Analysis of Comtemporary Practices on Social Work (KF08AAK0311), Psychosocial and Interactive Methods in Social Work (KF08EPS1010). Students also do practical training and take optional courses.

Students' solid knowledge of client groups is the essential foundation and for further methodological studies, which are helpful with regard to the chose client group. Students choose the sector in which they wish to study at the beginning of their secong year of studies at the latest.

Childhood and youth as a phase of life, 9 op KF08BHO0510 (study unit)

Lecturers

Eeva-Kaija Martin, MA (Edu.)

Objectives

Students will be familiar with activities and social participation of the individual from the point of view of the growth, development, learning and social welfare of children and adolescents. They will have a comprehensive understanding of the processes that support favourable development and continuity in the everyday life of children, adolescents and families. They will be competent in analysing problematic issues and needs for support. Students will be familiar with issues concerning the lifestyles of adolescents and youth culture and the forms of support needed by young people. Students will be familiar with the social service system and social welfare subsidies from the point of view of children, adolescents and their families.

Content

- Theories about childhood
- Factors affecting the growth and development of children
- Family and foster care as an environment
- Learning disabilities and school attendance
- Child welfare, risk of marginalization
- Lifestyles of adolescents and youth culture
- Social services and social welfare subsidies for families with children
- · Support services for adolescents

Literature / Study Material

- Karila, Kinos & Virtanen (eds.). 2001. Varhaiskasvatuksen teoriasuuntauksia. Jyväskylä: PS-kustannus.
- Pösö. 2004. Vakavat silmät ja muita kokemuksia koulukodista. Stakes. Research report 133.
- Puonti, Saarnio & Hujala (eds.). 2004. Lastensuojelu tänään. Helsinki: Tammi. (in part)
- National online service for early childhood education: www.stakes.fi/varttua
- Finnish Youth Co-operation Allianssi website: www.alli.fi
- Viittala. 2006. Lasten yhteinen varhaiskasvatus: erityisestä moninaisuuteen. Tampere: Tampere University Press
- Hilkamo (ed.). 2007. Toimeentuloturva 2007. Lakisääteinen sosiaaliturva ja vapaaehtoiset vakuutukset. Helsinki: Edita.
- Polarisoituva nuoruus? Nuorten elinolot –vuosikirja 2008. Helsinki: Hakapaino.
- Piironen-Malmi & Strömberg. 2008. Välittämisen pedagogikka. Tammi.
- Happo 2008. Sosionomin (AMK) osaaminen ja osaamishaasteet varhaiskasvatuksessa. In Viinamäki (ed.). 2008. 14 puheenvuoroa sosionomien (AMK) asemasta Suomen hyvinvointiasiantuntijajärjestelmässä. Resports and research 2/2008, pp. 99–114.
- Additional material introduced by the teacher

Learning Methods

- Workshop-style learning: activating lectures, guest speakers, field trips, co-opetative learning, working in small groups, independent study based on literature, exam, co-operative assignment, discussions, personal journal
- Assignment given in advance

Assessment

Assessment consists of the following parts: assignment (before the course), active participation in workshop, activity implemented by the group, independent assignments, journal, exam concerning social welfare. Grading based on a scale of 1–5.

Work, living and basic security, 9 op KF08BHO0610 (study unit)

Lecturers

- Katriina Honkala, MSc (Econ.)
- Mirva Siltakorpi, MSSc

Objectives

Upon completion of the course, students will be competent in analysing and defining the factors which, on the one hand, support well-being and social security among adult people, but on the other hand may cause problems. Students will know how to set goals for their professional activities, especially those associated with adults and their needs. They will also be familiar with the types of social security benefits available and know how to allocate them in the employment,

social welfare and basic security sectors.

Content

Students will analyze individuals' relationship to society using the following concepts from the perspective of social welfare and social participation: basic social security, employment and unemployment, debt and poverty, health and sickness. Knowledge arising from people's experience is utilised in the course, and the more important social welfare benefits, as well as living and basic securities are explored.

Literature / Study Material

- Hänninen, Karjalainen & Lehtelä (eds.). 2007. Pääsy kielletty! Poiskäännyttämisen politiikka ja sosiaaliturva. Vaajakoski: Gummerus.
- Heikkilä & Karjalainen (eds.). 2000. Köyhyys ja hyvinvointivaltion murros. Helsinki: Gaudeamus.
- Jokinen. 2005. Aikuisten arki. Helsinki: Gaudeamus.
- Karisto (ed.). 2005. Suuret ikäluokat. Tampere: Vastapaino
- Niemelä & Lahikainen (eds.). 2000. Inhimillinen turvallisuus. Tampere: Vastapaino.
- Raunio. 2006. Syrjäytyminen: sosiaalityötä kiinnostavia näkökulmia. Helsinki: Finnish Federation for Social Welfare and Health.
- Salmi & Lammi–Taskula (eds.). 2004. Puhelin, mummo vai joustava työaika? Työn ja perheen yhdistämisen arkea. Helsinki: Stakes.
- Isola, Larivaara & Mikkonen (eds.). Arkipäivän kokemuksia köyhyydestä. Helsinki: Avain.
- Bardy, Barkman & Janhunen (eds.). 2000. Elämäni tarina. Lukemisto lapsuuden kokemuksista lastenkodissa ja perhehoidossa. Helsinki: Sosiaali– ja terveysalan tutkimus– ja kehittämiskeskus.
- Komppa. 2001. Minä olen. Jyväskylä: Atena.
- Korhonen. 2003. Kahden ja yhden yön tarinoita. Turku: Sammakko.
- Rantala. 2005. Optimisti: äänetön monologi. Helsinki: Like.
- Sahlberg. 2001. Eksyneet. Helsinki: WSOY.
- Salonen. 2006. Enkelit eivät itke. FinnEpos.
- Hilkamo (ed.). 2007. Toimeentuloturva 2007. Lakisääteinen sosiaaliturva ja vapaaehtoiset vakuutukset.

Learning Methods

Workshop: lectures, discussions, group assignments during lessons, guest speakers. Learning assignment completed in advance.

Assessment

The assessment consists of the following parts: assignment (before the course), participation in workshop, the output of the workshop, independent assignment, participation in the learning circle.

Ageing in life course, 9 op KF08BHO0710 (study unit)

Lecturers

Riitta Ranta, MSc (Health)

Objectives

After successfully completing the course, students will be able to formulate their personal opinion about aging as an individual, community-based and society-bound phenomenon. They will understand old age as a unique phase of life. They will also understand the factors and evironments that affect how aging is experienced, the everyday abilities of the elderly, their social participation and living conditions. Students will have a positive attitude toward the elderly as individuals, members of a family and as citizens. They will be familiar with the network of services available to the elderly and know which services are appropriate for each individual case. Students will be competent in obtaining information and purposefully learning about aging, and they will be able to evaluate their learning as an individual and as the member of a team.

Content

- Concepts associated with old age
- Understanding of old age
- Aging
- Living environment, ways of living
- Daily activities of the elderly
- Elderly lifestyles
- Hobbies of the elderly and social support
- Illnesses, e.g. dementing diseases
- Death and dealing with death
- Elderly and social security services

Literature / Study Material

ops.seamk.fi - Study Guide - Seinäjoki University of Applied Sciences

- Heikkinen & Marin (eds.). 2002. Vanhuuden voimavarat. Helsinki: Tammi.
- Lyyra, Pikkarainen & Tiikkainen (eds.). Vanheneminen ja terveys. Edita: Helsinki. (pp. 1–214).
- Huovinen (ed.). 2004. Muistihäiriöt. Helsinki: Duodecim: Association of Finnish Pharmacists.
- Kurki. 2007. Innostava vanhuus: sosiokulttuurinen innostaminen vanhempien aikuisten parissa. Helsinki: Finlectura.
- Lakisääteinen sosiaaliturva ja vapaaehtoiset vakuutukset. Helsinki: Edita.
- Additional material provided by the lecturer

Learning Methods

- Assignment in advance
- Workshops
- Lectures,
- Guest speakers
- Learning circles
- Field trips
- Independent study
- Small–group work
- Journal

Assessment

Assignment given in advance, test on social welfare subsidies, active participation in workshop, learning circle, journal. Grading based on a scale of 1–5.

Disability and handicap in the life course, 9 op KF08BH00810 (study unit)

Lecturers

- Kristiina Järvi, MSSc
- Marja-Liisa Saariaho, MSSc

Objectives

Students will be familiar with the concept of disability from following perspectives: mental disabilities, sensory disabilities, physical diabilities and communication disorders. Students will be competent in analysing and defining the processes that enhance welfare and social participation, and they will be familiar with the processes that may cause problems and marginalisation. Students will be competent in dealing with people with disabilities, and they will understand the concept of being different from the point of view of the individual, the community and the society. Students will be familiar with the social welfare benefits available to people with disabilities and how to allocate them.

Content

- Mental, sensory and physical disabilities
- Communication disorders
- Impact of disability on one's life
- Socialization, divergence and social participation
- Rehabilitation, special education, social welfare benefits

Literature / Study Material

• Malm, Matero, Repo & Talvela. 2004. Esteistä mahdollisuuksiin: vammaistyön perusteet. Helsinki: WSOY.

One of the following:

- Lehtinen 1993. Aikuiskasvatuksen suunnitelma NOVA. Jyväskylä: Kasvatustieteiden tutkimuslaitos. OR
- Määttä 1999. Perhe asiantuntijana. Jyväskylä: Atena.

One of the following:

- Alatalo 1999. Olen ja saan sanoa. Porvoo Helsinki Juva: WSOY. OR
- Leijonaemojen tarinat. 2005. Helsinki: WSOY. OR
- Kuusisto 1998, Sokeiden planeetta. Helsinki: Otava. OR
- Mattus 2000. Luopuminen. Jyväskylä: PS –kustannus.

One of the following:

• Kerola 2000. Autismikuntoutus. Jyväskylä: PS-kustannus. OR

- Gillberg 2001, Nörtti, nero vai normaali. Aspergerin oireyhtymä lapsilla, nuorilla ja aikuisilla. Jyväskylä: Atena: PS-viestintä- OR
- Ikonen (ed.). 1999. Autismi, teoriasta käytäntöön. Jyväskylä: Atena.
- Hilkamo (ed.). 2006. Toimeentuloturva. Lakisääteinen sosiaaliturva ja vapaaehtoiset vakuutukset. Helsinki: Edita.

Other literature:

- Ladonlahti & Naukkarinen & Vehmas (eds.). 1998. Poikkeava vai erityinen? Erityispedagogiikan monet ulottuvuudet. Jyväskylä: Atena
- Lepistö & Peltonen. 2006. Silmänräpäys. Helsinki: Otava.
- Luoma. 2005. Älä itke kumijalka. Untamala.
- Sariola J. 2002. Hyväosainen. Helsinki, Ryttylä: Uusi tie
- Other materials assigned during the workshop

Learning Methods

Assignment in advance, workshops and working in small groups, independent assignments, learning circles, guest speakers, lectures, co-operative tasks, field trips, journal.

Assessment

Assignment (before the course), independent assignment, active participation in workshop, journal. Grading based on a scale of 1–5.

Substance abuse and criminal behaviour, 9 op KF08BH00910 (study unit)

Lecturers

- Tiina Kohtamäki, MA (Edu.)
- Anna-Kaarina Koivula, MSSc

Objectives

Upon completion of the course, students will be familiar with the abilities of individuals to function and social participation from the perspective of substance abuse and criminal behaviour. They will be competent in analysing the causes and effects of substance abuse and the consequences it has on an individual's behaviour in the community and in the society. Students will be trained in critical and analytical observation and information acquisition as well as in reflecting on their own understanding of substance use and abuse, and crime. They will also be familiar with the social welfare benefits that pertain to substance users and how those benefits can be applied. Students will be familiar with the principles of criminal care.

Content

• Analysing the individual's relationship to society using the following concepts: deviation, marginalization, sub-culture legality, illegality, criminal behaviour drugs, causes and effects of substance abuse and criminal behaviour from the perspective of the individual, community and society probation, care and rehabilitation, social welfare benefits

Literature / Study Material

- Laitinen & Kaukonen. 2005. Rikollisuus ja kriminologia.
- Andersson (ed.). 2001. Apua ja hoitoa päihteitä käyttäville vauvaperheille. Helsinki: Ensi- ja turvakotien liitto. OR
- Huoponen, Peltonen, Mustalampi & Koskinen–Ollonqvist. 2001. Päihteiden käytön ehkäisy. Opas koulujen ja sidosryhmien yhteistyöhön. Helsinki: Ministry of Education. Stakes: Terveyden edistämisen keskus. OR
- Leskinen. 1999. Koukussa lapseen: irti koukusta: riippuvuus perheen näkökulmasta. Helsinki: Kirjayhtymä. OR
- Piisi (ed.). 2001. Huumetyö. Helsinki: Tammi. OR
- Salasuo. 2004. Huumeet ajankuvana: huumeiden viihdekäytön ilmeneminen Suomessa. Helsinki: Stakes. OR
- Salminen & Toivonen (eds.). 2002. Vankeinhoidon perusteet. Vankeinhoidon koulutuskeskus 4/2002
- Hilkamo (ed.). 2008. Toimeentuloturva 2008. Lakisääteinen sosiaaliturva ja vapaaehtoiset vakuutukset. Helsinki: Edita.
- Lund. 2006. Torjuttu toivottomuus. Jyväskylä: PS -kustannus.

Learning Methods

- Workshop: problem-based learning, co-operative learning, guided learning, independent study, working in small groups, discussions, guest speakers
- Assignment in advance

Assessment

The grade for the course consists of following parts: assignment based on literature, independently searching for information, group work, discussions and summaries produced in groups, learning assignment (given before the course). Grading based on a scale of 1–5.

Childhood and youth from the perspective of substance abuse, 9 cr KF08BHO1200 (study unit)

Lecturers

Helena Järvi, MSSc

Objectives

Students will be familiarized with the growth, development, socialization and social welfare of children and young people, especially from the perspective of substance abuse. They will be capable of analysing and defining, from the perspective of substance abuse, the processes in society that support or hinder favourable development, e.g. lifestyle, youth culture, economical and political changes, drugs and alcohol policy. Students will be competent in recognizing needs of support arising from substance abuse of children and young people or their parents and the services available to them. Students will also have learned how to set goals for the professional activities.

Content

- Dependancy, intoxicants, use and misuse of substances
- Statistics
- Historical and cultural patterns of substance use
- Alternative policies concerning substances
- Children in substance abusive families
- Factors influencing substance abuse behaviour
- Ways to become free of substance abuse
- Different treatment ideologies

Literature / Study Material

- Caan & de Belleroche. 2002. Drink, Drugs and Dependence. London: Routledge. (partly)
- Beckett. 2003. Child Protection: An Introduction. London: Sage. (partly)
- Material given by teacher

Learning Methods

Field trips, individual assignments, lectures, working in small groups, searching for information independently

Assessment

Accomplishing individual and group tasks, active participation in the workshop. Grading is based on a scale of 1–5.

Languages of Instruction English

Contemporary society in theoretical frameworks, 3 op KF08BHO1010 (study unit)

Lecturers

Katariina Perttula, MSSc

Objectives

Upon completion of the course, students will be familiar with current social concepts related to the construction of a relationship between the individual, community and society. They will be competent in analysing cultural and social phenomena to understand the connections between change in society and the politics of life. Students will also be competent in utilising the theories associated with social work in their profession.

Content

Main concepts and themes are: individualization, life politics, community, reliability and social capital

Literature / Study Material

- Hoikkala & Roos (eds.). 1998. Elämänpolitiikka. Helsinki: Gaudeamus.
- Ilmonen. (ed.). 2002. Sosiaalinen pääoma ja luottamus. Jyväskylä: Jyväskylän Yliopisto: Kampuskirja
- Ruuskanen. (ed.). 2002. Sosiaalinen pääoma ja hyvinvointi.

Learning Methods

Introductory lectures, working in small groups, independent assignment and exam

Assessment Active participation in all parts of the course. Grading based on a scale of 1–5.

Psychosocial and interactive social work methods, 30 op KF08BPS0 (study entity)

Objectives: Students will possess basic knowledge of social work, its functions in society and different social work orientations. They will be competent in placing psychosocial work in the frame of different work orientations in social work. Students will have facilities to act in a goal–oriented way in situations with clients, to use interactive methods and to evaluate the work process. They will recognize that client–based and citizen–based orientation are the starting point for working methods. Students will also develop their profession and make it visible. They will also be able to put the theory they have learned into practice in the area of social welfare they have chosen. Students must choose two of the following courses to be included in their professional studies: Social Rehabilitation, Basic Social Security and Social Work, Social Work with Elderly People, or Early Childhood Education.

Basics of social work, 3 op KF08BPS0110 (study unit)

Lecturers

- Arja Haapaharju BSSc (AS13 and 15b)
- Marja–Liisa Saariaho, MSSc (15a and 15c)

Objectives

Upon completion of the course, students will be competent in constructing a multidisciplinary knowledge base within social work. They will be familiar with the more important theories of social work, developmental stages and job orientations. They will also be acquainted with a citizen–based and community–based approach to work.

Content

- Scial work theories and developmental phases
- Citizen-based and community-based approach to work

Literature / Study Material

- Raunio. 2004. Olennainen sosiaalityössä. Tampere: Gaudeamus Kirja Oy
- Laitinen & Hurtig. 2002. Pahan kosketus: ihmisyyden ja auttamistyön varjojen jäljillä. Jyväskylä: PS –kustannus. pp. 18–41.
- Juhila. 2006. Šosiaalityöntekijöinä ja asiakkaina: sosiaalityön yhteiskunnalliset tehtävät ja paikat. Tampere: Vastapaino. pp. 103–149.
- Sosionomin (AMK) ydinosaaminen. Sosiaalialan ammattikorkeakoulutuksen verkosto 2001.

Learning Methods

Lectures, learning circle, analysis of one's personal knowledge base, exam

Assessment

Active participation in all parts of the course, exam. Evaluation is based on a scale of 1 to 5.

Psychosocial work, 3 op KF08BPS0210 (study unit)

Lecturers Mirva Siltakorpi, MSSc

Objectives

Upon completion of the course, students will be familiar with the concept of psychosocial work. They will have command of the psychosocial approach to work and know how to apply that approach to various situations with clients. Students will be competent in planning, implementing and evaluating the process of goal–oriented work with clients. They will have advanced knowledge of the relationship between psychosocial work and the underlying theories of social work and the use of various methods in working with clients.

- Central concepts, work methods and theories
- Psychosocial work
- Goal-oriented social work process: planning, implementation and evaluation
- Evaluation of the impact of the client work process

Literature / Study Material

- Rostila I. 2001. Tavoitelähtöinen sosiaalityö. Voimavarakeskeisen ongelmanratkaisun perusteet. Jyväskylä: Kopijyvä Oy.
- Additional material assigned by the teacher

Learning Methods

Lectures, group work, drama, guest speakers

Assessment

- Assessment criteria to be announced at the beginning of the course
- Grading based on a scale of 1–5

Family work, 4 op KF08BPS0410 (study unit)

Lecturers

Eeva-Kaija Martin, MA (Edu.)

Objectives

Students will have command of solution–based, family–centered orientation to working and the principles, processes and work methods of the mentioned orientation. Upon completion of the course, students will be able to apply solution–based orientation in negotiations with clients and understand the concepts and practices of working with families, with particular emphasis on child protection. They will be competent in working as social workers and use co–operative methods in their work with families.

Content

- · Solution-based methods of working
- Role of the professional in solution-based work
- Co-operative relationships with clients
- Setting objectives for work
- Change-oriented negotiations
- Concepts of family, family work, and social worker
- Working as a professional support person
- Active methods in family work

Literature / Study Material

- Reijonen (ed.). 2005. Voimaa perhetyöhön. Arjen tuki ja ammatilliset verkostot. Jyväskylä: PS –kustannus. pp. 43–119.
- www.lastensuojelunkasikirja.fi
- Heino T. Lastensuojelun avohuolto ja perhetyö: kehitys, nykytila, haasteet ja kehittämisehdotukset. Online: http://www.stakes.fi/julkaisut/verkkojulkaisut/työpapereita 2008
- Helminen. 1999. Vanhemmuuden roolikartta: käyttäjän opas. Helsinki: Suomen Kuntaliitto.
- Additional material assigned by the teacher

Learning Methods

Lectures, group work, assignments, guest speakers and field trips

Assessment

- Assessment criteria to be announced
- Grading based on a scale of 1–5

Case management, 4 op KF08BPS0510 (study unit)

Lecturers Kristiina Järvi, MSSc

Objectives

Upon completion of the course, students will possess advanced knowledge of case managemet and the principles abided by in the process. They will be competent in evaluating a client's need for services and planning how the services could be integrated and monitored with regard to local opportunities. Students will also be competent in identifying the role and course of action to be applied at different stages in the case management process. Moreover, they will also possess facilities in promoting the implementation of planned services in co–operative networks and have command of the principles of networking and its practices.

Content

- Concepts and traditions of case management
- Client-based evaluation of the client's needs
- Integration of services and crossing sector borders
- Continuity of services
- Identification of a client's social networks
- Courses of action in networking and use
- Techniques involved in networking

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, group work, independent assignments, guest speakers

Assessment

Evaluation is based on a scale of 1 to 5 and comprises an exam based on literature and materials distributed during lectures (2/3), and an independent assignment (1/3).

Elementary education in day care, 3 op KF08BPS0610 (study unit)

Lecturers Tiina Jutila, MSSc

Objectives

Students will be competent in promoting a child's growth, development and learning in various early childhood educational situations. They will be familiar with the practices and procedures associated with early childhood education. They will understand the perpsective of social work in multi–professional work communities.

Content

- Interactive and goal-oriented processes in early childhood education
- Guidelines dictating early childhood education
- Supporting families' educational work, i.e. parenting partnerships
- Daycare as an environment for early childhood education
- Multi professional co-operation in daycare

Literature / Study Material

- Kupila (ed.). 2004. Arvioidaan yhdessä. Näkökulmia arviointiin varhaiskasvatuksessa. Helsinki: Tammi.
- Varhaiskasvatussuunnitelman perusteet. 2005. Helsinki: Stakes.
- Additional material assigned by the teacher

Learning Methods

Lectures, excercises, group work, self-evaluation

Assessment

Grading based on a scale of 1-5: exam and active participation in all parts of the course

Prerequisites

Participation in the Childhood and Adolescence as Stages of Life workshop or reading the literature set for the workshop as an elective course is recommended.

Social work with elderly people, 3 op KF08BPS0710 (study unit)

Lecturers Riitta Ranta, MSc (Health)

Objectives

Students will be familiar with the sociocultural framework and theories associated with the promotion of well-being, abilities and social participation of the elderly. They will possess advanced knowledge of the methods used in working with elderly people, and they will be motivated to apply those methods to their work.

Content

- Sociocultural framework of social work with elderly people
- Approaches to work based on clients' needs and abilities
- Preventive and rehabilitative approaches
- Gerontologic social work and social service work
- Memory activating methods and other expressive methods
- Validation method in dementia, problems with hearing

Literature / Study Material

- Marin & Hakonen 2003. Seniori- ja vanhustyö arjen kulttuurissa. Jyväskylä: PS-kustannus.
- Lumijärvi (ed.). 2007. Tunteva yksilö yhteisössä. Terapeuttisen yhteisöhoidon periaatteet ja validaatiomenetelmä sopimusvuorisäätiön dementiakodissa.
- Seppänen, Karisto & Kröger (eds.). 2007. Vanhuus ja sosiaalityö: sosiaalityö avuttomuuden ja toimijuuden välissä. Jyväskylä: PS –kustannus. pp. 69–91, 253–269.

Learning Methods

Lectures, guest speakers, group work

Assessment

Learning circle, group work, presenting the group work. Grading based on a scale of 1–5.

Prerequisites

Participation in Aging and the Course of Life course or reading the literature required for it as an elective

Social work in social welfare agencies, 3 op KF08BPS0810 (study unit)

Lecturers Arja Haapaharju, BSSc

Objectives

Upon completion of the course, students will be acquainted with the work carried out in social welfare offices, the Social Insurance Institutions of Finland and employment service agencies. They shall also be acquainted with the most essential features of working in social security agencies, e.g. legislation, norms and standards, and means-testing. They will be capable of determining and applying the most important services and allowances and basing their decisions on regulations. Students will understand the character of the work in social security services from the point of view of the professional.

Content

- Essential features of good service
- Motivating discussions in working with clients
- Dealing with an aggressive client
- Benefits and services associated with various sectors using examples

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods Lectures, groupwork, field trips, guest speakers, independent assignment

Assessment Active participation in all parts of the course. Evaluation is based on a scale of 1 to 5.

Social rehabilitation, 3 op KF08BPS0910 (study unit)

Lecturers Marja–Liisa Saariaho, MSSc

Objectives

Upon completion of the course, students will be familiar with the area of social rehabilitation and as part of the realm of rehabilitation activities. Moreover, they will understand the significance of social rehabilitation, its goals, the processes involved in it, and the ways it can be applied to various fields.

- Social rehabilitation as rehabilitative work
- Rehabilitation process
- Client-based rehabilitation process
- Connection between rehabilitation and the individual, community-based and society-bound processes
- Social welfare enterprises

Literature / Study Material

- Järvikoski & Härkäpää. 2004. Kuntoutuksen perusteet. Helsinki: WSOY.
- Karjalainen & Vilkkumaa (eds.). 2004. Kuntoutus kanssamme: ihmisen toimijuuden tukeminen. Helsinki: Stakes.

Learning Methods

Lectures, assignments, field trips, co-operative learning, exam.

Assessment

Active participation in all areas of the course. Grading based on a scale of 1–5.

Practical field period: Psychosocial and interactive social work methods, 10 op KF08EPS1010 (study unit)

Lecturers

Lecturers in the social sector

Objectives

Students will have command of psychosocial and interactive social work skills, especially from the perspective of the practical training organisation they have chosen. Students will possess profound understanding of the meaning of goal–oriented and client–based social work. They will have the facilities to evaluate the effects of various approaches to work from the clients' perspective. Students will also be capable of supporting and guiding clients in an interactive and goal–oriented relationship, and promoting their growth and development. Students will be able to identify personal, community–based and society–bound processes associated with the clients' situation.

Content

- Professional, interactive relationships
- Surveying clients' social situation and their needs for support
- Planning, implementation and evaluation of client-based social-service processes

Students will do their practical training in the area of the social sector relevant to their studies.

Literature / Study Material

Practical training guidebook (in Finnish): http://intra.epedu.fi/sosiaali- ja terveysala/Kampus/Harjoittelu

Learning Methods

Introductory lectures, practical training, assignments, feed–back discussions. The Analysis of Contemporary Social Work Practices course is combined with an independent assignment pertaining to the practical training.

Assessment

Pass/Fail. Assessment is based on the student's personal objectives and he objectives expressed in the curriculum.

Prerequisites

Participation in the workshops pertaining to the area of the students' chosen social sector.

Community work and creative methods, 26 op KF08BYL (study entity)

Objectives: Students will be competent in stregthening the welfare, coping strategies and social participation of their clients through group work, community work and creative methods. Students will know how to choose approaches appropriate for the needs and abilities of group members and guide groups and communities in a goal–oriented way. They will possess co–operative and creative skills to plan communal and creative activities in the form of projects. They will be competent in working in projects, making decisions, organising activities in projects, carrying out projects and evaluating them. Students will develop the communal and creative aspects of their profession and make them more transparent. Students will apply the theory they have learning in to practice during their practical training in their chosen social welfare sector.

Creative activities 1, 4 op KF08BYL0800 (study unit)

Lecturers

- Tiina Kohtamäki, MA (Edu.)
- Riitta Laru, LA

Objectives

Upon completion of the course, students will possess adept skills in arts and crafts and theatrical expression. They will understand how the process of creativity progresses and the methods to use in that process. Students will adopt goal–oriented methods of working, recognise their personal creative strengths and be motivated to develop them. They will be familiar with the significance of creativity as a catalyst in developing one's self–image and –confidence. Students will be competent in applying the knowledge they have learned into practice.

Content

- Various forms of theatrical expression: verbal and non-verbal expression, interactive methods, making contact, motion, senses and emotions
- Stage fright
- Team work skills
- Improvisation and expression
- Handicraft techniques, materials and tools. e.g. using paper, thread and textiles, wood and clay, felting
- Motivation and activation

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Excercises, experiments and production of a small-scale piece of work, activating learning methods, learning by experience, theatre visits

Assessment

- Excercises and assignments (80%) and journal (20%)
- Grading: pass/fail

Creative activities 2, 4 op KF08BYL0900 (study unit)

Lecturers

- Arto Juurakko, MA
- Tiina Kohtamäki, MA (Edu.)
- Riitta Laru, LA

Objectives

Upon completion of the course, students will have a comprehensive understanding of illustrative expression and music. They will advance their creative skills and recognise ways to utilise creative methods in social work in a goal–oriented way. Students will understand how the creative process proceeds from the point of view of the professinal and the client. They will be aware of the ir creative strengths and be motivated to develop them. They will also understand creativity as a catalyst in strengthening their self–image and –confidence.

Content

- Illustrative expression: from idea to illustrative expression, e.g. drawing, painting, graphics, serigraphy, mixed techniques, paper pulp techniques
- Theatrical expression: theatre-based methods applied to social work. Process-based drama used as enhancer of learning and participation
- Music: opportunities to use music as method of creative social work

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Excercises, discussions, journal, theatre visits, exam

Assessment

- Evaluation of the various parts of the course
- Active participation on all parts of the course required
- Grading based on a scale of 1–5

Prerequisites Creative Methods I

Project work, 3 op KF08BYL0510 (study unit)

Lecturers

- Anu Aalto, MSSc (group 15a)
- Elina Kangasluoma, MSSc (groups 14b, 14c, AS13)

Objectives

Upon completion of the course, students will be familiar with the characteristic features and role of project activities in the innovation and development of the social welfare field. They will understand the principles of project organisation, the importance of planning and the process of project work, including planning, networking, setting goals, implementation and evaluation. Students will be prepared to carry out projects as a method in social work, and they will identify the capacities professionals in social work need for project work.

Content

- Concepts of project and project organization
- Special characteristics of projects in the social welfare sector
- Financial resources
- Planning, stages and process of projects, and evaluation

Literature / Study Material

- Anttila. 2001. Se on projekti -vai onko? Kulttuurialan tuotanto- ja palveluprojektien hallinta. Akatiimi.
- Other materials assigned by the teacher

Learning Methods Contact teaching, project plan

Assessment

Active participation in all parts of the course. Grading based on a scale of 1–5.

Social work with groups, 3 op KF08BYL0610 (study unit)

Lecturers

- Kerttu Veikkola, MSSc (groups 13b, 13c, AS12)
- Marja–Liisa Saariaho, MSSc (group 15a)

Objectives

Students will be familiar with group work as a method of social work, basic skills of supervising small groups and group dynamics. They will be aware of the significance of group process as regards supervision of a group. Students will possess readiness in applying their group work skills in supervising various groups in social work, such as peer groups, therapeutic groups and activity groups. They will be competent in promoting individuals' ability to function through group work.

Content

- Group work as a method of social work
- Group dynamics, developmental stages of a group, functions of a group
- Peer groups, therapeutic groups, activity groups
- Role of the supervisor in a group
- Supervising a group

Literature / Study Material

- Jauhiainen & Eskola. 1994. Ryhmäilmiö. Porvoo Helsinki Juva: WSOY
- Niemistö Raimo 2002. Ryhmän luovuus ja kehitysehdot. Helsinki: Palmenia-kustannus.

- Novitskij. 2003. Elämäntaitoja ryhmätyönä: kuntoutusmalli nuorille huumeidenkäyttäjille. Diakonia University of Applied Sciences publication B, report 17.
- Vuorinen. 1998. Juttukeppi kiertämään: kokemuksia oma-aputoiminnasta vuosilta 1994–1997. Finnish Central Association for Mental Health.

Learning Methods

Drama exercises, interactive exercises, lectures, discussions, group supervision exercises

Assessment

Exam (80 %) and group supervision assignment (20 %). Grading based on a scale of 1–5.

Community work, 3 op KF08BYL0710 (study unit)

Lecturers

Arja Haapaharju, BSSc

Objectives

Upon completion of the course, students will have command of the foundations of community work and community activation. They will understand the connection between the theory of social pedagogy and community work, and they be competent in applying sociocultural activation approaches to community work. Students will be competent in estimating community resources and the needs for community activation. They will possess skills in initiating, implementing, and evaluating community work.

Content

- · Community work as working method
- Basics of social peadgogy
- Sociocultural activation and community activation
- Practical applications of community work

Learning Methods

Lectures, group work and assignments completed in the group

Assessment Group assignment (80 %), journal (20 %). Grading based on a scale of 1–5.

Practical field period: Community work and creative methods in social work, 9 op KF08EYL0810 (study unit)

Lecturers

Groups 13b and 13c

- Anu Aalto, MSSc
- Riitta Laru, LA
- Kerttu Veikkola, MSSc

Groups AS12 and 15a

- Tiina Kohtamäki, MA (Edu.)
- Elina Kangasluoma, MSSc
- Marja-Liisa Saariaho, MSSc

Objectives

Students will gain experience in supervising groups and responsibly carrying out a project. They will have command of planning, implementing and evaluating projects in the field of social services where they utilise creative, group and communal approaches. Students will be competent in activating groups and communities, within organisations and between organisations. The will understand the significance of being able to recognise the needs and resources of a participating group and using that knowledge to initiate activities.

- Preparing an action plan with co-operating bodies and implementing it in a goal-oriented way and, finally, evaluating the process
- Community work, group work and creative methods e.g. in client groups, social service units, residential communities or in work communities
- · Organising activities in project form and making realistic plans, i.e. procedures and schedules

Literature / Study Material

Practical training guidebook (in Finnish): http://intra.epedu.fi/sosiaali- ja terveysala/Kampus/Harjoittelu

Learning Methods

Introductory lectures, practical training, assignments, feedback sessions

Assessment

Pass/fail: Assessment is based on the student's personal objectives and the objectives expressed in the curriculum.

Prerequisites

Completion of the Project Work course

Organizing, managing and developing social services, 27 op KF08BOK (study entity)

Objectives: Students will possess readiness to evaluate social welfare units as a part of the Finnish social welfare system and to understand how legislation, official guidelines and resources influence their functions. Students will be competent in organising and supervising social welfare services, recognising arising issues in personnel management, and evaluating quality development and social service processes. They will be familar with the significance of assessing and analyzing the needs of client groups in developmental work. Moreover, they will be competent in exhibiting their expertise in co-operating networks. Students will understand the framework of entrepreneurship in social services and address questions pertaining to the production of services and comptetition between service producers. Students will apply the theory they have learned into practice in practical training in their chosen area of the social sector.

Organizing social services, 3 op KF08BOK0110 (study unit)

Lecturers

Groups 13a and AS12

- Anna-Kaarina Koivula, MSSc
- Marja–Liisa Saariaho, MSSc
- Sinikka Volanto, MA (Pol. Sc.)

Groups 13b and 13c

- Elina Kangasluoma, MSSc
- Tiina Kohtamäki, MA
- Sinikka Volanto, MA Pol. Sc.)

Objectives

Upon completion of the course, students will be competent in determining the service needs of their clients. They will be familiar with the framework of service production, especially as regards financing. Students will be capable of considering the rights and responsibilities of clients and personnel when organising services. They will also abide by international, national, and local guidelines when organising such services. Students will also be competent in identifying the needs of various client groups and in supporting social participation.

Content

- Being a client
- Social services
- Social service organizations
- Organizational goals
- Business ideas
- Personnel
- Evaluation of service needs
- Support of social participation
- Financing services
- Recommendations, guidelines, policy programmes and legislation

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, excercises, independent and group assignments, individual and group discussions, online teaching, reflections based on literature, co-opetative learning. The course alternates between theory and practice.

Assessment

Students set goals for their learning and compile a portfolio, which contains their completed essays and other assignments. Active participation in all parts of the course is required. Grading is based on a scale of 1-5.

Development, quality management and evalution skills, 5 op KF08BOK0210 (study unit)

Lecturers

- Anna-Kaarina Koivula, MSSc
- Marja–Liisa Saariaho, MSSc
- Sinikka Volanto, MA (Pol. Sc.) (groups 13a and AS12)
- Elina Kangasluoma, MSSc
- Tiina Kohtamäki, MA
- Sinikka Volanto, MA (Pol. Sc.) (groups 13b and 13c)

Objectives

Upon completion of the course, students will possess the abilities to develop social welfare services and their quality and evaluate their efficiency. They will be familiar with the bodies that supervise and coordinate the development of services, as well as the methods used in development processes. Students will possess a profound understanding of the factors, which influence the quality of service. They will be able to identify various perspectives affecting the evaluation of service processes. Students will be competent in presenting their expertise to various multiprofessional networks. They will also possess the facilities to organize collaboration for supporting clients and developing services.

Content

- Methods used in development
- Evaluation of service processes
- Quality of services, examples of quality systems, quality evaluation
- Role of networks in developing services
- Co-operation in developing services

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, excercises, individual assignments and assignments done in small groups, online learning, reflections based on literature, and cooperative learning. The course alternates between theory and practice.

Assessment

Students set goals for their learning and produces a portolio, which comprises their completed essays and assignments. Active participation is required in all parts of the course. Evaluation is based on a scale of 1 to 5.

Management and leadership, 4 op KF08BOK0310 (study unit)

Lecturers

- Anna-Kaarina Koivula, MSSc
- Marja-Liisa Saariaho, MSSc
- Sinikka Volanto, MA (Pol. Sc.) (groups 13a and AS12)
- Elina Kangasluoma, MSSc
- Tiina Kohtamäki, MA
- Sinikka Volanto, MA (Pol. Sc.) (groups 13b and 13c)

Objectives

Upon completion of the course, students will have adopted extensive understanding of how social service organizations are supervised and how personnel administration is carried out. They will possess the facilities to take charge of supervising and organizing tasks, to develop the work community and their personal work process in a goal–oriented manner. They will also be able to identify the significance of occupational welfare and distinguish models for supervising work. Students will also be also aware of practices that promote cooperation.

- Supervision as a form of professional social–welfare work
- Personnel administration (coaching, mentoring, initiating new employees)

ops.seamk.fi - Study Guide - Seinäjoki University of Applied Sciences

- Development of the work community (work supervision, developmental discussions, cooperation)
- Development of one's personal work process and self-management

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

Lectures, excercises, independent assignments and assignments in small groups, online teaching, reflections based on literature, cooperative learning. The course alternates between theory and practice.

Assessment

Students set goals for their learning and produce a portfolio, which comprises their written essays and assignments. Active participation is required in all parts of the course. Evaluation is based on a scale of 1 to 5.

Entrepreneurship in social services, 3 op KF08BOK0400 (study unit)

Lecturers

Sinikka Volanto, MA (Pol. Sc.)

Objectives

Students will become familiar with the charasteristic features of entrepreneurship in social and health care services, the attitudes concerning entrepreneurship and the factors that define private social services. Students will possess competence in creating business ideas and action plans. They will also be familiar with entrepreneurial practices such as establishing a business, producing services, marketing the services and competition of service producers.

Content

- Entrepreneurship in social welfare services
- Elements of success in business, quality and development
- Attitudes concerning entrepreneurship
- Business ideas and action plans
- Entrepreneurial skills, establishing a company
- Licences, contracts of purchase, processes of competition
- Producing services, marketing the services, interest groups, networks and co-operation

Literature / Study Material

- Tenhunen. 2004. Yrittäminen sosiaali- ja terveysalalla. Järvenpää: Yrityssanoma
- Sinkkonen & Rissanen. 2004. Hoivayrittäjyys. PS-Kustannus.
- Yrityksen perustamisopas. Käytännön perustamistoimet (latest edition). Employment and Economic Development Centre.

Learning Methods

Assignments, guest speakers, field trips, online learning

Assessment

Active participation in all parts of the course is required. Grading based on a scale of 1-5.

Practical field period: Organizing, managing and developing social services, 12 op KF08EOK0410 (study unit)

Lecturers Groups 13a and AS12

- Anna-Kaarina Koivula, MSSc
- Marja–Liisa Saariaho, MSSc
- Sinikka Volanto, MA (Pol. Sc.)

Groups 13b and 13c

- Elina Kangasluoma, MSSc
- Tiina Kohtamäki, MA (Edu.)
- Sinikka Volanto, MA (Pol. Sc.)

Objectives

Upon completion of the course, students will possess sufficient skills in managing and supervising social welfare services, e.g. client work, expert teams and projects. They will be capable of developing services, which are based on

clients' needs. They will recognize the defining factors, which influence practices, e.g. objectives, resources, directions, personnel, clients. They will also be familiar with the quality control system used in the field. Students will possess the facilities to deal with situations associated with personnel administration, to co-operate in the organization and with collaborating networks. They will be able to hold negotiations and meetings and understand the importance of documentation. The course requires students to carry out a developmental assignment in which they learn responsibility for actions taken.

Content

- Structure and financing of social services organizations
- Official recommendations, guidelines and legislation
- Documentation
- · Quality control systems and contemporary developement projects
- Supervising, organising and developing services
- Personnel administration, occupational welfare and co-operation with various bodies, e.g. meetings at the workplace, negotiations, training
- Well-being in the work community

Literature / Study Material

- Practical training guidebook (in Finnish): http://intra.epedu.fi/sosiaali- ja terveysala/Kampus/harjoittelu
- Annual reports
- Budgets
- Planning documents
- National development programmes
- Quality control documents

Learning Methods

Introductory lectures, active participation at the workplace and according to set objectives, personal portolio, and feedback discussions

Assessment

The course is evaluated on a pass/fail basis, according to the students' personal objectives and the objectives described in the curriculum.

Prerequisites

Courses pertaining to psychosocial and interactive social work methods and the social sector

Empowerment methods in social work, 12 op KF08BVS (study entity)

Objectives: Students will have command of the principles of critical and radical social work and ways of empowering clients, and they will be familiar with the methods and practices associated with approaches to work. Students will understand the various forms of multiculturalism, and they will apply various practices to social work with ethnic group and minoroties. Students will have the opportunity to apply their knowledge of empowerment and work with people from various ethnic backgrounds during their practical training in the social welfare sector they have chosen, either in Finland or abroad.

Social work and multicultural groups, 3 op KF08BVS0130 (study unit)

Lecturers

- Helena Järvi, MSSc (groups AS12 and 15a)
- Anu Aalto, MSSc (groups 13b and 13c)

Objectives

Upon completion of the course, students will possess knowledge of the basic concepts related to intercultural communication and the main issues in Finnish immigration policy. They will be familiar with the more significant legislation and social services pertaining to immigrants, and they will have basic knowledge of Finland's ethnic minorities. Students will be aware of their own ethnic identity, its background and how it influences professional social work. Students will be motivated to enhance their cultural sensitivity, and they will understand the social issues related to globalisation and immigration.

- Concept of culture from the perspective of cultural interaction
- Acculturation

ops.seamk.fi - Study Guide - Seinäjoki University of Applied Sciences

- Cultural sensitivity, multiculturalism, ethnicity, ethnical and cultural identity, stereotypes, racism
- Features of Finnish identity
- Ethnical minorities in Finland, immigration as global phenomenon
- Immigration policy in Finland, its objectives and implementation
- Social work and cultural differencies

Literature / Study Material

- Huttunen (ed.). 1999. Sama taivas, eri maa: maahanmuuttajan tarina. Helsinki: Finnish Literature Society.
- Räty. 2002. Maahanmuuttaja asiakkaana. Tammi.
- Other material provided by the teacher

Learning Methods

Lectures, group discussions, written and video materials, group work and presentations, written reflection of one's learning process, participation in international activities arranged by the school

Assessment

Group work, reflection of one's personal learning and active participation in contact teaching. Grading based on a scale of 1-5.

Languages of Instruction Groups AS12 and 15a have the option to be taught in English.

Social work and multicultural groups, 3 cr KF08BVS112 (study unit)

Lecturers Helena Järvi, MSSc

Objectives

Upon completion of the course, students will understand and appropriately utilise the basic concepts of intercultural interaction. They will be familiar with the essential features of the Finnish immigrant and minority group policy, the laws and services concerning immigrants and cultural and ethnic minorities, and they will be competent in finding respective information about other countries and comparing different policies and the historical, social and global factors pertaining to them. Students will recognise the features of their own ethnic identity and background and the cultural codes that influence on interation between the client and social worker. Students will be motivated to develop their intercultural communication skills.

Content

- Basic concepts: cultural differences, cultural codes, discrimination, racism, acculturation, diversity, ethnicity, ethnic and cultural identity, multiculturalism, migration, refugees
- Ethnic minorities and the situation in Finland and in other countries, the minority and immigration policy in Finland compared to other countries
- Social work and cultural diversity

Literature / Study Material Articles assigned by the teacher

Learning Methods Lectures, group assignment, individual analysis of learning

Assessment

Group assignment, summary of a given article, analysis of one's learning, and active participation in the lectures

Critical and radical social work, 3 op KF08BVS0210 (study unit)

Lecturers

- Anna-Kaarina Koivula, MSSc and Päivi Rinne, MSSc (groups 13b and 13c)
- Kristiina Järvi, MSSc and Anna–Kaarina Koivula, MSSc (groups AS13 and 14a)

Objectives

Upon completion of the course, students will have command of the basic principles of critical and radical social work, they will be competent in applying methods of empowerment and introducing clients' perspectives in social work activities. Students will recognise the individual, community–based and society–bound factors that cause marginalization or hinder equality and justice between different people. Students will also be competent in identifying, questioning and

preventing marginalizing practices, processes and structures.

Content

- Chritical and radical social work as social work orientation, principles and practices
- Social work practices associated with power, control and change and their impacts
- Practices, processes and structures that cause marginalization and discrimination, identifying them, breaking them down and changing them

Literature / Study Material

Students choose one book in Finnish and one in English from the following:

- Dahlgren et al. (eds.). 1996. Vähemmistöt ja niiden syrjintä Suomessa. Helsinki: Yliopistopaino.
- Juhila, Forsberg & Roivainen 2002. Marginaalit ja sosiaalityö. Jyväskylä: SoPhi.
- Helne. 2002. Syrjäytymisen yhteiskunta. Stakes research 123. Helsinki.
- Dalrymple & Burke. 1997. Anti–Oppressive Practice. Social Care and the Law. Buckingham: Open University Press.
- Fook. 2002. Social Work. Critical Theory and Practice. London, Sage.
- Gil. 1998. Confronting Injustice and Oppression. Concepts and Strategies for Social Workers. New York. Columbia University Press.

Learning Methods

Lectures, online teaching. The amount of lectures varies in different courses. The course is integrated into the Empowering Methods in Social Work.

Assessment

Grading is based on lectures, exercises, independent assignments and exam on a scale of 1–5.

Further Information

Students have the opportunity to begin the course at three different times during the 2008–2009 academic year. Students will be notified of registration for the course by e-mail.

Practical field period: Empowering methods in social work, 6 op KF08EVS0310 (study unit)

Lecturers Groups 13b and 13c

- Anna-Kaarina Koivula, MSSc
- Päivi Rinne, MSSc

Groups AS13 and 14a

- Kristiina Järvi, MSSc
- Anna-Kaarina Koivula, MSSc

Objectives

Students will have command of the principles, methods and practices of empowerment and know how to apply them in practice. They will be capable of evaluating goal-oriented actions based on individual, communal and societal factors that cause marginalisation, inequality and injustice among various people. Students will gain experience in social strengthening their clients and changing practices that promote marginalisation. Students will identify the structures, interests and contradictions associated with empowerment

Content

- Identifying and initiating needs for change
- Approaches of empowerment between the professional and the client
- Organisations and community actions
- Professional social work methods in empowerment

Literature / Study Material

Practical training guidebook (in Finnish): http://intra.epedu.fi/sosiaali- ja terveysala/Kampus/Harjoittelu

Learning Methods

Introductory lectures, practical training, assignments

Assessment

The grade for the course consists of approved completion of the introductory lectures, practical training and final report.

Grading is based on pass/fail basis according to the students' personal objectives and objectives expressed in the curriculum.

Prerequisites

Students are required to complete the Critical and Radical Social Work course either before they begin the practical training or while they are doing their practical training.

Social research, 28 op KF08BST (study entity)

Objectives: Students will demonstrate their knowledge in the basic skills of social research methods. They will understand their role as producer, user and analyser of knowledge. They will be familiar with the research methods used in various research reports. Students will acquire the capacity to think on an abstract level and know the basic rules of academic writing. They will possess facilities to perform research activities, to introduce practical knowledge and to develope their professional field using the methods of social research. Students will be able to identify needs for research and developement, define a set topic for research, choose the most suitable research methods for the task, implement the research plan in practice, report about their work and present the results of research and development activities.

People and community as source of information, 2 op KF08BST0110 (study unit)

Lecturers Katariina Perttula, MSSc

Objectives

Upon completion of the course, students will understand the significance of the information obtained from people and the community in developing professional methods and services. They will also understand the importance of the information that people of different ages in the community offer concerning their living conditions, well-being and social needs. Students will be competent in considering various methods for generating citizen-based knowledge. Students will acquire experience in obtaining information about well-being and be competent in analysing that information using an appropriately chosen research method.

Content

- Citizen-based social work
- Using citizen-based knowledge to develop services
- Concept of well-being and its dimensions
- Interviewing as the method of producing citizen-based knowledge

Literature / Study Material

To be announced at the beginning of the course.

Learning Methods

- Contact teaching
- Assignment for gathering information from a client or citizen
- Reflecting upon the interview experiences with other students
- Documentation of interview material

The course is integrated into the Qualitative Research Methods course.

Assessment

- Participation in contact teaching, assignment concerning client/citizen interview and a report about it
- Grading: pass/fail

Further Information R&D course

Qualitative research methods, 3 op KF08BST0210 (study unit)

Lecturers Katariina Perttula, MSSc

Objectives

Upon completion of the course, students will possess knowledge of the principles and processes of qualitative research as a research strategy. Students will identify the bases of qualitative research, and they will be able to evaluate the usage of

the special qualitative methods associated with the research topic. Students will possess the capacity to identify the research problem, and will have interiorized the use of various methods for analysing qualitative data, and be able to use them when analysing data. Students will also be able to formulate the knowledge arising from qualitative data into research results and report it in an appropriate way. They will also be able to evaluate the validity and application of the results.

Content

- Principles and processes of qualitative research
- Defining research problems and formulating research questions
- Various applications of qualitative research
- Thematic interview as a qualitative research method
- Various methos to use in analyzing qualitative research
- Reporting the results of qualitative research
- Research validity

Literature / Study Material

• Hirsjärvi& Hurme. 2000. Tutkimushaastattelu: Teemahaastattelun teoria ja käytäntö. Helsinki: Yliopistopaino.

Learning Methods

Lectures, excercises and exam, or alternatively a minor study with a group using material provided by the teacher. This course is integrated into the People and Community as Sources of Information course.

Assessment

Active participation in all parts of the course. Evaluation is based on a scale of 1 to 5.

Further Information R&D course

Quantitative research methods, 3 op KF08BST0310 (study unit)

Lecturers

Hilkka Latva–Somppi, MA

Objectives

Upon completion of the course, students will understand the basic concepts, research processes and the most common applications of quantitative research in social work. They will have command of the SPSS statistics programme as a tool in quantitative research and illustrate quantitative data using tables, parameters and graphics in the SPSS program. They will also be competent in using quantitative research methods in their thesis work and other areas of their studies, and they will possess skills in analyzing statistical dependencies between variables.

Content

- Features of quantitative research
- Research process and concepts, planning data acquisition
- Scales of variables
- Samples
- Analysing data with the SPSS program: frequency tables, cross tables, parameters, graphic presentations, and statistical tests

Literature / Study Material

- Heikkilä. 2008. Tilastollinen tutkimus. Helsinki: Edita.
- Holopainen. 2004. Tutkimusaineiston analysointi ja SPSS. Järvenpää: Yrityssanoma Oy.
- Ernvall, Ernvall & Kaukkila. 2002. Tilastollisia menetelmiä sosiaali– ja terveysalalle. Helsinki: WSOY.
- Vilkka. 2007. Tutki ja mittaa: määrällisen tutkimuksen perusteet. Helsinki: Tammi.
- Metsämuuronen. 2001. Metodologian perusteet ihmistieteissä. Helsinki: International Methelp.
- Metsämuuronen 2002. Tilastollisen kuvauksen perusteet. Helsinki: Methelp.
- Nummenmaa 2004. Käyttäytymistieteiden tilastolliset menetelmät. Helsinki: Tammi.
- Online materials

Learning Methods

Lectures, online learning (50 %), exercises

Assessment

Evaluation for the course is based on active participation in the lectures and online sessions, and completion of the online
assignments. Grading is based on a scale of 1 to 5.

Further Information R&D course

Action research, 2 op KF08BST0510 (study unit)

Lecturers Anu Aalto, MSSc

Objectives

Upon completion of the course, students will understand the target of development as a process where action and research are combined. They will be able to identify and set action research strategies, recognize the different roles of a developer and act accordingly. Students will possess knowledge of the action research process as a whole and the skills needed in setting and formulating realistic development tasks. Students will acquire knowledge of methods used in action research, and analyse, utilise, and present information and results, which are based on action research. Student will be able to use these skills in their thesis writing process and other activities related to research.

Content

- Setting the development task
- Discussing the various roles of researchers and developers
- Process of action research
- Action research methods and data
- Different ways to analyse action research data
- Conclusions, evaluation and reporting

Literature / Study Material

Heikkinen, Huttunen & Moilanen. 1999. Siinä tutkija missä tekijä. Toimintatutkimuksen perusteita ja näköaloja. Jyväskylä: Atena kustannus.

Learning Methods Lectures and/or assignments announced by the lecturer

Assessment Active participation in all parts of the curse. Evaluation is based on a scale of 1 to 5.

Further Information R&D course

Professional essay (Ps), 3 op KF08BST0600 (study unit)

Lecturers

Lecturers in the sector groups

Objectives

Upon completion of the course, students will possess in-depth knowledge about issues in the social sector as pertains to the area they have chosen to study. Students will also possess the skills necessary in choosing and defining subject matter relevant to their area of study and they will be able to acquire literature associated with the subject matter to produce an essay. Students will be competent in writing a logical, analytical essay about their chosen topic while applying theoretical knowledge. They will be able to produce factual texts, which combine literary sources of information and their own individual reasoning.

Content

- Choosing a topic to write about and defining it
- Obtaining information via various sources
- · Standards required for factual writing
- Writing essays
- Presentations and acting as an opponent

Literature / Study Material

The study material for the course is in Finnish and located online at: http://intra.epedu.fi/sosiaali- ja terveysala/Kampus/Ohjeita kirjoittamiseen

Learning Methods

Introductory lectures, compiling a professional essay, personal guidance and guidance in small groups, discussion of essays in small groups, peer reading, acting as an opponent. The study group's web-base will also be utilized. Teaching in the English group will be in English.

Assessment

Professional essay, active participation in discussions, acting as an opponent. Evaluation is on a scale from 1 to 5.

Prerequisites

Studies in the area of the social sector the student has chosen.

Further Information Course in R&D

Thesis, 15 op KF08BST0710 (study unit)

Lecturers

- Anu Aalto, MSSc
- Arja Hemminki, LSSc
- Katariina Perttula, MSS
- Päivi Rinne, MSSc
- Mirva Siltakorpi, MSSc
- Timo Toikko, PhD
- Kerttu Veikkola, MSSc

Objectives

Upon completion of the course, students will be competent in organising and carrying out research and development activities. Students will analyse and structure information arising in practical situations using various research methods and utilise the acquired information as the basis for their research and development activities. Students will also be competent in reporting their research results and applying those results in practice in the field of social work.

Content

- Determining the research problem or area of development
- Examining the research problem using concepts
- Drawing up a research plan or developmental plan
- Choosing methods, implementing the plan
- Organizing, directing and co-operating
- Reporting and evaluation
 - Acting as peer reader and opponent

Literature / Study Material

Seinäjoki University of Applied Sciences' Instructions for Writing a Thesis: http://intra.epedu.fi/sosiaali- ja terveysala/Kampus/ohjeita kirjoittamiseen

Learning Methods

Introductory lectures, individual supervision and supervision in small groups, seminars, acting as peer reader, independent work, Maturity Test

Assessment

Assessment for the course is based on participation individual and group supervision, active, independent work, preparation for thesis supervision, acting as a peer reader, seminar work, Maturity Test, approved report of the thesis process. Grading is based on a scale of 1 to 5.

Prerequisites Writing a Professional Essay

Further Information R&D course

General information for students

This section of the Study Guide contains general information about studies and services for students. For further information, please turn to teachers, student counsellors, international coordinators and the personnel at the Student Affairs Office and International Office.

- Living expenses
- Accommodation
- Meals
- Health care and social security
- Students with special needs
- Insurances
- Financial support for students
- Student support services and student counselling
- Premises and equipment
- International relations
- Practical information for international students
- Language courses
- Practical placements
- Free time and social activities
- Student Union SAMO

Living expenses

The Seinäjoki University of Applied Sciences does not charge any tuition fees. However, students have to cover their living expenses (accommodation, meals, free time and social activities). Students also have to pay for textbooks and other study material as well as travel between accommodation and faculty.

With the student card students can get some discount at the National Railways (VR), the Bus Transportation Company (Matkahuolto) and in some restaurants, department stores and smaller shops.

More information available concerning the international comparison of prices and costs of living expenses: www.stat.fi/til/kvhv

Accommodation

The Marttilan Kortteeri organisation offers housing services to students in Seinäjoki and also assists international students with their housing arrangements. Marttilan Kortteeri has several modern places of residence for students, consisting of one, two or three–room flats at moderate rent. The student flats are conveniently located and well equipped. There is an internet access in each accommodation. Also a joint gym, sauna etc. are available for the students. New students will be informed of the application procedure when they register at the institution. International students will be informed also by the international co–ordinators.

Notice that you have to pay the rental fee for an entire month even for periods shorter than a whole month. For further information, please turn to the Marttilan Kortteeri office, see the website or visit student affairs and international affairs offices.

Marttilan Kortteeri Office

Address: Puskantie 31 A FIN– 60100 Seinäjoki Telephone: +358 6 420 4800 E–mail: asuntotsto@marttilankortteeri.fi www.marttilankortteeri.fi

Internet connections are available in the Seinäjoki University of Applied Sciences' library (SeAMK Library), in the faculties, in some student flats and in Internet cafes in town.

The School of Agriculture and Forestry, Ilmajoki Unit provides its own student accommodation in the vicinity of the school. The apartments consist of four double rooms with a shared kitchen and bathroom. The shcool facilities are at students' disposal. These include a student restaurant, launderette, sports hall, fitness centre and sauna.

The School of Agriculture and Forestry, Ähtäri Unit (asuntola.tuomarniemi@seamk.fi) and the Business School, Kauhajoki Unit also offer student accommodation at a reasonable price.

The School of Culture and Design in Jurva offers student housing, both in the vicinity of the school and in the centre of the village.

Tuppiroska Oy provides accommodation for students of the Business School, Kauhava Unit. The dormitory comprises one and two-room flats as well as flats for several students, with a shared kitchen and bathroom, but single study/bed rooms. Tuppiroska Oy also rents out two-room flats in blocks of flats at a short walking distance from the school. www.tuppiroska.fi

Meals

Each institute has a student canteen that serves lunch at subsidized student prices. Student flats have kitchens where meals can be prepared.

Health care and social security

School health nurse and physician

Each of the faculties has a public-health nurse on duty on certain days of the week. Your tutor will inform you of the office hours. In Finland, a person with a health problem or injury must first go to the local municipal health centre (terveyskeskus) by making an appointment with a physician/medical doctor. Seinäjoki University of Applied Sciences has also its own physician with whom you can make an appointment through the school nurse. If there is a need for special treatment, a medical doctor in the health centre will write a referral to a specialist in a hospital (sairaala) in the City of Seinäjoki. If the matter is urgent you should go to the emergency (päivystys) at the health centre, which is open from early morning until late evening. The emergency at the hospital in the City of Seinäjoki is open during the night hours.

EU citizens are entitled to the same health care services as Finnish citizens. The health care centre in Seinäjoki charges about 11 euros per visit or a yearly payment of 22 euros.

If you come from an EU/ETA country or from Switzerland, you should bring a European Health Insurance Card with you. Students from the Nordic countries, who stay more than 6 months in Finland, must apply for the Inter–Nordic Migration Form. Students from other countries should consult embassies or consulates about the matter. Since September 1, 2007 international degree and exchange students coming from outside the EU/ETA countries need a health insurance of at least 100.000 euros for getting a visa, if they study in Finland for more than three months. The value of the insurance can be lower (60.000 euros) if the student stays in Finland for more than six months. We advise also exchange students and international degree students coming from the EU/ETA countries to have a private personal health insurance to cover unexpected injury, sickness, etc., also during their free time and travelling. Treating such injuries or illness can be quite costly in Finland.

Private medical doctors

There are various private clinics in the City of Seinäjoki and in other surrounding towns and municipalities. It costs about 50 euros to consult a private doctor. In the phone book private clinics are listed under the title 'lääkäreitä' (medical doctors). Appointments with private medical doctors are expensive as well as hospital fees. So, please check the coverage of your insurance.

Dentist

A municipal dental clinic is located in Seinäjoki in the K-house in the Campus area. Dental care is not free for students, but it is less costly at the municipal dental clinic than at private clinics. You will find a list of dentists in the phone book under the title 'hammaslääkäreitä' (dentists).

Pharmacies

Finnish pharmacies (apteekki) have an excellent range of medicines and other medical products available without prescription. Without prescription (resepti) you can buy e.g. mild painkillers, skin–care products, flu medicines and get help with many other minor disorders. However, to get a prescription, you must always make an appointment to see a medical doctor.

Psychologist

The Seinäjoki University of Applied Sciences offers psychologist services by appointment. Ms Pirkko Viitasaari Visiting address: Keskuskatu 32 I (Campus area I house) Tel.: +358 6 425 5582 pirkko.viitasaari@seamk.fi

Please ask for more information about health care matters from the school health nurse in your own faculty / unit.

The Seinäjoki University of Applied Sciences has a student insurance, which covers students while they study, also including practical placement, but not during their free time. Students who are planning an exchange period abroad are advised to check their insurance with the international coordinator of the faculty.

Students with special needs

As far as the facilities of the institution are concerned, more attention has been paid to the needs of physically impaired persons in the last few years. Foreign students with a physical disability planning to study at the Seinäjoki University of Applied Sciences should contact the personnel at the international affairs office in advance for information about the facilities available for studies and accommodation.

Insurances

The Seinäjoki University of Applied Sciences has insurance for students, which covers students while they study, also including practical placement, but not during their free time. Students who are planning an exchange period abroad are advised to check their insurance with the international coordinator of the faculty. All the needed documents are obtainable from the international co–ordinator of the faculty.

If you come from an EU/ETA country or from Switzerland, you should bring a European Health Insurance Card with you so that you can get the same health care services than the Finnish citizens. We also advise exchange and international degree students coming from the EU/ETA countries to have a personal private health insurance to cover unexpected injury, sickness, etc., also during their free time and travelling. Students from the Nordic countries, who stay for more than 6 months in Finland, must apply for the Inter–Nordic Migration Form.

Since September 1, 2007 international degree and exchange students coming from outside EU/ETA countries need a health insurance at least 100.000 euros for getting a visa, if they study in Finland for more than three months. The value of the insurance can be lower (60.000 euros) if the student studies in Finland for more than six months. Students from countries outside EU/ETA should consult embassies or consulates about this matter.

Financial support for students

International students are not eligible for the state financial aid. Students who are not citizens of Finland but live in Finland on a permanent basis for purposes other than studying are eligible for student financial aid. They must be registered as permanent residents in the Finnish population register system. The purpose of residency in Finland is determined by reference to such matters as the residence permit, registration or acceptance to an educational institution. Foreign residents must attach the OT 10 form to their application for financial aid.

For more information, please contact Ms Päivi Marjomäki, Secretary of the Board of Financial Support for Students, Seinäjoki UAS P.O. Box 412 (street address: Keskuskatu 34, 2nd floor, Campus building) FIN–60101 Seinäjoki Tel.: +358– 20 124 5008 Fax: +358 20 124 5022 opintotukilautakunta@seamk.fi

The home institution(s) of international exchange students may offer scholarships or other financial aid to them. The Seinäjoki University of Applied Sciences offers yearly ten scholarships for international students having their practical placement in the Seinäjoki region. Also some African students receive a grant from the national North–South–South Programme. The International co–ordinators and International Office will inform students concerning different types of

Student support services and student counselling

All of the teachers, tutoring students, international coordinators, Student Affairs Offices, International Office and libraries are responsible for student counselling and student support services. Student counselling is coordinated in the faculties by the student counsellors, international co-ordinators and teachers who are responsible for practical training.

Offices for students affairs

Every faculty and unit has its own Student Affairs Office, which offers services related to student admissions, enrolment, studies, study certificates, and financial aid. There are some variations in the offices' opening hours. Students must inform the Student Affairs Office of changes in address and other personal information. International exchange students must inform the international coordinator of changes in their personal information.

SCHOOL OF AGRICULTURE AND FORESTRY

Ilmajoki Unit (Agriculture) Ilmajoentie 525 FIN-60800 Ilmajoki Tel.: +358 20 124 5700 Fax: +358 20 124 5701 maa@seamk.fi Open: Monday-Friday 8 a.m.- 3:30 p.m.

Ähtäri Unit (Forestry) Tuomarniementie 55 FIN–63700 Ähtäri Tel.: +358 20 124 5800 Fax: +358 20 124 5801 metsa@seamk.fi

BUSINESS SCHOOL

Seinäjoki Unit Koulukatu 41 FIN–60100 Seinäjoki Tel.: +358 20 124 5400 Fax: +358 20 124 5401 liiketalous@seamk.fi Open: 9 a.m.–1:30 p.m. and every other Tuesday 4 p.m.–6 p.m.

Kauhava Unit P.O. Box 11/Kauppatie 109 FIN-62201 Kauhava Tel.: +358 20 124 5000 Fax. +358 20 124 5388 yrittajyys@seamk.fi Open: Monday-Friday 9 a.m.-11 a.m. and 12 p.m.-3 p.m.

Kauhajoki Unit (Food Management) P.O. Box 19/Topeeka 47 FIN-61801 Kauhajoki Tel.: +358 20 124 5600 Fax: +358 20 124 5601 ravitsemisala@seamk.fi Open: Monday-Friday 10 a.m.-2 p.m.

SCHOOL OF CULTURE AND DESIGN

kulttuuri@seamk.fi Jurva Unit (Design) P.O. Box 4/Kotikouluntie 1 FIN-66301 Jurva Tel.: +358 20 124 5900 Fax: +358 20 124 5901 Open: Monday-Thursday 11 a.m.-3 p.m., and Friday 10 a.m.-1 p.m. Frami Unit (Cultural Management) Kampusranta 9 A FIN-60320 Seinäjoki Tel.: +358 20 124 4946 Fax: +358 20 124 5986 Open: Monday-Friday 10 a.m.-12 p.m.

Törnävä Unit (Conservation) Törnäväntie 26 FIN–60200 Seinäjoki Tel.: +358 20 124 5312 Fax: +358 20 124 5337 Open: Monday–Friday 10 a.m.–2 p.m.

SCHOOL OF HEALTH CARE AND SOCIAL WORK

P.O. Box 158 FIN-60101 Seinäjoki *Keskuskatu Unit (Social Work)* Visiting address: Keskuskatu 32 E FIN-60100 Seinäjoki Tel.: +358 20 124 5100 Fax: +358 20 124 5101 sosiaali@seamk.fi Open: Monday-Friday ad. 12.15 p.m.

Koskenala Unit (Health Care) Visiting address: Koskenalantie 17 FIN–60220 Seinäjoki Tel.: +358 20 124 5157 Fax: +358 20 124 5151 terveys@seamk.fi Open: Monday–Friday 11:30 a.m.–1 p.m.

SCHOOL OF TECHNOLOGY

Frami Unit Kampusranta 9 A FIN-60320 Seinäjoki tekniikka@seamk.fi 1st floor A150.3 Tel.: +358 20 124 4950, Fax.: +358 20 124 4909 Open: Monday-Friday 8.45 a.m. - 12.15 p.m. 3rd floor A310.8 Tel.: +358 20 124 4903, Fax.: +358 20 124 4909 Open: Monday-Friday 9 a.m. - 12 p.m.

Vaasantie Unit Vaasantie 1, 60100 Seinäjoki Tel.: +358 20 124 5327, Fax.: +358 20 124 5301

Campus Student Affairs Office and Admissions Office P.O. Box 412 (visiting address: Keskuskatu 34, Campus House, 2nd floor) FI-60101 Seinäjoki, Finland Tel.: +358 20 124 5023, +358 20 124 5018, +358 20 124 5147 Fax: +358 20 124 5022 opintotoimisto@seamk.fi hakutoimisto@seamk.fi

There is a joint Student Affairs Office and Admissions Office in the Campus building. The Campus Student Affairs Office offers services related to studies, study regulations and student financial aid. The Admissions Office provides guidance to applicants applying to the Seinäjoki University of Applied Sciences. The office is open 8 a.m.– 3.45 p.m.

Admissions Office for the degree programmes conducted in English P.O. Box 412 (visiting address: Keskuskatu 34, Campus House, 2nd floor) FI–60101 Seinäjoki, Finland Tel.: +358 20 124 5208 Fax: +358 20 124 5022 admissions@seamk.fi www.admissions.fi

Career services

The faculties are responsible for services for both students and employers. The most important objective of the services is to help students step into the working world as smoothly as possible. Career services provide a wide range of information and assist in career planning. They also provide information concerning the job market and various types of placements for practical training.

The Seinäjoki University of Applied Sciences has joined the national online recruitment service of the Finnish Universities of Applied Sciences (www.jobstep.net) where students may register as job seekers submitting a CV, which consists of a detailed history of their work experience and other activities.

Career services for the international students, for instance contact seminars with the employers, will be offered by the International Office, too.

Student pastor

The Seinäjoki University of Applied Sciences has its own student pastor:

Ms Aila Orsila Visiting address: Keskuskatu 32 I (Campus area I House) aila.orsila@seamk.fi

Student counselling

Student counselling promotes the objectives of learning at the institution and aims to assist students in developing various facets of their personality. Guidance and counselling is based on the idea that an individual assumes primary responsibility for his/her studies. The guidance and counselling relationship is based on the ethics of professional service and aims at helping students with their professional development and personal life. Students are important both as individuals and as team members. The academics responsible for student counselling are primarily the heads of the degree programmes, other teachers, the student counsellor, the international coordinator of the faculty/unit and the International Office. The contents of each course are best explained by the lecture(s) who teach the course in question.

School of Culture and Design	Ms Tuija Huusko, tel. +358 40 8304 227
Business School	Seinäjoki Unit: Ms Ulla Autio, tel. +358 20 124 5416 Kauhava Unit: Ms Raija Rauma, tel. +358 40 8304 214 Kauhajoki Unit: Ms Virpi Antila, tel. +358 20 124 5621, +358 40 830 4208
School of Agriculture and Forestry	<i>Ilmajoki Unit:</i> Ms Anu Katila, tel. +358 20 124 5747 <i>Ähtäri Unit:</i> Mr Jorma Toopakka, tel. +358 20 124 5814, +358 40 830 4137
School of Health Care and Social Work	Keskuskatu Unit: Ms Katriina Honkala, tel. +358 20 124 5108 Koskenalantie Unit: Ms Tellervo Pihlaja, tel. +358 20 124 5180
School of Technology	Ms Piia–Mari Riihilahti, tel. +358 20 124 4929 Ms Tarja Keski–Mattinen, tel. +358 20 124 4935 Mr Ismo Tupamäki, tel. +358 20 124 4923

Student counsellors

E-mail address for the student counsellors: forename.surname@seamk.fi

International study counselling

The aim of international study counselling is to support outgoing and incoming students, professors and staff members, as well as foreign and all other degree students. The aim is to integrate internationalisation in studies and to promote home internationalisation as well. The personnel associated with international affairs are responsible for international study counselling, together with other faculty members. There is an international coordinator in each faculty. The International Office is located in the Campus building.

International Office:

Manager of International Affairs, Ms Helli Kitinoja: helli.kitinoja@seamk.fi Secretary of International Affairs, Ms Maria Loukola: maria.loukola@seamk.fi Project Manager, Ms Sanna Valkosalo: sanna.valkosalo@seamk.fi Financial Secretary of International Affairs, Ms. Essi Korkiakoski: essi.korkiakoski@seamk.fi

International co-ordinators for the faculties:

School of Agriculture and Forestry Mr Heikki Koskimies (Ilmajoki Unit: agriculture): heikki.koskimies@seamk.fi Ms Pirkko Kivinen (Ähtäri Unit: forestry): pirkko.kivinen@seamk.fi

Business School Ms Ritva Leppänen (Seinäjoki Unit): ritva.leppanen@seamk.fi Ms Marjo Arola (Kauhava Unit): marjo.arola@seamk.fi Ms Erja Heikkilä (Kauhajoki Unit): erja.heikkila@seamk.fi

School of Culture and Design Ms Eija Pennanen: eija.pennanen@seamk.fi

School of Health Care and Social Work Ms Helinä Mesiäislehto–Soukka (Koskenala Unit: health care): helina.mesiaislehto–soukka@seamk.fi Ms Helena Järvi (Keskuskatu Unit: social work): helena.jarvi@seamk.fi

School of Technology Mr Tapio Pihlajaniemi: tapio.pihlajaniemi@seamk.fi

Tutoring students

Seinäjoki University of Applied Sciences has students who are trained for tutoring the new students especially at the beginning of their studies. The tutor offers peer–guidance and supports the new student to live in a new environment and start studies in the Seinäjoki University of Applied Sciences. The student tutors also participate in the promotion of their faculty.

Guidance related to practical placements

It is important for the students to build up links to the working life and companies during their studies. It is possible when students are doing their project studies, when they are visiting companies, doing their practical training and final thesis or participating in the seminars related to the working life.

In each faculty there are persons who are responsible for guidance related to the practical placements, also the Heads of the Degree Programmes help the students in planning the practical training. Students can get information concerning working life also from the Internet (www.kitkatta.net), this information is in Finnish. The Finnish Universities of Applied Sciences have also a joint career and recruitment service Jobstep (www.jobstep.net), also in the English language. The Jobstep also helps you to write your curriculum vitae in an electronic form.

Premises and equipment

The Seinäjoki University of Applied Sciences has five faculties. Two of the faculties (School of Health Care and Social Work, School of Technology) are situated in the City of Seinäjoki, one of them (School of Culture and Design) partly in Seinäjoki and in Jurva, one (School of Agriculture and Forestry) partly in Ilmajoki and Ähtäri and one faculty (Business School) partly in Seinäjoki, Kauhava and Kauhajoki. The Seinäjoki University of Applied Sciences and its faculties offer students an excellent environment, including modern technology and equipment, in which to study. Studying abroad is also part of the learning process and opportunities are available to students through the Seinäjoki University of Applied Sciences' international network.

Information systems services

The Seinäjoki University of Applied Sciences belongs to the national FUNET network (Finnish University and Research Network). Upon acceptance of the FUNET guidelines, students receive an e-mail address and a username/an identification code for the information systems network. The username and pin-code are personal and should not be used by anyone else. All users are responsible for using the information systems services according to that which is set forth in the data security guidelines, http://www.seamk.fi/kayttosaannot. Students may use their personal e-mail address and username throughout their studies. Once a student has graduated, the username will function for 14 days, and the codes

will be discarded from all of the faculties' information systems. The codes for the Winha study management system will also be discarded from the faculties' Student Affairs Offices.

The e-mail system utilized at the Seinäjoki University of Applied Sciences is Microsoft Exchange and students can use their e-mails through the Outlook Web Access at https://mail.seamk.fi/exchange. The e-mail address is usually forename.surname@seamk.fi.

Students will also receive a personal username/identification code for the Winha study management system at http://winha.seamk.fi.

Virtual learning centre

The virtual learning centre of South Ostrobothnia region supports the learning process through new technology.

International relations

Goals of the international studies

Studies at the Seinäjoki University of Applied Sciences are characterised by internationalisation. This involves interaction with foreign countries, partner institutions and international working life. During their studies, students will gain skills and competencies required in international environments (enterprises, development projects, contacts with customers from foreign cultures). Students will also learn to manage international business and cooperation across cultural and national borders, they also learn the importance of internationalisation for the regional development. In addition to language skills and cultural knowledge, today's professionals need to know how to make use of the latest research results and ICT technology. Higher education should also provide students with broader perspectives, a better understanding of the various sectors of society, willingness to change, and flexibility. The Ministry of Education has awarded the Seinäjoki University of Applied Sciences three times for its international activities, in 1999, 2000 and 2002.

Home internationalisation

The prerequisites for internationalisation include language skills and knowledge and understanding of different cultures. In addition to the basic language studies (the official languages Finnish and Swedish and in addition one or two foreign languages), students may choose optional language courses. Asian languages and cultures have recently been of special interest; the latest trend has been an increasing need to study about South America and the Spanish language. Home internationalisation, international aspects in the curriculum and professional studies are the main priorities in education. The institute recognises that which is set forth in the Bologna Process in implementing internationalisation in education and research. The European Credit Transfer and Accumulation System (ECTS) is used and all the graduated students are given a Diploma Supplement (DS).

Student mobility

Seinäjoki University of Applied Sciences has institutional partnership contracts with about 170 partner Universities in the European countries and about 30 partners in the other continents. Erasmus cooperation with European partner universities began in 1993, and cooperation with Chinese partner universities began in 1995. One year later cooperation began with partner institutions in African, in 1997 with the United States, Canada and Japan, in 1998 with Latin America and in 2007 with India and Vietnam. Each year, approximately one fifth of the degree students study abroad at least one semester. In addition, one–third of the students study for shorter periods abroad.

Practical training abroad is another form of internationalisation. Students may also do their thesis work abroad. The average length of a study period abroad is five months. The most popular destinations are Germany, Spain and the Baltic countries. Other countries that attract students from Seinäjoki University of Applied Sciences include the United States, Asian countries, such as China, Japan and India, African countries, such as Uganda, Kenya and Zambia, as well as the eastern European countries and Latin American countries. Grants are awarded to support students and staff mobility, mainly from the European Union programmes. Moreover, students may apply for a scholarship in their own institution. Students who are planning an exchange period abroad are advised to check their insurance with the international coordinator of the faculty. Outgoing students have to visit also the Kela office before the exchange period to get the needed documents (Y39, E128, E111 and the European Health Card). Students also have to visit the School Health Nurse of their own faculty, so that they can make a plan for injections.

Every year, about 200 international students from partner institutions study or complete their practical training at Seinäjoki University of Applied Sciences. Orientation and Finnish language teaching as well as social programme in cooperation with the student union will be offered for the international students. In addition there are about 100

international degree students.

Teaching in English

Seinäjoki University of Applied Sciences offers courses equivalent to 800 ECTS taught in English . These studies are available for the Finnish students as well as for the international students. The Business School has a Bachelor degree programme in International Business and a Master programme in International Business Management conducted completely in English. The School of Health Care and Social Work has Nursing degree programme totally taught in English. There are also one semester programmes taught in English in each Faculty. The programmes are primarily intended for exchange students from the partner universities, but also for the Finnish students.

International R&D projects and international conferences

Seinäjoki University of Applied Sciences has about 20 international research and development projects yearly. Students studying at the institute may join these projects as part of their thesis or practical training. The Seinäjoki University of Applied Sciences hosts an international conference and two or three international seminars each year. Students can work as conference assistants in these international conferences and seminars and get a certificate for that.

International guidance, counselling and tutoring

Heads of the degree programmes, teachers, student tutors, international coordinators and student advisers provide assistance for both incoming and outgoing students. All of the faculties have staff for handling international affairs, and there is also an International Office in the Campus building. The study guides and homepages on the internet (www.seamk.fi) are important sources of information for international students. The international coordinators, other staff and students provide their support to students from other countries in planning their studies and making the best of their stay in Finland. Finnish students gain a wealth of important knowledge of different countries and cultures by tutoring foreign students and learning from their experiences.

If a student needs personal counselling, (s)he should make an appointment with the international co-ordinator in his/her faculty/unit. The coordinators can be contacted by e-mail: forename.surname@seamk.fi.

International Office:

Manager of International Affairs, Ms Helli Kitinoja: helli.kitinoja@seamk.fi Secretary of International Affairs, Ms Maria Loukola: maria.loukola@seamk.fi Project Manager, Ms Sanna Valkosalo: sanna.valkosalo@seamk.fi Financial Secretary of International Affairs, Ms. Essi Korkiakoski: essi.korkiakoski@seamk.fi

International co-ordinators for the faculties:

School of Agriculture and Forestry Mr Heikki Koskimies (Ilmajoki Unit: agriculture): heikki.koskimies@seamk.fi Ms Pirkko Kivinen (Ähtäri Unit: forestry): pirkko.kivinen@seamk.fi

Business School Ms Ritva Leppänen (Seinäjoki Unit): ritva.leppanen@seamk.fi Ms Marjo Arola (Kauhava Unit): marjo.arola@seamk.fi Ms Erja Heikkilä (Kauhajoki Unit): erja.heikkila@seamk.fi

School of Culture and Design Ms Eija Pennanen: eija.pennanen@seamk.fi

School of Health Care and Social Work Ms Helinä Mesiäislehto–Soukka (Koskenala Unit: health care): helina.mesiaislehto–soukka@seamk.fi Ms Helena Järvi (Keskuskatu Unit: social work): helena.jarvi@seamk.fi

School of Technology Mr Tapio Pihlajaniemi: tapio.pihlajaniemi@seamk.fi

Student Union SAMO kv.samo@seamk.fi

Practical information for international students

Finnish educational system

The educational system in Finland is made up of a 9-year comprehensive school, general or vocational secondary-level education, and higher education. Independent organisations, evening schools, vocational institutions and higher education institutions (HEIs), such as universities and universities of applied sciences, provide adult education. Finnish higher education consists of two parallel sectors, the relatively new university of applied sciences sector and the university sector. www.minedu.fi

The formation of the university of applied sciences began in 1991, and today there are 26 of them in Finland. The purpose of universities of applied sciences is to raise the standard of higher professional education, carry out applied research based on the current needs of the working world and to support other regional development.

Students acquire both theoretical knowledge and practical training in their own field. Finnish degrees obtained at universities of applied sciences are equivalent to Bachelor's and Master's degrees in most of the European Union' member states. Studies at a university of applied sciences are characterised by varied teaching and learning methods. The amount of traditional lecturing has been reduced and the institutions emphasise the students' responsibility for their own studies. In modern society, the amount of information increases and diversifies constantly. Therefore, it is important that students adopt the idea of lifelong learning and independent search for information during and after their studies. Studies lead to degrees, which are higher–education degrees for demanding tasks in the working world. The Ministry of Education defines the content of the degrees and the degree titles.



Finnish Educational System (Ministry of Education)

Facts about Finland

- Population: 5.3 million
- *Total area:* 338.000 km², one of the largest countries in Europe. Three–quarters of the area is covered with forests, most of which are evergreen. Another characteristic feature in Finland is the multitude of lakes (about 200.000 lakes in all), especially in the central and eastern parts of the country. The northernmost part of Finland, Lapland, lies north of the Arctic Circle.
- Population density: 17 inhabitants / km²
- Capital: Helsinki with 550.000 inhabitants
- Other major cities: Espoo, Tampere, Vantaa, Turku, Oulu
- Languages: Official languages are Finnish (92 %), and Swedish (5.5 %). English is widely spoken.
- Religion: Evangelical Lutheran (82 %), Orthodox (1 %), other (1 %), no religious denomination 16%
- Form of government: Parliamentary republic since 1917; President: Ms Tarja Halonen 2000–. The head of state is the President and the legislative body is the unicameral Parliament (Eduskunta), which is made up of 200 members elected every four years.
- *Member of the EU*: since 1995. Co-operation with the other Nordic countries has always been active in political, economic, social and cultural matters. Finland has also maintained good political and commercial relations with Russia.
- *Currency*: the euro (EUR)

Finland is situated in northern Europe, surrounded by Sweden in the west, Norway in the north, and Russia in the east and Estonia in the south. The climate is not as cold as its northern location might imply. However, temperatures below zero degrees centigrade in winter are not uncommon. Summers are light and warm, and in the northern part of the country the sun does not set at all for a few weeks. The average temperature varies between -6 in January and +21 in July (Helsinki).

Industrialisation began in Finland in the 19th century, and particularly rapid growth took place after World War II. Traditionally, the forestry and wood processing industries have played a central role in the economy. Other important industrial fields include electrical and metal engineering, the chemical and textile industries. Today, many Finnish companies are known for their high–tech products. As in most advanced industrial economies today, the greater part of Finland's output is produced in the service sector.

Coming to Finland

Passport

All foreigners excluding citizens of the Nordic countries need a valid passport to enter Finland. Citizens of the Nordic countries may arrive, reside, study and work in Finland without limitations. They do not need visas, residence or work permits. See http://www.formin.fi/Public/

Visa

Students from the EU countries and a number of other countries do not need a visa to enter Finland. Other international students must apply for a visa at the Finnish embassy or consulate in the country of permanent residence. A visa is needed if a student is required to participate in an entrance exam in Finland prior to being accepted at the educational institution, or if he or she is a citizen of a country that has not signed an agreement on the abolition of visas with Finland. Since the visa allows for only a short stay, a student who has taken the entrance examination must return to his or her home country and apply for an actual residence permit before returning. See http://www.formin.fi/Public/

Since September 1, 2007, international degree and exchange students coming to Finland from outside EU/ETA countries and studying there for more than three months, have needed a health insurance at least EUR 100.000 for getting visas. The value of the insurance can be lower (EUR 60.000) if the student studies in Finland for more than two years. Students from the countries outside the EU/ETA should consult embassies or consulates about this matter.

Residence permit

A residence permit is needed if a person's stay exceeds three months. Citizens of the Nordic countries do not need a residence permit. EU citizens and equivalent persons do not need a residence permit, but they must register at the local police office in Finland for their right to reside in Finland if their stay lasts longer than three months. Students coming from countries other than the Nordic countries may need to provide proof of funding. Similar regulations on the right of free movement that apply to citizens of EU member states also apply to those from Iceland, Liechtenstein, Norway and Switzerland. Hence, the citizens of these states are equated with EU citizens.

Students from other countries can apply for their residence permits from the Finnish diplomatic mission in their home country. The Finnish government does not usually fund the stay of foreign students in Finland. Therefore, applicants must show that their income is secured either with a scholarship, a grant or other funds with which they can support themselves during the academic year. Applicants must have a minimum of EUR 500 per month to cover their living expenses. In some cases, applicants may simply indicate that funds are available for transfer from their home country to Finland by means of a reliable banking connection. If the educational institution offers free tuition, accommodation and

meals, the required amount may be reduced. Funding for students participating in an exchange programme between a Finnish and foreign university may be arranged through the exchange programme.

The residence permit is usually granted for one year at a time. Getting an extension for the residence permit requires that a student is still registered at the educational institution, is a full–time student and has completed the required courses in the institution's study programme. If the student has poor study performance, an extension of the residence permit may be denied. The application for an extension of the residence permit is submitted to the local police in Finland. See http://www.formin.fi/Public/

Work permit

EU citizens and persons from Iceland, Liechtenstein, Norway and Switzerland can work while studying in Finland and do not need to apply for a special work permit to do so.

The residence permit for study purposes allows students from other countries to work within certain limits, i.e. the work is part of their practical training required by the degree programme, or if the amount of part–time work does not exceed 20 hours per week. Students may take full–time employment during holidays when the educational institution does not arrange teaching as such; in practice, this is usually during summer and Christmas vacations.

Wages earned through part-time work during the academic year may, on the discretion of the authorities, reduce the amount of money that a student is required to possess during his or her studies. When applying for the first residence permit, promised employment or a signed contract of employment cannot reduce the required amount of permitted funds. See http://www.formin.fi/Public/

Travelling in Finland

The airports nearest to the City of Seinäjoki are located in Rengonharju (10 km from the Seinäjoki City Centre) and Vaasa (70 km from Seinäjoki). A flight from the Helsinki airport to the Rengonharju airport takes only about one hour. International students travel to Seinäjoki and the surrounding areas primarily by train, which takes about three hours from Helsinki, or by their own car. Finland has right–hand traffic with overtaking on the left. It is compulsory to use seatbelts in cars. Young people may receive their driver's licence at the age of 18. Vehicles must use their headlights at all times, even during the day. Using mobile phones in vehicles requires hands–free devices. Drunken driving is a criminal offence; so if you drink you don't drive.

Language courses

In addition to the basic language studies students may choose optional, advanced language courses in Seinäjoki University of Applied Sciences. There are also virtual language courses. Seinäjoki University of Applied Sciences offers language courses in English, Swedish, German, French, Spanish, Portuguese, Russian and Finnish as a foreign language.

Asian languages and cultures have recently been of special interest; the latest trend has been an increasing need to study about South America and the Spanish language.

Seinäjoki University of Applied Sciences has a Language Centre, which supports high-level language teaching and interaction between the Institution and the working life, it helps also staff members in the tasks related to the languages.

The Language Center of Seinäjoki University of Applied Sciences Address: Business School, Koulukatu 41, 60100 Seinäjoki Ms. Heli Simon, Coordinator of languages heli.simon@seamk.fi, tel. +358–20 124 5415 or +358–40–830 4129

Mr. Päivö Laine, Principal Lecturer of languages paivo.laine@seamk.fi, tel. +358–20 124 5409 or +358–40–830 4175

Practical placements

It is important for the students to build up links to the working life and companies already during their studies. It is possible when students are doing their project studies, when they are visiting companies, doing their practical training and final theses or participating in the seminars related to the working life. Practical training in the University of Applied Sciences is a supervised learning period in real working life. During a training period a student gets to know working methods and working environment and has an opportunity of professional interaction with the customers. Quite often a final thesis is related to the practical training.

Students are supported to find their practical placements by themselves. Only in the School of Heath Care and Social Work and in the School of Agriculture the academic staff are responsible in offering the placements for the students. In each faculty there are persons who are responsible for guidance related to the practical placements, also the Heads of the Degree Programmes help the students in planning the practical training. Students can get information concerning working life also from the Internet (www.kitkatta.net), this information is in Finnish. The Finnish Universities of Applied Sciences have also a joint career and recruitment service Jobstep (www.jobstep.net), also in the English language.

Seinäjoki University of Applied Sciences has also an Incubator for start-up companies of the students in collaboration with Satakunta and Turku Universities of Applied Sciences.

More information: Ms. Helena Hannu, Project Manager helena.hannu@seamk.fi, tel. +358-20 124 5261

Free time and social activities

Seinäjoki

Seinäjoki is the centre of Ostrobothnia and has developed into the centre of a province with 200.000 inhabitants. The population of Seinäjoki is about 57,000 and its industrial structure is service oriented.

Life in Seinäjoki is dynamic. A wide variety of educational institutions are located in the city, and it offers commercial, administrative and cultural services to the entire surrounding area. The city is known for its numerous events also. In midsummer, the Tango Festival invites friends of light music to a cheerful dance and music event. Provinssirock was a forerunner of the Finnish rock festival culture already three decades ago, and every summer in June it gathers tens of thousands of music lovers to Törnävänsaari.

The Seinäjoki City Theatre attracts large audiences, even by national standards. The complex of the administrative and cultural buildings in Seinäjoki is known world wide as the Aalto Centre. Built in the 1960s, it houses the Lakeuden Risti church (Cross of the Plain), City Hall, the City Library and the Government Office Building. This milieu, designed by architect Alvar Aalto, represents Functionalism at its best, and is appreciated by admirers and experts of architecture.

Sports are very important to Seinäjoki, both at the championship level (Finnish baseball, wrestling, floorball, football, rugby, speedway, etc.) and in the provision of facilities for fitness enthusiasts. A full–length, artificial ice rink, artificial gravel grass, beaches, ski slope and various other sports facilities offer a variety of choices.

Student life is lively, too. In addition to sports facilities, students will find a wide variety of art and culture, from ballet to concerts and visual arts. Nightlife is varied and includes discos and pubs popular among students.

Connections to Seinäjoki from other parts of Finland are excellent. Trains from Helsinki to the north pass through the Seinäjoki railway station. Seinäjoki has about 25 train services daily, and from the Rengonharju airport, several flights a day to Helsinki. The distance from Seinäjoki to Vaasa is 80 km, to Helsinki 350 km, and to Tampere 180 km. www.seinajoki.fi

Ilmajoki

Ilmajoki is situated in the centre of Ostrobothnia. Ilmajoki has the typical Ostrobothnian landscape with low–lying, fertile fields and a number of barns, referred to as the 'sea of barns'. The Ostrobothnian plain is split by the river Kyrönjoki, which runs through effectively cultivated farmlands. Ilmajoki has approximately 11,700 inhabitants and an area of 609 km². The nearest towns are Kurikka (15 km), Seinäjoki (20 km) and Vaasa (70 km).

Ilmajoki is rich in tradition; you can get acquainted with Ostrobothnian heritage at the House Museum of Yli–Laurosela, for example. Ilmajoki is also a vigorous cultural municipality, which is famous for its Music Festival in early summer. Agriculture is an important source of livelihood, but there are also numerous small and medium–sized businesses operating in a wide variety of fields. The most renowned company in Ilmajoki is Primalco Corporation in the village of Koskenkorva. Primalco produces raw materials for the alcoholic beverage, Koskenkorva, named after the village. www.ilmajoki.fi

Jurva

Jurva is a municipality of about 4,700 inhabitants 55 km from Seinäjoki. Jurva is famous for its furniture industry; most of the furniture in Finland is made there. There are 300 furniture companies in the municipality employing a total of ca. 500 people. The School of Culture and Design was founded in 1911 and is one of the most esteemed schools of craft skills in Finland. The school specialises in the Scandinavian way of carving wood.

The municipality provides a range of public services such as a health centre with medical and dental services, as well as police, postal and bank services. There are also various private services available, such as shops, hotels and restaurants.

A wide range of recreational facilities are also available. You can exercise in the sports hall located in a local school, or in the indoor sports facilities at the School of Culture and Design. Close to the school, there is a running track, where you can ski in winter. The Säläsjärvi lake, with its public swimming facilities, is located next to the running track. A sauna on the camping site can be rented for private use. In the winter, you can try winter swimming, too. The Lintula riding farm is an interesting place for horse enthusiasts. A motor racing track and a rifle range are located next to the farm.

The civic college offers other hobbies as well. The college offers a wide range of courses, so there is something for everyone: language studies, dance and music, art subjects ranging from restoration to bookbinding, etc.

Jurva also has two drama clubs offering performances to the public. Art lovers can visit exhibitions in the local library throughout the year. Furthermore, the School of Culture and Design exhibits its activities at its annual spring exhibition. www.jurva.fi

Kauhajoki

Kauhajoki is the service and industrial centre in the southern-most part of South Ostrobothnia where agriculture plays an important role in the economy. Rustic, South Ostrobothnian culture, modern service and the information society meet here. Commercial and administrative services of the southern part of the region are concentrated in Kauhajoki, and for this reason the municipality is famous for its high, urban-like standard of services. By area, Kauhajoki is the largest municipality in South Ostrobothnia with 14,700 inhabitants. It is located 58 km from Seinäjoki, 100 km from Vaasa, and 160 km from Tampere. The distance between Kauhajoki and Helsinki is 360 km. There are direct bus connections to all the nearby towns every day. The quickest connections from southern Finland, e.g. Helsinki, are by train via Seinäjoki and from there by bus.

Colourful events such as the Kauhajoki Food Fair and the Nummirock festival attract thousands of visitors to Kauhajoki each year. The Kauhajoki Food Fair is of particular importance to the institution because it is the initiator of this great event. Kauhajoki also has sights related to Ostrobothnian rural culture and Finnish history. www.kauhajoki.fi

Kauhava

Kauhava is a young, dynamic town in the northern part of South Ostrobothnia. It was granted its town charter in 1986. The town has always been famous for its entrepreneurship. This has further strengthened the position of Kauhava as a commercial and service centre. Kauhava has good road connections, as the town is located on highway 19 and on the main road 63, Kauhava–Ylivieska. Moreover, Kauhava has an excellent airport. Kauhava is 400 km from Helsinki, 80 km from Vaasa and 40 km from Seinäjoki.

A tourist visiting Kauhava can admire the slow river and the vast 'sea of barns', among other things. Other sights include the Kauhava church, completed in 1925, the Rise of the Steath–knife statue in front of the city hall, and the monument to the Fouga fighter. The annual event called Airmen's Midsummer gathers 20.000 people together at the airport to celebrate Midsummer. Kauhava is also well–known for the Air Force Flight School.

The Air Force Flight School offers the town and its inhabitants tremendous facilities for various aviation. In addition to aviation the youthful town provides facilities for ice hockey, volleyball, football and a variety of other sports. The Kauhava Civic College provides excellent opportunities for further education in foreign languages and in manual skills for those who are eager to study during their leisure time as well. www.kauhava.fi

Ähtäri

Ähtäri is located in Suomenselkä, in the eastern part of the South Ostrobothnia province, and is known for its high–quality tourist services and as a town of many events. The population of Ähtäri is about 7,100. Its total area is 906 square kilometres, of which 103 square kilometres is covered by lakes. The nearest airports are in Jyväskylä and Seinäjoki and the nearest seaport in Vaasa (165 km). Distances to the more important centres: Turku 310 km, Helsinki 330 km, Tampere 160 km, Seinäjoki 80 km, and Jyväskylä 120 km. There are connections by road and by train to the above destinations. The nature in Ähtäri, with its forests and water–ways, provides diverse opportunities for outdoor activities and tourism in nature. In addition to the excellent sports facilities at Tuomarniemi, Ähtäri offers many other facilities.

Ähtäri offers many cultural and athletic services and events year–round. The city library has a mobile library which visits Tuomarniemi weekly, and two branch libraries. The Pirkanpohja Art Centre exhibits 200 paintings by Artist, Professor Eero Hiironen, as well as other temporary exhibitions. Sights include Ähtäri Wildlife Park, a domestic animal park, Villa Pohjola, Pirkanpohja Art Centre, an automobile museum, a local arts–and–crafts museum, Koskela ceramics and Ähtäri church. Local events are Ähtäri Snow Weeks, Ähtäri Night Rowing, Summer Market, Travellers' Christian Summer Days, the charismatic Open Road event and the Buster Triathlon. www.ahtari.fi

SAMO: Student Union of the Seinäjoki University of Applied Sciences

Seinäjoki University of Applied Sciences has a student union called SAMO derived from the Finnish title Seinäjoen ammattikorkeakoulun opiskeliat ry. SAMO is the common student union within the institution. In addition, every school has its own student association. SAMO was founded to bring together student associations in the faculties and individual students, to protect the rights and benefits of students and to organise events for students attending Seinäjoki University of Applied Sciences. The cafés in the faculties, as well as the bookstores, stationery shops and copying machines are mainly run by the student associations. The services are offered at competitive prices, so it is worthwhile to use these services.

SAMO Student Union participates in tutor activities. The tutors initiate students into studying at the Seinäjoki University of Applied Sciences and the region. Students can turn to them for assistance and they provide students with advice. All tutors have done tutor training. SAMO has a student who is responsible for international affairs. This person is responsible for the social programme and, together with the staff of the international office and international coordinators of the faculties, tends to international issues concerning students in Seinäjoki UAS. To contact him or her, please send an e-mail to: international.samo@seamk.fi.

SAMO Student Union and the student associations participate in various recreational, cultural and sports events. Sports tournaments between faculties are common, such as indoor bandy and indoor baseball. Get-together in the evenings counterbalance studying in a pleasant way, adds another aspect to student life. Members are granted a discount on the entrance fee for some of these events. Furthermore, SAMO arranges a special social programme for international degree and exchange students. Both SAMO's and SeAMK's websites have more information about the latest social programme. SAMO publishes also its own magazine called 'Samolainen', which tells about SAMO's events and topics concerning students.

Students are advised to join the student association when arriving in the Seinäjoki region, because membership in the student association and the SAMO Student Union offers students various benefits. They tend to students' interests and offer assistance in questions related to their studies, and help them save money in the form of various discounts. Upon membership, students receive a student card, with which they may receive discounts on train (Finnish Railways) and bus tickets (Matkahuolto), as well as on Sampo insurance. The International Student Card entitles students to only some of these discounts.

In addition to nationwide advantages, the SAMO Student Union has arranged discounts on the services and products of local companies. The discount lists are posted on the student associations' notice boards. To become a member, students must fill out the application form for the student card at the student association office. SAMO has its own office on campus, which is open during the day. The General Secretary is available in the office every day and students may get help from him/her with any problems connected with their studies.

The Office of the Student Union SAMO is located in the Campus House

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