# **Catalogue report**

**LUT School of Business and Management** 

# Master's Programme in Strategy, Innovation and Sustainability (MSIS)

# Master's programme in Strategy, Innovation and Sustainability (MSIS) 2018-19

This Study Guide includes the learning outcomes, degree structure and curriculum of the master's programme of Strategy, Innovation and Sustainability (MSIS) 2018-19.

- Master of Science in Economics and Business Administration, M.Sc.(Econ. & Bus.Adm.), 120 credits, duration 2 years.
- Higher university degree, gives eligibility to scientific doctoral studies.

# **Learning Outcomes**

After completing the programme, students will be able to:

- discuss and assess theories and models related to strategy, innovation and sustainable value creation
- analyze managerial problems and make strategic decisions related to innovations in the context of international business and sustainable value creation
- · demonstrate analytical business skills
- utilize intercultural and teamwork competences
- conduct an independent scientific research project, report and present it professionally
- show a global, innovative, and sustainability-aware mindset

# **Degree structures**

# **Degree structure:**

Core Studies 48 ECTS cr Specialisation studies 42 ECTS cr Minor studies 24 ECTS cr Language studies (not English) 6 ECTS cr

Total min. of the degree is 120 ECTS cr.

# Master's Programme in Strategy, Innovation and Sustainability 2018-2019 (MSIS) (E)

Degree structure status: accepted

Academic year: 2018-19

Beginning date of the academic year: 01.08.2018

# **Complementary studies (min 3 cr)**

Complementary studies must be completed in addition to the actual Master's level studies in business administration. They are not included in the Master's degree.

Important! Students who have received their education in Finnish or Swedish must demonstrate in studies included in education for a lower or higher university degree that they have attained proficiency in Swedish required by decree (Government Decree on University Degrees, 6§). If the required proficiency in Swedish has not been demonstrated in a previous degree, it must be demonstrated in studies at LUT in addition to other complementary studies. However, this is not required of students who have been educated in a language other than Finnish or Swedish or who have been educated abroad. This rule applies to all degree programmes.

# Students, who have graduated as B.Sc. (Econ. & Bus. Adm.) in Finland:

A130A0050 Introduction to Studies of Economic Sciences for Master's Students, 3 ECTS cr

**All other students** study in addition also the course:

A350A0050 Business Research Methods, 6 ECTS cr.

# Core Studies; Strategy, Innovation and Sustainability 48 ECTS cr (min 48 cr)

KaMsisCs1: Core Studies, 42 - 90 cr

Obligatory studies 18 cr

A210A0200: Empirical Strategy Research, 6 cr

A350A0500: Sustainable Strategy and Business Ethics, 3 cr

A350A0301: Innovation Management, 6 cr

BH60A4400: Introduction to Sustainability, 3 cr

Elective studies min. 30 cr

A130A2200: Internship for Master's Programmes, 2 - 6 cr

A210A0702: New Venture Management, 6 cr A310A0501: Sustainable Global Sourcing, 6 cr A330A0100: International Business Strategies, 6 cr

A330A0201: Marketing of High Technology Innovations, 6 cr A350A0250: Multivariate and Econometric Analysis Methods, 6 cr

A350A0560: Sustainability Reporting and Communication, 6 cr

A365A0711: Accenture Case Workshop, 3 cr

CS30A1655: Advanced Course in Strategic Management, 6 cr

CS30A1661: Open Innovation, 6 cr

CS34A0401: Strategic Entrepreneurship in an Age of Uncertainty, 6 cr

# Specialisation Studies 42 cr (min 42 cr)

KaMsisSs: , 42 cr Obligatory

A350A0551: Project Course on Sustainable Business, 6 cr

A350A0601: Contemporary Issues in Strategic Management and Innovation, 6 cr A350A9101: Master's Thesis, Strategy, Innovation and Sustainability, 30 cr

# Minor Studies 24 cr (min 24 cr)

Recommended minors in MSIS programme: **Entrepreneurship** (TuSOEntr), **Knowledge and Innovation Management** (KaSOMTijo), **Sustainability** (KaSOMSust) and **International Marketing** (KaSOMIntm). Please see more under Minor Studies.

# Language Studies 6 cr (min 6 cr)

Foreign language (not English). Please see https://www.saimia.fi/en-fi/studies/study-information/language-centre/lut-saimaa-uas

#### **Free Elective Studies**

# Courses and study modules not included in degree structures

#### **Instructions**

The obligatory minor package in both bachelor's and master's programmes is always minimum 24 ECTS credits. Those students who start in the b.sc programme, have to study the business administration minor either in bachelor's or master's degree.

- Suitable minor studies in business administration are: accounting, economics and finance, corporate law, supply management, management, international marketing and entrepreneurship
- In addition to previously mentioned, suitable minor studies in master's degree are: Knowledge and Innovation Management, International Marketing, Sustainability, Digitalization and Analytics, Entrepreneurship, Russian and East European Master's School's minor (=VIE-maisterikoulu) and Co-op Network Studies.
- In addition, an university level minor from another business school or university can be accepted to be included in to the degree, but this has to be confirmed before the studies from the student counsellors.

In MSIS-programme the recommended minor studies are: Entrepreneurship (TUSOEntr), Knowledge and Innovation management (KaSOMTijo) and Sustainability (KaSOMSust).

Please note that the business administration students can not study the minors International Business and Management nor Liiketoimintaosaaminen as they are meant only for the students of technology.

KaSOJoht: , 24 - 35 cr Obligatory studies 24 cr

A130A0550: Introduction to Organizational Behavior, 6 cr

A370A0250: Labour Law, 6 cr

A370A0401: Case-Course of Business, 6 cr

A380A0131: Business Relationships in International Value Networks, 6 cr

KaSOKvmark: , 24 - 35 cr

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Obligatory studies 24 cr
      A250A0450: Market and Competition Law, 6 cr
      A380A0000: Cross-Cultural Issues in International Business, 6 cr
      A380A0201: Sales and Marketing Communication, 6 cr
      A380A0250: Export-Import Operations, 6 cr
KaSOLamo: , 24 - 35 cr
   Obligatory studies 24 cr
      A250A0750: Financial Statement Analysis, 6 cr
      A250A0800: Financial Statement Planning, 6 cr
      A250A0850: Basic Course in Auditing, 6 cr
      CS31A0102: Basic Course in Cost Management, 6 cr
KaSOKansis:, 24 - 35 cr
   Obligatory studies 12 cr
      A250A0050: Econometric Methods, 6 cr
      A250A0160: Introduction to Environmental Economics, 6 cr
   Elective studies, min 12 cr (Recommended, if not included elsewhere in the degree
      A210A0010: Economics of Organizations and Strategy, 6 cr
      A250A0100: Investments, 6 cr
      A250A1200: Financial Markets and Institutions, 6 cr
      BM20A1801: Linear Optimization, 6 cr
      BM20A6800: Mathematics II, 6 cr
KaSOYrijuri:, 24 - 35 cr
   Obligatory studies 24 cr
      A210A0650: Corporate Tax Regulation and Business, 6 cr
      A250A0300: Business Credits and Securities, 6 cr
      A250A0901: Company Law, 6 cr
      A370A0250: Labour Law, 6 cr
TUSOdigan: Digitalization and Analytics, 24 - 36 cr
   Obligatory courses 12 cr
      A210A0601: Information Systems in Corporate Management and Decision-making, 6 cr
      A220A0053: Investment and Business Analysis with Excel, 6 cr
   and minimum 12 cr of the following
      BM20A5001: Principles of Technical Computing, 4 cr
      BM20A6500: Simulation and System Dynamics, 6 cr
      CS31A0720: Basics of ERP systems, 6 cr
      CS38A0040: Marketing analytics, 6 cr
      CT70A4000: Business Process Modelling, 6 cr
   Elective
      CS38A0020: Optimization in business and industry, 6 cr
TuSOEntr: Entrepreneurship, minor, 20 - 35 cr
   Obligatory course 6 cr
      CS34A0302: Entrepreneurship Theory, 6 cr
   Elective studies
      CS30A1372: Creative Design and Problem Solving, 6 cr
      CS30A1691: Social Sustainability, 6 cr
      CS34A0352: Leading business growth, 6 cr
      CS34A0401: Strategic Entrepreneurship in an Age of Uncertainty, 6 cr
      CS34A0551: Business Idea Development, 6 cr
      CS34A0712: Business Governance and Entrepreneurial Renewal, 6 cr
      CS34A0721: Entrepreneurship, ownership and family firms, 6 cr
      CS34A0733: New Venture Creation, 6 cr
KaSOMIntm: International Marketing, 24 - 35 cr
   Elective courses min. 24 cr.(Please note that A330A0550 is lectured every other year.)
      A330A0010: Contemporary Issues in International Marketing, 3 cr
      A330A0060: Managing Customer Relationships and Business Networks, 6 cr
      A330A0061: B2B Marketing, 6 cr
      A330A0112: Strategic Marketing Project, 6 cr
      A330A0300: Strategic Global Marketing Management, 6 cr
      A330A0550: Essential Sales and Negotiation Skills, 3 cr
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Interchangeable 6 cr (please note that A330A5000SS is Summer School course, lectured every other year, next time 2019-20)

A330A5000SS: International Marketing of High Technology Products and Innovations, 3 cr

A330A0221: Marketing of High Technology Innovations: Applications, 3 cr

A330A0201: Marketing of High Technology Innovations, 6 cr KaSOMTijo: Knowledge and Innovation Management, 24 - 35 cr

Obligatory studies 24 cr

A365A0251: Organizational Learning, 6 cr

A365A0301: Organizing in Knowledge-Based Networks, 6 cr

CS30A1661: Open Innovation, 6 cr

CS30A1671: Service Innovation and Management, 6 cr

KaSOHajo: Supply Management, 24 - 30 cr

Pakolliset opintojaksot 24 op

A130A0220: Public Procurement, 6 cr

A380A0101: Supplier assessment and purchasing tools, 6 cr

A380A0131: Business Relationships in International Value Networks, 6 cr

A380A0250: Export-Import Operations, 6 cr

KaSOMSust: Sustainability, 24 - 35 cr

Obligatory courses 9 cr

BH60A4400: Introduction to Sustainability, 3 cr

CS30A1691: Social Sustainability, 6 cr

Elective courses, min. 15 cr. Recommended, if not included elsewhere in the degree

A310A0761: Green Logistics, 6 cr

A350A0500: Sustainable Strategy and Business Ethics, 3 cr A350A0560: Sustainability Reporting and Communication, 6 cr

BH61A0600: Bioenergy, 3 cr

BJ02A1090: Environmental and Industrial Analytics, 5 cr

BL40A2600: Wind power and solar energy technology and business, 5 cr

# **Course descriptions**

# Descriptions of courses and study modules included in the degree structures

KaMsisCs1: Core Studies, 42 - 90 cr

Validity: 01.08.2016 -

Form of study: Major studies

Type: Study module

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

No course descriptions.

Obligatory studies 18 cr

A210A0200: Empirical Strategy Research, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

Type: Course

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Kaisu Puumalainen, Päivi Maijanen-Kyläheiko

Year:

M.Sc. (Econ. & Bus. Adm.) 1-2

Period:

3-4

# **Teaching Language:**

**English** 

#### Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Kaisu Puumalainen
Post Postoral Postoral

Post Doctoral Researcher, D.Sc. (Econ.) Päivi Maijanen-Kyläheiko

#### Aims:

After taking the course the student

- •knows the basic empirical application types and theories of strategy research
- •is familiar with the evolution, state-of-the art and future directions of research within four different central themes of empirical strategy research
- •can independently select a specific theme related to strategy, technology or innovation research and conduct a critical and systematic literature review on this theme
- •collect and analyze empirical data around this theme, and subsequently report, interpret and evaluate the results and their practical and theoretical implications

#### **Contents:**

Core content: Four specific themes of strategy research: empirical testing of main theories, research strategies and designs and main results. The themes may include e.g. resource-based view, organizational cognition, sustainable strategies and competitiveness of the firm. The themes are related to current research projects, and may vary each year.

Additional content: measurement of firm performance, specific methods of empirical research, e.g. event study, qualitative comparative analysis.

Special content: important authors and publication forums of empirical strategy research.

#### Teaching Methods:

Lectures 18 h , exercises 6 h and independent preparation for lectures + pre-lecture tasks 40 h, 3rd period Exercises 6 h, team assignment + preparing the presentation 78 h, seminar 12 h, 4th period Total workload 160 h.

# Suitability for doctoral studies (Yes/Leave empty):

Yes

# **Examination in Examination schedule (Yes/No):**

No

#### **Examination in Moodle (Yes/No):**

No

# Examination in Exam (Yes/No):

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points. pre-lecture tasks 40% Written seminar report 40% Oral presentation of seminar assignment 20%

#### **Course Materials:**

Collection of articles

# **Prerequisites:**

Multivariate and econometric analysis methods or Quantitative research methods, recommended Basic course in econometrics

Places for exchange-students? (Yes, number/No):

max 5

Places for Open University Students?(Yes, number/No):

max 5

# A350A0500: Sustainable Strategy and Business Ethics, 3 cr

Validity: 01.08.2013 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Karl-Erik Michelsen, Laura Olkkonen, Paavo Ritala

#### Note:

Only Master-level students, i.e those that have completed a Bachelor's degree or equivalent before the beginning of the course, are allowed to enroll.

Year:

M.Sc. (Econ. & Bus. Adm.) 1

Period:

2

#### **Teaching Language:**

**English** 

# Teacher(s) in Charge:

Professor, D.Sc. Paavo Ritala Professor, Ph.D. Karl-Erik Michelsen

Post-doctoral Researcher, Ph.D. Laura Olkkonen

#### Aims:

This course concentrates on the topical phenomena and concepts related to the creation and development of sustainable strategy, shared value creation and business ethics in organisations. The concepts will be investigated both from the viewpoints of academic research and practical relevance. Students will learn to discuss and synthesize the recent literature, examine the links of contemporary topics to previous research and assess the practical relevance of the issues through concrete examples. The learning outcomes of the course are the following:

- 1.To assess the topics of sustainable strategy and business ethics in the firm level as well as within the broader institutional context from both academic and practitioner perspectives.
- 2.To discuss and debate on the conflicting perspectives of sustainability and ethics in business.
- 3. To be able to analyze the practical relevance of sustainable business strategy

# **Contents:**

The content of the course is based on topical issues related to sustainable strategy and business ethics from different approaches.

The core content includes: - Basics of sustainability and ethics in business context - Recent trends and developments of sustainable strategy and corporate responsibility - Sustainability issues in the supply network - Key business ethics challenges

# **Teaching Methods:**

In-class hours: 2. period: 12 hours of lectures, 6 hours of interactive theme sessions and seminars, and an interactive panel session with business and societal experts (4 hours).

Out-class hours: Preparation for the theme sessions and seminars: 8 h. Course assignment in groups 50 h. Total hours: 80 h.

# Examination in Examination schedule (Yes/No):

No

# **Examination in Moodle (Yes/No):**

No

# **Examination in Exam (Yes/No):**

No

#### **Assessment:**

No written exam. Final grade 0-5. 100 points based on course assignment conducted in groups.

#### **Course Materials:**

Academic and practitioner-oriented articles on sustainability and business ethics. Readings list distributed in Moodle.

# **Prerequisites:**

Only Master-level students, i.e. those that have completed a Bachelor's degree or equivalent before the beginning of the course, are allowed to enroll.

# Places for exchange-students? (Yes, number/No):

max 10

# Places for Open University Students?(Yes, number/No):

max 5

# A350A0301: Innovation Management, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Karl-Erik Michelsen

# Note:

The course is only for Master's level students.

#### Year:

M.Sc. (Econ. & Bus. Adm.) 1-2

# Period:

1-2/3-4

#### **Teaching Language:**

English

# Teacher(s) in Charge:

Professor, Ph.D. Karl-Eric Michelsen

# Aims:

After completing the course the students are able to critically evaluate and assess the process of innovation and its management. The students will have a deep understanding on the theoretical aspects of innovation management, related key concepts and frameworks, and developed capabilities in applying them when analysing and evaluating concrete cases.

# **Contents:**

The course focuses on the process of innovation and the role of innovations in small, midsize and large corporations. We study in-depth the concept of innovation, who are the innovators and how the innovations are used in the marketing of new products and services. In the global world, innovations are necessary for every company, because innovation connects companies to the customers and markets and helps company to renew.

Innovation is a complex process and despite of serious efforts, there is no commonly accepted formula for innovation. Today, innovations are created inside and outside companies, with customers and with other stakeholders. In order to maintain innovative momentum, business organization must manage creativity, maintain close contacts with customers and understand how the markets and customer behavior changes. Managing innovation is not a separate part of company process, but located in the very heart of organizational culture.

This course focuses on the innovation process, tries to analyze, evaluate and observe how innovations are created and how they are directed to serve the needs of customers. There is no one way to make innovations and manage the innovation process. Start-up companies live on radical innovations when mature global companies prefer incremental improvements. Innovation process is influenced by the internal dynamics of the company, but today also by the customers. Disruptions and sudden changes in markets affect the innovation process.

#### Core content:

What is an innovation and what is the innovation process.

Innovation typologies; what is the difference between radical, disruptive and incremental innovations? Innovation and strategy: How to promote and maintain innovation?

Innovation and culture: How to promote creativity, leadership and sustainability?

Innovation and problem solving: How to know what are the right questions and how questions are solved?

Innovation and society: How to manage innovation process in the regional, national and transnational context.

#### Additional knowledge:

Interplay between technology, business and society.

Role of networks and collaboration.

Talents and management of creativity.

# **Teaching Methods:**

In-class hours: Lectures: 24 h, Seminars: 8 h, Out-class hours: Assignments 52 h. Total student workload: 160 h

#### **Examination in Examination schedule (Yes/No):**

No

#### **Examination in Moodle (Yes/No):**

Yes

# Examination in Exam (Yes/No):

No

# **Assessment:**

Final grade 0-5. Evaluation 0-100 points will be based on: Assignment 1. (20 points), Assignment 2. (20 points), Assignment 3. (20 points), Moodle exam. (40 points). Total (100 points).

In order to pass the course, the student must gain a minimum of 10 points from the Assignments 1 and 20 points from the Moodle exam.

NOTE 2: The students who give feedback after the course through Webropol gain 2 extra points.

#### **Course Materials:**

Tidd, J. & Bessant, J. (2010) Managing Innovation: Integrating Technological, Market and Organizational Change. 4th Edition. John Wiley & Sons Ltd. Selected articles.

# Places for exchange-students? (Yes, number/No):

Nο

# Places for Open University Students?(Yes, number/No):

No

# BH60A4400: Introduction to Sustainability, 3 cr

Validity: 01.08.2013 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Energy Systems **Grading:** Study modules 0-5,P/F

Teachers: Virgilio Panapanaan, Mirja Mikkilä, Risto Soukka

Year:

M.Sc. (Tech.) 1

Period:

1

# **Teaching Language:**

English

# Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Risto Soukka

#### Aims:

Upon completion of the course the students are expected to be able to:

- 1) explain the interaction between the environment, society and business and understand the relationships of various actors in these fields and their impacts on the society and the environment, 2) understand the core idea and thinking behind sustainability and its importance in order to limit or decelerate environmental damages and improve our quality of life while pursuing a more sustainable lifestyle and business within the planetary boundaries,
- 3) understand and apply practically the learned principles and concepts of sustainability in relation to current production and consumption habits,
- 4) know and be guided about the different value-adding activities and tools that promote sustainability

#### **Contents:**

The idea is to learn and understand sustainability challenges and their interconnectedness, and find out how we could move or transit towards a more sustainable world.

# **Teaching Methods:**

1st period: 14 h of lectures. Independent study (approx. 64 h): assignment (group work) and seminar (approx. 26 h). Preparation for the examination and the exam (approx. 38 h). Total workload 78 h.

# Suitability for doctoral studies (Yes/Leave empty):

Yes

#### Examination in Examination schedule (Yes/No):

No

#### **Examination in Moodle (Yes/No):**

Yes

# Examination in Exam (Yes/No):

No

# Assessment:

0 - 5. Examination 60 %, assignment 40 %.

#### **Course Materials:**

Will be announced during lectures. Moodle.

Places for exchange-students? (Yes, number/No):

max 5

Places for Open University Students?(Yes, number/No):

max 5

Elective studies min. 30 cr

#### A130A2200: Internship for Master's Programmes, 2 - 6 cr

Validity: 01.08.2016 -

**Form of study:** Basic studies **Type:** Practical training

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F

#### Note:

This course concerns students in MIMM, MSF, MSIS and MSM master´s programmes. Registration for the course directly to the teacher any time during the academic year but before the planned practical training. The instructions for the training are given by the teacher. NB! Bachelor's and Master's degrees can include a total of 12 credits of practical training. The student can divide the credits in both of the degrees or the training can be included in its entirety in one of the degrees. However, in Master's degrees, maximum of 6 ECTS credit are acceptable as electives in core studies, and extra ECTS credits can be accepted in electives in Master's degrees. The student is free to find a suitable company / organization of his/her choice. The planned internship (organization, time, content, tasks) needs to be agreed by the internship coordinator in advance. It is advisable that Master´s programmes´ students would have an international element in their internships. Only the internship, which the student does during his/her studies at LUT, is acceptable.

The internship can be accepted only if the working hours are an average of 10 hours per week.

Student cannot apply for credits both for internship and for Project Work Course (A130A1000) from the same practical training.

#### Year:

M.Sc. (Econ. & Bus. Adm.) 1-2

#### Period:

1-4

#### **Teaching Language:**

English

#### Teacher(s) in Charge:

Please see UNI-portal: https://uni.lut.fi/en/web/lut.fi-eng/internship (UNI-portal > Degree Programmes > Business Administration > Instructions > Internship).

#### Aims:

The aim of the internship for Master's Programmes is to provide the students an opportunity to put their theoretical knowledge into practice, and to build networks in the job market. The student applies the knowledge learned in the university studies to complete the work tasks in a target organization. The student also develops skills in order to apply knowledge in his/her future career. In addition, the student gains new experience-based knowledge that can be utilized in studies, for example in assignments and in Master's Thesis.

#### **Contents:**

Applying previously learned knowledge, Gaining experience-based knowledge, Writing a report.

# **Teaching Methods:**

The practical training period in the target company 4 - 12 weeks, writing of the report (2-3 pages). Periods 1 - 4. Total workload in study hours 52 - 160 h (in work hours 160 - 480 h). See UNI-portal for instructions and further information: UNI-portal > Degree Programmes > Business Administration > Instructions > Internship.

# **Examination in Examination schedule (Yes/No):**

No

# **Examination in Moodle (Yes/No):**

No

#### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Accepted / failed, report 100%.

#### **Course Materials:**

See UNI-portal for instructions: UNI > Degree Programmes > Business Administration > Instructions > Internship.

# **Prerequisites:**

Bachelor's studies. For MIMM students: A330A0300 Strategic Global Marketing Management, A330A0251 Internationalization of the Firm, A350A0300 Technology and Innovation Management. For MSF students: A220A0200 International Financial Management, A220A0650 Financial Theory and Valuation, A220A0101 Derivatives and Financial Risk Management. For MSM students: A310A0101 Strategic Supply Management

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

No

# A210A0702: New Venture Management, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Anna Vuorio, Antero Tervonen, Sanni Väisänen, Terhi Virkki-Hatakka, Markku Ikävalko

#### Note:

The course is an advanced level course, but it can also be placed in bachelor's studies. Course is carried out in cooperation with several courses of Mechanical Engineering and Electrical Engineering Degree Programmes.

#### Year:

B.Sc. (Tech.) 2-3, B.Sc. (Econ. & Bus. Adm.) 2-3, M.Sc. (Tech.) 1-2, M.Sc. (Econ. & Bus. Adm.) 1-2

#### Period:

1-3

# **Teaching Language:**

English

#### Teacher(s) in Charge:

Post-doctoral researcher, D.Sc.(Bus. Adm.) Anna Vuorio Associate professor, D.Sc. (Bus. Adm.) Markku Ikävalko Project manager, D.Sc. (Tech.) Terhi Virkki-Hatakka University Lecturer, D.Sc. (Tech.) Antero Tervonen Post-doctoral researcher, D.Sc. (Tech.) Sanni Väisänen M.A. in Russian language and philosophy James F. Hyneman

#### Aims:

By the end of the course, students will be able to

- apply the skills and knowledge accumulated from previous courses into practice,
- recognize and develop new business ideas,
- manage creativity and learn methods for idea generation,
- plan different business operations,
- manage and organize business as a whole and act as a manager,
- create various business and management documents and reports,
- communicate issues about the project with other firm members.

#### **Contents:**

Recruited business experts together with engineering experts (= mainly mechanical engineering students) explore their creativity and create new business ideas by forming creative swarms. In these swarms of individuals, new business ideas are created and developed further. After evaluating ideas, business experts form virtual firms (= small groups) with 4-6 individuals and develop elements of business activity around their idea in cooperation with engineering experts.

The entire staff of the firm is self-organized and takes care of the establishment of the virtual firm. Business experts formulate a business plan and financial plan in cooperation with possible engineering experts of the firm. The tasks of business experts also include planning of various business activities, implementing those activities and reporting: management, financial management, cost accounting, budgeting, finance, marketing, supply chain management and logistics in cooperation with product planning and manufacturing.

The board and the Investors' board (= the teachers of different accompanied courses and a business mentor outside the university) support firm operations.

# **Teaching Methods:**

Board steering sessions (= introductory lectures) 12 h, 1st period. Board steering sessions 4 h and the board meetings 3 h, 2nd period. Board steering sessions 4 h and the board meetings 4 h, 3rd period. Independent project work by the staff of the virtual firm (the staff mainly defines working schedules, practices and responsibilities by itself) 133 h, 1st-3rd periods. Total workload 160 h.

# Examination in Examination schedule (Yes/No):

No

#### **Examination in Moodle (Yes/No):**

No

#### **Examination in Exam (Yes/No):**

No

# **Assessment:**

Grade 0-5, evaluation 0-100 points; project work 60 % (includes internal activities of the virtual firm, different written assignments of the business experts and performance in board meetings), peer review by the members of the firm 20 %, and self-evaluation 20%.

# **Course Materials:**

Material of the steering session of the board (= lecture notes). Material sought by the staff of the virtual firm.

#### **Prerequisites:**

The basic studies of bachelor's degree in Business Administration or bachelor's degree in Industrial Engineering and Management

# Limitation for students? (Yes, number, priorities/Leave empty):

Yes, 50; own quotas for Business Administration students and Industrial Engineering and Management students; priority to master degree students.

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

No

# A310A0501: Sustainable Global Sourcing, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Katrina Lintukangas

#### Note:

Replaces the course A310A0500 Global sourcing and sub-contracting. Can't be included in the same degree as A310A0500 Global sourcing and sub-contracting.

The number of participants is limited to 60. Students of Supply Management program have first priority to participate.

#### Year:

M.Sc. (Econ. & Bus. Adm.) 1

#### Period:

2

# **Teaching Language:**

English

#### Teacher(s) in Charge:

Associate Professor, D.Sc. (Econ & Bus. Adm.) Katrina Lintukangas

# Aims:

The aim of the course is to familiarize students with the strategic planning of global sourcing and the management of global supply networks and the execution of supply strategies in globally active firms. After taking the course, students should be able to

- identify and generate global sourcing strategies and sustainable sourcing
- recognize the risks and challenges of global sourcing
- analyse multinational business environments and sourcing opportunities
- assess the outsourcing, sub-contracting, technology and production transfer opportunities, challenges and sustainability in supply chains, location decisions and re-shoring
- develop supplier relationship management and supplier selection and assessment tools and methods.

#### **Contents:**

Global sourcing strategies, opportunities and challenges. Sustainability in global supply networks and the transparency of supply chains. Outsourcing and subcontracting, technology and production transfer. Reshoring and location decisions. Supplier selection and assessment, relationship management, collaboration and partnerships in global supply networks.

#### **Teaching Methods:**

Interactive lectures 8 h, case assignments, video presentations of case assignments, written report. Written exam, 2nd period. Preparing for lectures 16 h, preparation of the case assignment, presentations and written report 66 h, preparation for the exam 70 h. Total workload 160 h.

#### **Examination in Examination schedule (Yes/No):**

Yes

# **Examination in Moodle (Yes/No):**

No

#### **Examination in Exam (Yes/No):**

Nο

#### **Assessment:**

Grade 0-5, evaluation 0-100 points, written exam 70%, case reports 30%, all assignments must be passed to obtain the final grade.

#### **Course Materials:**

Lecture slides

Bals, Lydia & Tate, Wendy (Eds). Implementing triple bottom line sustainability into global supply chains 2016, Greenleaf Publishing

Assigned reading (collection of articles)

# **Prerequisites:**

B.Sc. (Econ. & Bus.Adm.) studies. For exchange students B.Sc. studies related to operationsmanagement, supply chain management, supply management or similar.

# Places for exchange-students? (Yes, number/No):

max 15

# Places for Open University Students?(Yes, number/No):

No

# A330A0100: International Business Strategies, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Anssi Tarkiainen, Jari Varis

Note:

Only for Master's level students.

Year:

M.Sc. (Econ. & Bus. Adm.) 2

Period:

1-2

#### **Teaching Language:**

**English** 

#### Teacher(s) in Charge:

Associate Professor, D.Sc. (Econ. & Bus. Adm.) Anssi Tarkiainen Associate Professor, D.Sc. (Tech.) Jari Varis

#### Aims:

The aim of the course is to familiarize students with strategic planning for international business in general and the management and execution of international business strategies within the context of multinational corporations in particular; To help the students to develop an understanding of various international or global strategies and their advantages and disadvantages. The assignment aims to expose the students to actual management challenges in an international context. After completing the course the students should be able to:

- assess technology intensive international marketing environment, and to create and carry out properly justified international business strategies;
- -decompose the corporate strategy into functional strategies (e.g. marketing or production strategy), and

to coordinate and critically evaluate the implemented strategies, by interpreting key financial indicators of performance;

- design, communicate, and carry out a group research project applied to a firm in asimulation; -work in a multi-cultural team;
- interpret new information critically and systematically and to develop ideas and projects based on this information;
- to apply knowledge gained from the course, in addition to that provided by additional reading, analysis and discussion, to the events, activities and/orstrategies of an actual firm or organisation;
- discusson topics of international business interest, and to stimulate and answer questions from a knowledgeable audience;
- develop a mindset that fosters sustainability, and global, market and technology orientation in a global business environment.

#### **Contents:**

The skills and application of critical inquiry into your reading, discussions, and situations and experiences that you encounter with regard to international business, both inside and outside the classroom setting. The international business planning process and its content especially related to international marketing. International and global business strategies. Strategic tools for analyzing the internal and external environment, for example resource and product positions. Organization of resources, capabilities and knowledge within a multinational corporation. Implementation methods of an international business strategy. International finance, international HRM, international production and sourcing strategies, corporate social responsibility. OLI paradigm, institutional theory, international technology strategy, real-life firm strategy examples (provided by a quest lecturer).

# **Teaching Methods:**

14 h of interactive lectures, 1st period. 8 h of interactive lectures, 2nd period. Group assignment/project work based on simulation exercises in international groups (incorporating online simulation and written group assignments: a strategic plan and a reflective report) 97 h, mid-term tutorial (each group independently with tutors), 1 h mental map assignment, preparation for lectures and exam, and a written exam 40 h. Total course 160 h.

#### Examination in Examination schedule (Yes/No):

Yes

## **Examination in Moodle (Yes/No):**

Yes

#### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Final grade 0-5. Evaluation 0-100 points:

Active class participation. Assignment(s): oral and written project work in groups, 70 points. Exam, 30 points.

All assignments (including the exam) must be passed.

#### **Course Materials:**

Lasserre, P: (2012). Global Strategic Management (3rf edition). Peng, M.W. (2009). Global Strategy (2nd edition). Assigned reading (collection of articles). Guide manual for the simulation. Slides from the lectures.

# **Prerequisites:**

A330A0300 Strategic Global Marketing Management, A330A0250 Internationalization of the Firm, A350A0300 Technology and Innovation Management

# Limitation for students? (Yes, number, priorities/Leave empty):

Yes, 100, The number of students attending the course may have to be limited based on a pre-exam if the number of students exceeds 80. In registration, priority is given to LUT School of Business and Management Master's students and foreign exchange students with earlier knowledge of international business.

# Places for exchange-students? (Yes, number/No):

Yes. 30

# Places for Open University Students?(Yes, number/No):

No

### A330A0201: Marketing of High Technology Innovations, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Agnes Asemokha, Sanna-Katriina Asikainen, Sanjit Sengupta

#### Note:

The course is only for Master's level students. The number of students attending the course is limited to 60. In registration, priority is given to LBM MIMM degree students followed by LUT LBM degree students.

#### Year:

M.Sc. (Econ. & Bus. Adm.) 2

# Period:

1-2

# **Teaching Language:**

English

#### Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Sanna-Katriina Asikainen Professor, PhD Sanjit Sengupta Junior researcher, M.Sc. (Econ. & Bus.Adm.) Agnes Asemokha

#### Aims:

After the course, student should be able to:

- 1. assess the special characteristics of high technology marketing environment and evaluate relevant opportunities and threats for a global business.
- 2. build and evaluate marketing strategies in high technology environments
- 3. formulate marketing decisions in high technology environments
- 4. solve real life high technology marketing problems
- 5. create and develop skills in theory application, information acquisition, analyses, and communications.
- 6. develop social and intercultural competence by working in intercultural groups

Course aims to provide a deep understanding of the functions of marketing regarding challenges and opportunities in high technology products and markets, assist the participants to understand the virtue and limitations of traditional marketing thinking and tools in emergent high technology markets.

#### **Contents:**

Contingency model of high technology marketing. Special characteristics of high technology markets. Strategy and Corporate Culture in High-Tech firms. Partnerships and Alliances. Marketing Research in High-Tech Markets. Understanding High-Tech Customers. Product development and Management issues in High-Tech markets. Pricing Considerations in High-Tech Markets. Advertising and Promotion in High-Tech Markets. New product launch strategies.

#### **Teaching Methods:**

Online lectures, homework and case assignments, seminars, exam.

This is an online course.

Lecture sessions:

6 h of live online sessions, 1.period. 1 h of case method introduction (online), 1. period. 6 h of live online seminars, 2.period. 2 h business case online lecture, 2 period. Total 15 hours.

#### Other assignments:

30 h of exam preparation, 10 h for preparing for online sessions, 13 h for doing homework assignment, 65 h for doing case assignments, 25 h for solving the business case. Total: 143 h. Final written exam. 2h

Total workload for student 160 h.

# **Examination in Examination schedule (Yes/No):**

No

# **Examination in Moodle (Yes/No):**

No

# **Examination in Exam (Yes/No):**

Yes

#### **Assessment:**

Final grade 0-5. Evaluation 0-100 points: Exam (35 points), Homework assignments (10 points), Case assignments (groupwork) (30 points) and case presentation (groupwork) 10 points. NOTE: Peer evaluation of the group work may effect on the grade. Business case (groupwork) (15 points)

#### **Course Materials:**

Mohr, Jakki, Sanjit Sengupta, and Stanley Slater (2010) Marketing of High-Technology Products and Innovations. Third Edition. Pearson Prentice Hall. Web site http://marketinghightech.net/

# **Prerequisites:**

Principles in marketing, Strategic Global Marketing Management

# Limitation for students? (Yes, number, priorities/Leave empty):

The number of students attending the course is limited to 60. In registration, priority is given to LBM MIMM degree students followed by LUT LBM degree students, exchange students with earlier knowledge on marketing/international business/technology management.

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

No

#### A350A0250: Multivariate and Econometric Analysis Methods, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Heli Arminen, Kaisu Puumalainen

Year:

M.Sc. (Econ. & Bus. Adm.) 1

Period:

3-4

#### **Teaching Language:**

English

# Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Kaisu Puumalainen Associate Professor, D.Sc. (Econ.) Heli Arminen

#### Aims:

The aim of the course is to give extensive general knowledge about the main econometric and multivariate analysis methods. After completion of the course students:

- understand the role of multivariate analysis in scientific research
- can evaluate and compare the applicability of various multivariate methods
- are able to collect numerical data about the market environment in different countries
- can apply multivariate analysis methods for cross-sectional, panel and time series data
- can conduct the analyses with Stata software
- can interpret and evaluate the results of the analyses
- can report the results according to good scientific practice General aim of the course is to improve following personal skills of the students:
- written and oral communication
- group work skills in a multicultural team context
- problem solving and project management skills

#### **Contents:**

Measure development and factor analysis, linear regression, linear models, logistic regression, panel data regression. Use of Stata software, use of international databases of statistical data. Special features of countries.

# **Teaching Methods:**

Video lectures 21 h, exercises 21 h (first two times of exercises are compulsory), independent data collection and analysis using the Stata software 50 h, 3rd period. Seminar 8 h, independent analysis, writing of report and preparing for presentation 60 h, 4th period. Total workload for student 160 h.

# Suitability for doctoral studies (Yes/Leave empty):

Yes

# **Examination in Examination schedule (Yes/No):**

No

# **Examination in Moodle (Yes/No):**

No

#### **Examination in Exam (Yes/No):**

No

#### Assessment:

Final grade 0-5, evaluation 0–100 points, written report 75%, oral presentation 25%.

# **Course Materials:**

Hair, Joseph Jr. et al.: Multivariate data analysis. Prentice Hall, 1998. Hill, R.C. - Griffiths, W.E. - Judge, G.G.: Undergraduate Econometrics, 2nd edition, 2001 or newer edition: Hill, R.C. - Griffiths, W.E. - Lim, G.C.: Principles of Econometrics, 3rd or 4th edition, 2008 or 2012.

# **Prerequisites:**

Basic courses in statistics and economics.

# Places for exchange-students? (Yes, number/No):

max 5

# Places for Open University Students?(Yes, number/No):

max 5

#### A350A0560: Sustainability Reporting and Communication, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Laura Albareda, Päivi Maijanen-Kyläheiko

#### Note:

Sustainability reporting and communication -course is an online course for individual learning. It is open throughout the academic year in Moodle. Students will proceed individually through the course. The course is available for Master's students of MSIS and Accounting.

Year:

M.Sc 1-2

#### Period:

Open throughout the academic year 1-4, summer

# **Teaching Language:**

English

# Teacher(s) in Charge:

Associate Professor Laura Albareda

Post-Doctoral Researcher, Päivi Maijanen-Kyläheiko

#### Aims:

By the end of the course, students will be able

- to define sustainability reporting and the main objectives for companies to report, fundamental concepts and the main dimensions and guiding principles
- to identify and apply different methods (sustainability reporting and integrated reporting) and the different elements and stages in preparing an integrated report
- to identify and analyze alternative ways to communicate sustainability as part of the business
- to identify the risks related to sustainability reporting and communication
- to evaluate the strategic value of sustainability reporting and communication (e.g. sustainable value creation, sustainable business models).

#### **Contents:**

Main content is connected to course aims:

Understand sustainability reporting

- The concept of materiality and sustainability reporting
- Fundamental and guiding principles

Identify and apply different methodologies

- Sustainability and Integrated reporting: main principles, values and framework
- Assignment: to prepare a chapter of integrated reporting
- Understand and analyze alternatives ways to communicate sustainability
- How is sustainability communicated
- Sustainability communication and brand building

Identify the risks related to sustainability reporting and communication

- Different risks related to sustainability reporting and communication
- How to handle these risks

Evaluate the strategic value of sustainability reporting and communication

- Value creation & business models
- Global agenda: sustainability reporting and stakeholder engagement
- Assignment: case analysis.

# **Teaching Methods:**

Independent learning based on the course materials, concept maps, videos with short lectures, power point or digital presentations, case studies, stimulating questions, (50 h)

- Online tests/multiple choice (20h)
- Assignments: formulation of a chapter for a sustainability report, case analysis, communication assignment (90 h)

Total workload: 160 hours.

#### Examination in Moodle (Yes/No):

Yes

#### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Assessment on the scale 0-5

40 % of the grade based on online tests/assignments in Moodle

60 % of the grade is based on assignments evaluated by the teachers (formulation of a chapter for a sustainability report, case analysis, communication assignment).

#### **Course Materials:**

Books, research articles and other material will be published in Moodle.

#### **Prerequisites:**

B.Sc level studies.

#### Limitation for students? (Yes, number, priorities/Leave empty):

The course is available for Master's students of MSIS and Accounting in LUT School of Business and Management.

#### Places for exchange-students? (Yes, number/No):

Nο

# Places for Open University Students?(Yes, number/No):

No

# A365A0711: Accenture Case Workshop, 3 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

**Teachers:** Agnes Asemokha, Lasse Torkkeli

#### Note:

Maximum of 35 students, based on a pre-assignment. Teams are formed randomly at the beginning of the day. The best student groups will gain access to Accenture Apprentice network. Only for Master's level students.

#### Year

M.Sc. (Tech.) 1, M.Sc. (Econ. & Bus. Adm.) 1

#### Period:

Intensive week 9

#### **Teaching Language:**

English

#### **Teacher(s) in Charge:**

Associate Professor Lasse Torkkeli MSc. (Econ. & Bus. Adm.) Agnes Asemokha

#### Aims:

After completing the course, the student will have the ability to apply case methodology (issue based problem solving) used by Accenture, in order to analyze real-life business cases, to evaluate possible solutions to strategic and managerial challenges, and to create professional presentations of the solution. The learning outcomes of the course are the following:

- 1.To identify the different stages of issue based problem solving case methodology
- 2.To apply the case methodology in practice to analyze problems
- 3.To deduce meaningful implications from real-life marketing case issues
- 4.To construct a written summary of a methodology textbook

5.To organize a multi-cultural group in order to analyze a case problem in a brief amount of time

6.To evaluate possible solutions to a marketing case problem.

7.To create a and present a professional consulting presentation

8.To propose and to defend consulting recommendations to professional consultants

9.To estimate the importance of sustainability in business management through case methodology.

#### **Contents:**

Issue based problem solving methodology, strategic decision-making, application of frameworks, presentation skills and group work

# **Teaching Methods:**

8 hours of interactive seminars, intensive week 9. Preparation for workshop 18 h. Written assignments 54 h. Total workload for student 80 h.

# **Examination in Examination schedule (Yes/No):**

No

# **Examination in Moodle (Yes/No):**

No

# **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Accepted/Failed

#### **Course Materials:**

http://www.ollisalo.net/koc/king\_of\_cases.pdf https://www.mindtools.com/ Hammond (1976). Learning by the case method. Harvard Business School material.

# **Prerequisites:**

This workshop is targeted at students who have already completed their bachelor degree and are studying in masters' programmes in business administration, industrial engineering and management or software engineering.

# Limitation for students? (Yes, number, priorities/Leave empty):

Yes, 35. Only for Master's level students

#### Places for exchange-students? (Yes, number/No):

No

#### Places for Open University Students?(Yes, number/No):

No

# CS30A1655: Advanced Course in Strategic Management, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Samuli Kortelainen

#### Note:

The student who has completed the course CS30A1684SS Advanced Course in Strategic Management can not include this course into the LUT degree.

#### Year:

M.Sc. (Tech) 2

## Period:

3-4

# **Teaching Language:**

English

# Teacher(s) in Charge:

Post-Doctoral Researcher, D.Sc. (Tech.) Samuli Kortelainen

#### Aims:

Strategic management literature is a widely research topic, that has lead to a wide and many times confusing and even contradictory literature. In order to fully understand the current state of literature, the lens needs to be first turned to the history of different strategic schools. Therefore, the course starts from the roots of strategy management and then builds a comprehensive view to the current status of strategic management literature. After the successful completion of course the student has:

- 1. Comprehensive picture of the current state of strategic management theory o Understanding reasoning behind different strategic management theories
- 2. Understanding on the limitations and restrictions in current strategic management theory and their practical implications
- 3. Holistic view to current new themes linking strategic management theories to other industrial management disciplines

#### **Contents:**

- 1. Main schools of strategic management The course begins on looking at the development history of main strategic management schools, where the goal is to identify similarities and differences between different literature streams.
- 2. The challenges and criticism of current strategic management theories Although strategic management theories are widely applied, they are also subjected to wide range of criticism. The second part of lectures focuses on these critical aspects of strategic management.
- 3. Current development paths of strategic management theory Third part focuses on the various detailed development steps in strategic management literature to counter or point critical points in original theories.

#### **Teaching Methods:**

Lectures 18 h, in-class room exercises 10 h, seminarwork and presentation 50 h, preparation to exam 50 h. Total 128 h. Individual 24 h exam.

# Examination in Examination schedule (Yes/No):

Nο

# Examination in Moodle (Yes/No):

No

#### **Examination in Exam (Yes/No):**

Yes

#### **Assessment:**

0 - 5. Exam 50 %, exercise 50 %.

# Places for exchange-students? (Yes, number/No):

Yes, 10

# Places for Open University Students?(Yes, number/No):

This course has 1-5 places for open university students. More information on the web site for open university instructions.

#### CS30A1661: Open Innovation, 6 cr

Validity: 01.08.2013 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Antero Kutvonen, Daria Podmetina, Justyna Dabrowska, Ekaterina Albats

Year:

M.Sc. (Tech.) 2, M.Sc. (Econ. & Bus. Adm.) 2

Period:

Periods 1-2, Periods 3-4

# **Teaching Language:**

English

# Teacher(s) in Charge:

Researchers, D.Sc. Antero Kutvonen, D.Sc. Daria Podmetina and doctoral students, M.Sc. Ekaterina Albats, M.Sc. Justyna Dabrowska

#### Aims:

After completion of the course, students will be able to

- 1. explain the concept of open innovation through both theory and examples (to e.g. a company executive)
- 2. analyze open innovation activities in real life companies and the motives for engaging in them and the mechanisms through which they create value for the company
- 3. distinguish between different modes of open innovation (inbound, outbound and coupled)
- 4. analyze the relation between a company's strategic choices and application of open innovation
- 5. understand and apply the scientific literature on the theme and relate open innovation to the context of other innovation management theories.

#### **Contents:**

Must know: The fundamental definitions and concept of open innovation. Modes and implementations of open innovation, i.e. ways to manage purposive in- and outflows of knowledge to collaboratively develop and/or commercialize innovations. Difference between closed and open innovation in managing technology. Identifying open innovation activities in real life firms. Monetary and strategic motives for engaging in open innovation.

Should know: Process models of inbound, outbound and coupled open innovation. The relation between corporate strategy, technology strategy and open innovation activities. Models of distributed innovation such as crowd-based open innovation. Most common examples of firms used to explain open innovation. Platforms and ecosystems role in business and innovation. Varying topics from state-of-the-art open innovation research, depending on guest lecturer. Basics of IPR management in open innovation. Nice to know: Development of the open innovation concept on the basis of prior innovation management theories. Knowledge of the main scientific literature surrounding open innovation. Theoretical determinants of open innovation and future perspectives towards the phenomenon.

#### **Teaching Methods:**

Lectures and guest speakers 35 h as intensive teaching. Small group assignments during lectures. Group exams (or substituting them with summaries of scientific articles, 16 h) on two of the intensive days, preparing for exams 16 h. Group-based case assignment 36 h. Independent study 44 h. Total 155 h.

# Suitability for doctoral studies (Yes/Leave empty):

Yes

Doctoral School course where enrollment is in WebOodi (Yes/Leave empty):

Yes

Examination in Examination schedule (Yes/No):

Νo

**Examination in Moodle (Yes/No):** 

No

**Examination in Exam (Yes/No):** 

No

#### **Assessment:**

0 - 5. Continuous evaluation based on small group exams (50%) and group-based case assignment (50%). Possibility to substitute group exams with literary work (summaries of scientific articles) in case of absence.

#### **Course Materials:**

The course book and reading material will be announced at the first lecture.

#### Limitation for students? (Yes, number, priorities/Leave empty):

Yes, 40 students, prioritized based on motivation letter submitted during registratio

Places for exchange-students? (Yes, number/No):

max 5

Places for Open University Students?(Yes, number/No):

max 5

# CS34A0401: Strategic Entrepreneurship in an Age of Uncertainty, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Marko Torkkeli, Ekaterina Albats, Justyna Dabrowska

Year:

M.Sc. (Tech.) 1

Period:

3

# **Teaching Language:**

**English** 

#### Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Marko Torkkeli

# Aims:

Managing in a knowledge-based economy, Managing by Core Competences, Knowledge intensive firms, Uncertainty. Are they the latest buzz words or another passing managerial fad? Old wine in new bottles? Or perhaps, just perhaps, fundamental means of survival and success for modern day corporations? Given the amount of effort that has been devoted to the topic by both academics and practitioners, it appears worth taking a deep and dispassionate look at the role of entrepreneurial thinking in sustained competitive advantage. The goal is to learn as you go and effectively convert assumptions to knowledge at a low cost.

By the end of the course, students will be able to identify business opportunities and analyze them using different tools of uncertainty management. Students will be able to understand the main components of different pitches and be able to design and present a pitch.

# **Contents:**

During the course students learn to develop and test a business idea following the feasibility analysis, discovery driven planning steps as well as using the uncertainty management tools of Attribute Mapping, Supply Chain Analysis, Differentiation, Quizzing and Market-Busters. The course does not teach business plan writing but rather focuses on opportunity recognition and feasibility assessment. Moreover, it adds the elements of lean startup as well as social entrepreneurship as possible avenues in dealing with entrepreneurial challenges.

Entrepreneurial thinking, uncertainty management, strategic entrepreneurship, discovery-driven planning.

# **Teaching Methods:**

Lectures 20 h, Independent study 73 h, seminar work writing 63 h, Total 156 h.

# Suitability for doctoral studies (Yes/Leave empty):

Yes

# **Examination in Examination schedule (Yes/No):**

No

#### **Examination in Moodle (Yes/No):**

Nο

#### **Examination in Exam (Yes/No):**

No

#### Assessment:

0 - 5. Based on assignment and in-class work, participation in the lectures required (possibility to substitute absence with literary work).

#### **Course Materials:**

Lectures and additional reading provided in the class. Book: McGrath Rita and MacMillan Ian, (2000). The Entrepreneurial Mindset. Harvard Business School Press.; McGrath Rita and MacMillan Ian, (2005). MarketBusters: 40 strategic moves that drive exceptional business growth. Harvard Business Press.

# Limitation for students? (Yes, number, priorities/Leave empty):

60, priority for GMIT students and others to whom this course is part of the major.

# Places for exchange-students? (Yes, number/No):

Yes, max 15

# Places for Open University Students?(Yes, number/No):

This course has 1-5 places for open university students. More information on the web site for open university instructions.

# KaMsisSs:, 42 cr

Validity: 01.08.2014 -

Form of study: Major studies

**Type:** Study module

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

No course descriptions.

# Obligatory

#### A350A0551: Project Course on Sustainable Business, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Laura Olkkonen, Laura Albareda

# Note:

This course is only offered for students of MSIS-programme in LUT School of Business and Management.

Year:

M.Sc. (Econ. & Bus. Adm.) 1

Period:

3-4

# **Teaching Language:**

**English** 

#### Teacher(s) in Charge:

Associate Professor Laura Albareda Researcher, Ph.D. Laura Olkkonen

#### Aims:

This project course focuses on business sustainability from a chosen case company perspective. Students will learn to assess and analyze sustainability elements of a case company, as well as to create suggestions for improvements and solutions in this regard. The learning outcomes of the course are the following:

1.To assess and analyze the sustainability of business and strategy of a chosen case company.

2.To create suggestions and guidelines for improving sustainability in various elements of a chosen case company's business and strategy.

#### **Contents:**

The course is designed around an independent research project, conducted for a chosen case company. Students are free to choose the case company from Finland or internationally, and they will receive help in this process if needed. The project involves theory-based work, data collection and analysis, and creation of concrete solutions for different aspects of sustainable business for the case company. During the course, different frameworks and tools regarding sustainable business are introduced, and they are utilized to analyze case companies. Before the course, students will contact the case companies in small groups. During the course, students will work with the lecturers and by themselves related to the collecting data from and analyzing the case companies. After data collection and analysis, students will return an individually conducted report using the frameworks and analytical tools introduced in the course.

#### **Teaching Methods:**

Contacting and finding a case company before the course lectures 20 h, Mandatory readings before the course lectures 12 h,

Lectures and seminars 28 h, Field research 40 h, Writing a project report 60 h. Total hours 160 h.

#### Examination in Examination schedule (Yes/No):

Nο

#### Examination in Moodle (Yes/No):

No

# **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Final grade 0-5. Evaluation 0-100 points.

Evaluation is based on individually conducted and reported project (60 points), in-class activity (20 points) and as well as a seminar presentation (20 points).

#### **Course Materials:**

Assigned via Moodle.

# **Prerequisites:**

This course is only offered for students of MSIS-programme in LUT School of Business and Management.

#### Places for exchange-students? (Yes, number/No):

No

## Places for Open University Students?(Yes, number/No):

No

# A350A0601: Contemporary Issues in Strategic Management and Innovation, 6 cr

Validity: 01.08.2015 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Paavo Ritala, Henri Hussinki

Year:

M.Sc. (Econ. & Bus. Adm.) 1

Period:

3

# **Teaching Language:**

English

# Teacher(s) in Charge:

Professor, D.Sc. Paavo Ritala

Post-doctoral Researcher, D.Sc. Henri Hussinki

#### Aims:

This course focuses on the topical phenomena and concepts related to strategic management and innovation, which will be investigated from different viewpoints of academic research and business practice. Students will learn to asses, debate and synthesize the recent literature and examine the links of contemporary topics to previous research.

The learning outcomes of the course are the following:

1.To assess and synthesize the contemporary concepts in strategic management and innovation.

2.To discuss and debate on specific topics of the course.

#### **Contents:**

The specific content of the course is based on current topics of strategic management and innovation, such as sustainable strategy, crowdsourcing, crowdfunding, digital platforms, artificial intelligence, business model innovation and business ecosystems. The course syllabus with detailed contents will be distributed in the beginning of the course. The course will utilize online methods and tools (blog posts and discussion threads) for student-driven content creation and discussion. The course will be conducted virtually within the 3. period, and is concluded with a live panel discussion.

#### **Teaching Methods:**

3. period, virtual course +, final panel discussion, Independent familiarization with literature 36 h, Independent content production 60 h. Online work: blog-thread moderation, commentary and discussion, 60 h. Panel discussion 4 h. Total hours: 160 h.

#### Examination in Examination schedule (Yes/No):

No

# **Examination in Moodle (Yes/No):**

No

# **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Final grade 0-5. Evaluation 0-100 points. Content creation 50 % Online activity points 50 % There is no written final exam.

#### **Course Materials:**

Independent content creation based on academic and practical sources and familiarization of other students' input.

# Places for exchange-students? (Yes, number/No):

max 10

# Places for Open University Students?(Yes, number/No):

No

# A350A9101: Master's Thesis, Strategy, Innovation and Sustainability, 30 cr

Validity: 01.01.2018 -

Form of study: Major studies

Type: Master's Thesis

**Unit:** LUT School of Business and Management **Teachers:** Kaisu Puumalainen, Laura Albareda

#### Note:

Topic of the master's thesis has to be confirmed as soon as the topic has been decided with the supervisor. Use form 1A in UNI-portal.

Year:

M.Sc. 2

#### Period:

1-4

#### **Teaching Language:**

**English** 

# Teacher(s) in Charge:

Professor, D.Sc. Kaisu Puumalainen Associate Professor Laura Albareda

#### Aims:

Upon completion of the course, students should be able to carry out a research project independently and to report the research in written format according to scientific practices, and will thus be able to:

- delimit and define the purpose and the topic of the research
- have a deep understanding on the theory, current research and research methods relevant to their main subject
- design and apply theoretical frameworks in own research and in solving empirical research problems
- independently identify and formulate issues and to plan and, by using appropriate methods, carry out advanced tasks within specified time limits
- integrate knowledge and to analyze, assess and deal with complex phenomena, issues and situations
- report scientific research in written academic format, clearly present and discuss conclusions, and the knowledge and arguments behind them

# **Contents:**

The student applies the knowledge and skills of previous studies and attends the Master's Thesis Seminars covering the specific features of a scientific research process and related requirements.

# **Teaching Methods:**

Seminar work on 1. - 4. periods. Seminars start in the beginning of the 1st period. Active participation in research seminars, successful completion of the required seminar assignments on topic selection, literature review, research aim, research questions and theoretical framework, presentation of the research plan, acting as discussants for other's work-writing of the thesis and completing the final

version of the Thesis under supervision of assigned Master's Thesis supervisors. Total workload consisting of research seminars, seminar assignments, research execution and written reporting 800 h.

# **Examination in Examination schedule (Yes/No):**

No

**Examination in Moodle (Yes/No):** 

No

Examination in Exam (Yes/No):

No

Number of mid-term examinations:

No

#### **Assessment:**

Thesis: improbatur – laudatur. All theses submitted for evaluation will undergo similarity check for plagiarism.

# **Course Materials:**

Master's Thesis - instructions and seminar materials available in Moodle and Uni portals.

# **Prerequisites:**

Approximately 30 ECTS cr. of master's studies. Thesis project idea that has been preliminary approved by the thesis supervisor (submitted in Moodle).

Places for exchange-students? (Yes, number/No):

No

Places for Open University Students?(Yes, number/No):

No

# Descriptions of courses and study modules not included in the degree structures

KaSOJoht: , 24 - 35 cr

Validity: 01.08.2016 -Form of study: Type: Study module

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Obligatory studies 24 cr

A130A0550: Introduction to Organizational Behavior, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Anna-Maija Nisula

#### Note:

This course is virtual and self-learning course.

#### Year:

B.Sc. (Econ. & Bus. Adm.) 1

# Period:

3-4

#### **Teaching Language:**

**Finnish** 

#### Teacher(s) in Charge:

D. Sc. (Econ. & Bus. Adm.), Post-doctoral researcher Anna-Maija Nisula

#### Aims

After completing the course a student is able to define the basic concepts of organizational behavior and identify these concepts by definition. The student is also able to describe and explain theoretical entities that are composed by the association of the basic concepts.

#### **Contents:**

The course examines organizational behavior on individual, group, and organization -levels. On the individual-level, the main themes of the course are personality and values, perception and decision-making, attitudes at work, basic concepts of motivation and their applications, and moods and emotions. On the group-level, the main themes are groups and teams, leadership, power and politics, and conflict and negotiation. On the organization level the content includes culture and change. Research methods in organizational behavior. Psychological ownership in organizations.

# **Teaching Methods:**

Online course. Independent work and written assignments 86 h. Written exam and preparation for the exam, 74 h. Total workload for the student 160 h.

# Examination in Examination schedule (Yes/No):

No

#### **Examination in Moodle (Yes/No):**

No

#### Examination in Exam (Yes/No):

Yes

#### Assessment:

Final grade 0 – 5. Evaluated on scale 0 – 100 points. Examination 60%, written assignments 40%.

#### **Course Materials:**

1. Robbins, S. P. & Judge, T. A. (2009). Organizational Behavior. 13th Edition, New Jersey: Pearson/Prentice Hall. 2. Materials announced by the lecturer.

# Places for exchange-students? (Yes, number/No):

Νo

# Places for Open University Students?(Yes, number/No):

No

#### A370A0250: Labour Law, 6 cr

**Validity:** 01.08.2011 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Helena Sjögrén

Year:

B.Sc. (Econ. & Bus. Adm.) 2-3

Period:

4

# **Teaching Language:**

**Finnish** 

### **Teacher(s) in Charge:**

Associate Professor D.Sc.(Econ. And Bus. Adm.) Helena Sjögrén

#### Aims:

A student knows the basics of labour as a subject of legal regulation.

#### **Contents:**

Labour as a subject of legal regulation and determination of the legal position of the employee. Collective labour law. Regulation of working time and safety at work.

# **Teaching Methods:**

Lectures 20 h and preparation for lectures 11 h. Written exam and preparation for exam 129 h. 4th period. Total workload for a student 160 h.

# **Examination in Examination schedule (Yes/No):**

Yes

# **Examination in Moodle (Yes/No):**

No

#### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points.

# **Course Materials:**

1. Koskinen, S. - Ullakonoja, V.: Oikeudet ja velvollisuudet työsuhteessa, 2012. 2. Koskinen, S. - Nieminen, K. - Valkonen, M.: Työsuhteen päättäminen, 2012. Lecture slides.

## **Prerequisites:**

Recommended A130A0700 Basic course in Business Law

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

max 15

#### A370A0401: Case-Course of Business, 6 cr

Validity: 01.08.2012 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Jukka-Pekka Bergman

# Year:

B.Sc. (Econ. & Bus. Adm.) 3

#### Period:

1-2, 3-4

# **Teaching Language:**

English

#### Teacher(s) in Charge:

Post-Doctoral Researcher, D.Sc. (Tech.), Dos. Jukka-Pekka Bergman

#### Aims:

The aim of the course is to familiarize students with the case-writing through the self-oriented independent team work by making an exersice of a *business analysis of a real case firm*. The students are able to evaluate and describe firm's business practices, markets, and explain their development using the frameworks she or he has learned at previous courses. The student is able to construct a well-written description of a case-firm and its business environment as well as provide concluding suggestions for the development targets for the firm using different empirical materials collected during the exercise. In addition, students train to organize and study the group work by themselves being collectively/as a group responsible for the case process and results.

#### **Contents:**

Strategy analysis. Case study methodology. Case-writing.

# **Teaching Methods:**

Lectures 4 h, selection of case-company and collection of data 40 h, reading of the literature needed in the analysis and description of the case 40 h, case-writing in English (international groups) or Finnish 76 h and possible final seminar (4 hours). Total workload for student 160 h.

# Examination in Examination schedule (Yes/No):

No

# **Examination in Moodle (Yes/No):**

No

# Examination in Exam (Yes/No):

No

#### **Assessment:**

Grade 0-5, evaluation 0–100 p. Literary group assignment 100%.

#### **Course Materials:**

Lecture slides.

#### **Prerequisites:**

B. Sc. (Econ. & Bus. Adm.) 2 studies

# Places for exchange-students? (Yes, number/No):

15-

# Places for Open University Students?(Yes, number/No):

max 10

#### Description and DL of the company assignment:

Exercise is a real-life business case that can/recommended to be a project for a company.

# A380A0131: Business Relationships in International Value Networks, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Anni-Kaisa Kähkönen, Terhi Tuominen

## Note:

If student has taken the course of A380A0130 Kansainväliset liikesuhteet arvoverkostoissa, the student is not able to participate to this course.

#### Year:

B.Sc. (Econ. & Bus. Adm.) 3

#### Period:

1

### **Teaching Language:**

English

# Teacher(s) in Charge:

Associate Professor, D.Sc. (Econ. & Bus. Adm.) Anni-Kaisa Kähkönen Post-Doctoral Researcher, D.Sc. (Econ. & Bus. Adm.) Terhi Tuominen

#### Aims:

The aim of the course is to familiarize students with different business relationships in value networks, with the management of relationships and networks, and the characteristics of international business relationships and collaborative networks.

Upon completion the course students are able to

- understand the main concepts and theoretical backgrounds of collaboration and networks
- analyze the benefits and challenges of relationships and networks
- recognize and understand the characteristics of value networks
- define supplier and customer relationships
- participate to the development of relationships.

#### **Contents:**

The concepts and theories of collaboration and networking, characteristics of value networks, the benefits and challenges of collaboration, managing of collaboration and networks, vertical and horizontal collaboration, the management of supplier relationships and customer relationships.

# **Teaching Methods:**

Online course, student driven content creation and discussion. Reading assignments and writing of essays 40 h. Case assignment including written reports, 60 h, in small groups. Independent Moodle exam and preparation for exam 60 h, 1stperiod. Total workload for student 160 h.

# Examination in Examination schedule (Yes/No):

No

# **Examination in Moodle (Yes/No):**

Yes

# **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points. Exam 40 %, case assignment 40 %, essays 20 %, all assignments must be passed to obtain final grade.

#### **Course Materials:**

1. Selection of journal articles, 2. Assigned readings

# **Prerequisites:**

B.Sc. (Econ. & Bus. Adm.) General studies

#### Places for exchange-students? (Yes, number/No):

15-

# Places for Open University Students?(Yes, number/No):

# KaSOKvmark:, 24 - 35 cr

Validity: 01.08.2016 -

Form of study: Type: Study module

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

#### Aims:

This minor is taught partly in Finnish.

Minor in International Marketing aims to provide basic knowledge on marketing and sales management as well as their idiosyncracies that arise from doing international business. After completion of this minor, the students are able to analyze, plan and develop the processes of marketing and sales in international business context. In addition, they understand the cultural issues that arise from international operating environment. The students possess good skills in communication, cooperation and project management.

Obligatory studies 24 cr

# A250A0450: Market and Competition Law, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F

Teachers: Pertti Virtanen, Helena Sjögrén

Year:

B.Sc. (Econ. & Bus. Adm.) 2-3

Period:

2

# **Teaching Language:**

**Finnish** 

# Teacher(s) in Charge:

Associate Professor, D.Sc. (Econ. and Bus. Adm.) Helena Sjögrén

#### Aims:

A student knows the legislation related to the regulation of the market conditions of businesses and a student understands the protection of a business or product idea, the product or service itself, and issues involving manufacture, marketing and competition restrictions.

#### **Contents:**

General regulation of market law, public procurement and competition law. Marketing and competition legislation and improper business activity. Product safety and product liability.

# **Teaching Methods:**

Lectures 20 h and preparation for lectures 10 h. Assignment and preparation for it 30 h. Written exam and preparation for exam 100 h. 2nd period. Total workload for a student 160 h.

# **Examination in Examination schedule (Yes/No):**

No

# **Examination in Moodle (Yes/No):**

No

## **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points. Presumes completed and passed assignment.

#### **Course Materials:**

1. Articles and statutes given by the lecturer. 2. Kuoppamäki, Petri, Uusi kilpailuoikeus, 2012, luvut I-V. 3. Virtanen: Markkinoi ja myy oikein, 2010. Sallitut ja kielletyt markkinointikeinot chapters 3-5.

# **Prerequisites:**

Recommended: A130A0700 Basic course in Business Law

Places for exchange-students? (Yes, number/No):

No

Places for Open University Students?(Yes, number/No):

max 15

# A380A0000: Cross-Cultural Issues in International Business, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Igor Laine

Year:

B.Sc. (Econ. & Bus. Adm.) 2

Period:

3

#### **LUT Winter School time:**

Yes

## **Teaching Language:**

**English** 

# Teacher(s) in Charge:

Post-doctoral researcher, D.Sc. (Econ. and Bus. Adm.) Igor Laine

#### Aims:

The goal of the course is to give an understanding of how the cultural environment affects management in international business, and advance students' global mindset by giving conceptual tools to increase their intercultural competence. After completing the course the students will be able to:

- 1. define and categorize culture
- 2. explain cultural orientations towards time, space and context
- 3. analyze and compare national cultures according to Hofstede's, Trompenaars' and GLOBE cultural dimensions
- 4. reflect upon the relationship between culture, organizations and management evaluate the effects of the cultural environment on international marketing strategies
- 5. examine the sources of cultural conflicts in international organizations
- 6. identify the role of cultural factors in managing and leading international teams
- 7. apply studied theories and ideas to business situation

The general aim of the course is to improve following personal skills and abilities of the students:

- recognizing cultural differences

- interacting effectively with people from other cultures
- working in groups and international teams

### **Contents:**

Concept and levels of culture, dimensions of culture in business (Hall, Hofstede, Trompenaars and GLOBE); The effect of culture on leadership and management in international business; The limits of globalization from the cultural perspective; Cross-cultural issues in virtual teams; Standardization and adaptation in international marketing; Country cases of cultural differences (term paper reports)

# **Teaching Methods:**

15 hours of lectures, case study workshop (2 hours) and term paper presentation seminar (4 hours). Preparation for lectures 12 h. Writing of term paper, preparation for case study and term paper presentations, 63 h. Written exam and preparation for exam 65 h. Total workload for student 160 h.

# **Examination in Examination schedule (Yes/No):**

Yes

# **Examination in Moodle (Yes/No):**

No

# **Examination in Exam (Yes/No):**

Yes

### **Assessment:**

Grade 0-5, evaluation 0-100 points, written exam 60 %, term paper 25 %, peer group evaluation report 5 %; case assignment 10 %, all assignments must be passed to obtain a final grade.

#### **Course Materials:**

1.Browaeys & Price: Understanding Cross-Cultural Management (3rd ed), Pearson, 2015

2.Lecture slides

3.Additional material distributed in class and via Moodle

### **Prerequisites:**

Basic course in management or marketing

# Places for exchange-students? (Yes, number/No):

15-

### Places for Open University Students?(Yes, number/No):

max 10

# A380A0201: Sales and Marketing Communication, 6 cr

**Validity:** 01.01.2018 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

**Teachers:** Tommi Rissanen, Anssi Tarkiainen

#### Note:

Replaces the course A380A0200 Promotion and Sales Management 6 cr

#### Year:

B.Sc. (Econ. & Bus. Adm.) 3

### Period:

2

## **Teaching Language:**

English

## Teacher(s) in Charge:

Associate Professor, D.Sc. (Econ. & Bus. Adm.) Anssi Tarkiainen Doctoral Student, M.Sc. (Econ. & Bus. Adm.) Tommi Rissanen

#### Aims:

After completing the course the student will understand changes in the field of commerce, including buying behavior, marketing communication (MC) and sales management (SM). Student is able to create and design marketing and sales funnel that applies new, more productive technologies. This course will pay special emphasis on understanding the linkages between marketing communication and sales, and the challenges in their integrated management.

The learning outcomes of the course are the following:

- to understand the evolution of buying behavior, marketing and sales in the era of digital technologies
- to understand the role of MC and SM in marketing strategy
- to assess the usability of different forms of communication with regard to buyer behavior
- to be able to design, implement and manage marketing communication and sales as part of the marketing process
- to assess the challenges of integrating MC and sales strategies, and combining traditional tools with new technologies
- to evaluate the effectiveness of MC and sales in the changing business environment.

#### **Contents:**

Core contents:

- The evolution of buying behavior, marketing and sales in the era of digital technologies.
- The role of marketing communication (MC) and sales in marketing strategy.
- The role of buyer behavior and its effects on the nature of communication (mass vs interactive /personal).
- MC and sales process, message and media strategy.
- Strategic planning process of MC and sales; challenges of integrating MC and sales management strategies.

Additional knowledge:

- Sustainability in MC context.

Special knowledge:

- Digitalization of MC and sales.

## **Teaching Methods:**

Combined lectures and exercises 28 h 2. period. Preparation for exercises 63 h (including written work) and preparation for the exam 71h. Written exam.

Total workload for student 160 h.

### **Examination in Exam (Yes/No):**

Yes

#### **Assessment:**

Final grade 0-5, evaluation 0-100 points. Exercises 40 points, written exam 60 points.

### **Course Materials:**

Lectures and selected articles.

# **Prerequisites:**

A130A0250 Kansainvälisen markkinoinnin perusteet (or basic course in marketing).

# Places for exchange-students? (Yes, number/No):

Yes, 15-

## Places for Open University Students?(Yes, number/No):

Max 5

### A380A0250: Export-Import Operations, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Sirpa Multaharju, Jari Varis

Year:

B.Sc. (Econ. & Bus. Adm.) 2

Period:

1

# **Teaching Language:**

**Finnish** 

### Teacher(s) in Charge:

D.Sc. (Tech.) Jari Varis

D.Sc. (Econ. & Bus. Adm.) Sirpa Multaharju

### Aims:

The aim of the course is to provide the students with the knowledge of most central issues of firms' exporting and importing functions. After completion of the course the students are able to:

- analyze various export and import modes
- compare the functions of exporting and importing in companies
- evaluate the export and import readiness of a chosen company in practice and analyze the skills needed for starting and developing international business (market entry)
- recommend the most suitable payment and transportation modes in a given export/import situation.
- explain the most common documentation related to export/import operations.
- indicate the most important organizations for export/import assistance.
- understand the basic theories of international trade.
- conduct project work in teams regarding export/import related matters.

#### **Contents:**

Exporting and importing as concepts and various modes of exporting and importing; exporting and importing as a part of firm's operations; exporting, importing and marketing functions of the firm, export / import readiness, export / import planning and implementation; payment methods in international trade, international trade theories and Finnish foreign trade. Required documents related to exporting and importing, Sources of information for exporting. Real life examples of exporting and importing practices in various companies (group assignments).

### **Teaching Methods:**

Lectures 12 h, exercises 8 h, preparing for exercises 50 h, group assignment given on the lectures, 1st period. Compulsory written exam. Total workload for student 160 h.

### Examination in Examination schedule (Yes/No):

Νo

### **Examination in Moodle (Yes/No):**

No

### **Examination in Exam (Yes/No):**

Yes

#### **Assessment:**

Grade 0-5, evaluation 0-100 points: - Group assignment 40 points - Written exam 60 points

# **Course Materials:**

Lecture materials

Melin Kirsti, (2011) Ulkomaankaupan menettelyt

Albaum, G. & Duerr, E. (2008) International marketing and export management, 6th (or 7th) edition, Prentice Hall, FT (luennoitsijan ilmoittamat osat)

Other material informed by lecturers

# **Prerequisites:**

CS10A0010 Markkinoinnin perusteet, A130A0200 Hankintatoimen perusteet

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

This course has 1-5 places for open university students. More information on the web site for open university instructions.

KaSOLamo: , 24 - 35 cr

Validity: 01.08.2016 -Form of study: Type: Study module

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

Obligatory studies 24 cr

# A250A0750: Financial Statement Analysis, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Antero Tervonen

Year:

B.Sc. (Econ. & Bus. Adm.) 2

Period:

1-2

# **Teaching Language:**

**Finnish** 

### Teacher(s) in Charge:

University lecturer, D.Sc. (Tech.) Antero Tervonen

# Aims:

By the end of the course, students will be able to:

- pay attention to essential factors of financial statement which can affect interpretation
- analyze, interpret and explain financial situation of a company using common key ratios of financial statement analysis
- evaluate the level of key ratios using mark scales and industry statistics
- choose suitable key ratios for a case with motivation by literature
- match effects of company's operational environment and industry to financial situation
- search for company's financial statement data and key ratios from different sources, among others financial statement databases

General aim of the course is to improve personal skills of the student:

- write a case report using common instructions of scientific writing

# Contents:

Adjustment of financial statement. Analysis of financial statement. Ratios of financial statement analysis, interpretation and utilization. Databases of financial statements. Cash flow statements.

# **Teaching Methods:**

Lectures 28 h, exercises 21 h, independent exercises and preparation for lectures 25 h, written case report 40 h, 1st period. Written case report 45 h, feedback lecture 1 h, 2nd period. Total workload 160 h.

# **Examination in Examination schedule (Yes/No):**

No

## **Examination in Moodle (Yes/No):**

No

# Examination in Exam (Yes/No):

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points, written case report 100 %

# **Course Materials:**

- 1. Yritystutkimus ry (Yritystutkimusneuvottelukunta): Yritystutkimuksen tilinpäätösanalyysi, 2005 or newer
- 2. Kallunki, J-P., Kytönen, E.: Uusi tilinpäätösanalyysi, 2007 or newer
- 3. Leppiniemi, J., Leppiniemi, R.: Tilinpäätöksen tulkinta, 2006 or newer
- 4. Salmi, I.: Mitä tilinpäätös kertoo?, 2012 or newer
- 5. Niskanen, J., Niskanen, M.: Tilinpäätösanalyysi, 2003 or newer
- 6. Kallunki, J-P., Lantto, A-M., Sahlström, P.: Tilinpäätösanalyysi IFRS-maailmassa, 2008
- 7. Luentomoniste
- 8. Muu luennoitsijan jakama materiaali

## **Prerequisites:**

A250A0250 Basic Course in Financial Accounting

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

No

# A250A0800: Financial Statement Planning, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Pasi Syrjä

Year:

B.Sc. (Econ. & Bus. Adm.) 3

Period:

1-3

### **Teaching Language:**

**Finnish** 

# Teacher(s) in Charge:

Professor, D.Sc. (Econ. & Bus. Adm.) Pasi Syrjä

Aims:

The aim of the course is to give basic skills able to plan the financial statements of a company, taking into consideration tax effects and shareholders', interests. After completion of the course students:

- understand the short and long term objects of financial statement planning
- can basic regulations of corporate and shareholders' taxation
- can basic tax planning elements
- understand the role of financial management in small business context General aim of the course is to improve following personal skills of the students: - group work skills -

problem solving

#### **Contents:**

Business taxation, shareholders´equity, short and long term financial statement planning, allocation and valuation, bookkeeping act. Procedure of taxation, taxation today, VATT and financial statement, Companies Act. Framework and theories of profit calculation.

# **Teaching Methods:**

Lectures 12 h 1st period. Lectures 12 h and exercises 12 h 2nd period. Case tutorial 4 h 3rd period. Independent reading, exercises and preparation for lectures 40 h, 1st and 2nd period. Case-report 40 h. Written exam and preparation for exam 40 h or learning diary 80 h. Total workload for student 160 h.

# Examination in Examination schedule (Yes/No):

Yes

# **Examination in Moodle (Yes/No):**

No

# Examination in Exam (Yes/No):

No

#### **Assessment:**

Grade 0–5, evaluation 0-100 points, case-report accepted/fail.

### **Course Materials:**

Leppiniemi & Walden: Tilinpäätös- ja verosuunnittelu, Talentum fokus e-book. Lecture and exercise material

# Places for exchange-students? (Yes, number/No):

No

### Places for Open University Students?(Yes, number/No):

15-

# A250A0850: Basic Course in Auditing, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Antero Tervonen

#### Year:

B.Sc. (Econ. & Bus. Adm.) 2

### Period:

4

### **Teaching Language:**

Finnish

# Teacher(s) in Charge:

University lecturer, D.Sc. (Tech.) Antero Tervonen

#### Aims:

Students learn to understand the basics of auditing and internal auditing, to define regulation that is related to auditing and to recognize reports of auditor.

#### **Contents:**

Contents and aim of auditing. Regulation of auditing. Audit reports. Internal control.

# **Teaching Methods:**

Lectures and exercises 28 h, preparing for the lectures and exercises, learning tasks of group work 72 h, personal learning tasks 60 h, 4th period. Total workload 160 h.

# Examination in Examination schedule (Yes/No):

No

# **Examination in Moodle (Yes/No):**

No

# **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points, learning tasks of group 60 %, personal learning tasks 40 %.

### **Course Materials:**

- 1. Tomperi, S.: Tilintarkastus Normeista käytäntöön, 2016
- 2. Ratsula, N.: Yrityksen sisäinen valvonta, 2016 or Ahokas, N.: Yrityksen sisäinen valvonta, 2012
- 3. Lecture material
- 4. Other literature announced by the lecturer

# **Prerequisites:**

A250A0750 Financial Statement Analysis

### Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

max 5

### CS31A0102: Basic Course in Cost Management, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Antti Ylä-Kujala, Tiina Sinkkonen

### Year:

B.Sc. (Tech.) 2,B.Sc. (Econ. & Bus. Adm.) 2

#### Period:

1

# **Teaching Language:**

Finnish

### Teacher(s) in Charge:

University Lecturer, TkT Tiina Sinkkonen

#### Aims:

By the end of the coursestudents will be able to:

- describe general cost terms
- use basic costing methods
- produce product calculations
- construct budget

### **Contents:**

Cost terms. Depreciation methods. Process-costing methods. Product costing. Investment appraisal methods. Budgeting. Cost-volume-profit analysis. Cost-based pricing. Standard costing.

# **Teaching Methods:**

Lectures 28 h, guided exercises 8 h, literature 21 h, homeworks 50 h, preparation for the exam and exam 50 h. Altogether 157 h. Exam.

# Examination in Examination schedule (Yes/No):

Yes

### Examination in Moodle (Yes/No):

Yes

# Examination in Exam (Yes/No):

No

### **Assessment:**

0 - 5. Examination in Examination schedule and in Moodle.

#### **Course Materials:**

Neilimo, Kari ja Uusi-Rauva, Erkki: Johdon laskentatoimi, Edita Oyj, Helsinki 1997.

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

max 10

# KaSOKansis: , 24 - 35 cr

Validity: 01.08.2016 -Form of study: Type: Study module

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

No course descriptions.

Obligatory studies 12 cr

# A250A0050: Econometric Methods, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Anni Tuppura, Heli Arminen

### Year:

B.Sc. (Econ. & Bus. Adm.) 2

#### Period:

3

# **Teaching Language:**

**Finnish** 

### Teacher(s) in Charge:

Associate Professor, D.Sc. (Econ. & Bus. Adm.) Heli Arminen Associate Professor, D.Sc. (Econ. & Bus. Adm.) Anni Tuppura

#### Aims:

By the end of the course, students will be able to explain what kind of assumptions and practices form the basis of regression analysis. Students can interpret and evaluate the results based on regression analysis. Students will be able to specify econometric models and estimate the parameters of the models with cross-section, time series, and panel data. Moreover, students will be able to evaluate critically the estimated model and methodology, as well as the reliability of the conclusions based on the model. Students will recognise that there are various estimation methods, and are able to explain what kind of method is suitable in a certain situation (and, when necessary, are able to use a statistical test to find the appropriate method).

### **Contents:**

Linear regression analysis and hypothesis testing. The use of Stata software and interpreting Stata output. Non-linear models, qualitative dependent variables, simultaneous equations and instrumental variables. The use of time series and panel data. Prediction and basic assumptions.

## **Teaching Methods:**

Lectures 21 h, exercises 14 h, preparation for lectures and exercises 35 h, course assignment and /or Moodle exercises 45 h, preparation for written exam and exam 45 h. Total workload for student 160 h.

## **Examination in Examination schedule (Yes/No):**

Yes

### **Examination in Moodle (Yes/No):**

No

# **Examination in Exam (Yes/No):**

No

### **Assessment:**

Grade 0–5, evaluation 0-100 points. Written exam 60%, course assignments 40%.

#### **Course Materials:**

- 1. Hill, R.C. Griffiths, W.E. Lim, G.C.: Principles of Econometrics, 3rd or 4th edition, 2008 or 2012 (or older edition: Hill, R.C. Griffiths, W.E. Judge, G.G.: Undergraduate Econometrics, 2nd edition, 2001)
- 2. Other material handed out in Moodle.

# **Prerequisites:**

A130A0350 Kvantitatiiviset tutkimusmenetelmät

## Number of exercise groups where enrollment is in WebOodi (Number/Leave empty):

2

# Places for exchange-students? (Yes, number/No):

No

### Places for Open University Students?(Yes, number/No):

max 5

# A250A0160: Introduction to Environmental Economics, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Heli Arminen

Note:

Replaces course A250A0150 Kansainvälisen kaupan teoria

Year:

B.Sc. (Econ. & Bus. Adm.) 2-3

Period:

3

# **Teaching Language:**

**Finnish** 

# Teacher(s) in Charge:

Associate Professor, D.Sc. (Econ. & Bus. Adm.) Heli Arminen

#### Aims:

By the end of the course, students will be able to

- name the central environmental problems and consider them from the point of view of economics
- use different methods for valuing the environment
- use simple economic models to analyze the connections between economic growth, international trade and sustainable development
- analyze the interplay of renewable and nonrenewable resources and the economy
- evaluate environmental policies from the point of view of economics.

### **Contents:**

Core content: Economic treatment of environmental issues

Additional content: Valuing the environment, environmental policy, renewable and nonrenewable resources as well as economic growth, international trade and sustainable development Special content: Finnish and international aspects of environmental issues

# **Teaching Methods:**

Lectures 20 h, exercises 8 h, preparation for lectures and exercises 20 h, course assignment and Moodle exercises 50 h, preparation for paper exam and exam 62 h. Total workload for student 160 h.

# **Examination in Examination schedule (Yes/No):**

Yes

### **Examination in Moodle (Yes/No):**

Yes

# Examination in Exam (Yes/No):

No

### **Assessment:**

Grade 0-5, evaluation 0-100 points. Paper exam and course assignment 100 %.

### **Course Materials:**

- 1. Hanley, N., Shogren, J. & White, B. (2013). Introduction to Environmental Economics, 2nd edition.
- 2. Other material handed out during lectures and exercises.

# **Prerequisites:**

A250A0400 Microeconomics

# Places for exchange-students? (Yes, number/No):

Νo

### Places for Open University Students?(Yes, number/No):

Elective studies, min 12 cr (Recommended, if not included elsewhere in the degree

# A210A0010: Economics of Organizations and Strategy, 6 cr

Validity: 01.08.2014 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

**Teachers:** Päivi Maijanen-Kyläheiko, Jorma Sappinen

Year:

M Sc.(Econ. & Bus. Adm.) 1-2

Period:

2

## **Teaching Language:**

**Finnish** 

# Teacher(s) in Charge:

Associate Professor, Ph.D. Jorma Sappinen Post-Doctoral Researcher D.Sc. (Econ. & Bus.Adm.) Päivi Maijanen-Kyläheiko

#### Aims:

The student is able to explain how transactions and production costs influence the boundaries of the firm after completing the course. He is also able to analyze the impact of the nature of market competition to the strategic decisions of a firm, and apply this knowledge to study by what kinds of means the firm is able to improve its position in markets and attain sustainable competitive advantage. Moreover he is able to analyze how to set incentives in an efficient way from the point of view of organization of the firm.

#### **Contents:**

The horizontal and vertical boundaries of the firm, the impact of competitive structure of decision making, strategic decision making of a firm (e.g. pricing, commitment, entry and exit etc.), attaining and sustaining of competitive advantage, and internal organization and incentives of firm. The evolution of business organizations. Diversification and social context of a firm.

### **Teaching Methods:**

Lectures 24 h, independent reading, completing the term paper, and preparing for lectures 70 h, written exam and preparation for the exam 66 h. Total workload 160 h. Written exam 80% and term paper 20%, both parts obligatory. Moodle is used in this course.

### **Examination in Examination schedule (Yes/No):**

Yes

## **Examination in Moodle (Yes/No):**

No

### **Examination in Exam (Yes/No):**

No

# **Assessment:**

Grade 0-5, evaluation 0-100 points, 80% exam and 20% term paper.

## **Course Materials:**

1. Besanko D. et al: Economics of Strategy, 3rd, 4th, 5th, 6th or 7th ed. 2. Collection of articles

# **Prerequisites:**

A250A0400 Microeconomics

Places for exchange-students? (Yes, number/No):

No

Places for Open University Students?(Yes, number/No):

No

### A250A0100: Investments, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Eero Pätäri

Year:

B.Sc. (Econ. & Bus. Adm.) 2

Period:

4

# **Teaching Language:**

Finnish

### Teacher(s) in Charge:

Eero Pätäri

### Aims:

At the end of the course a student is expected:

- to be familiar with the most commonly used asset pricing models
- to understand the pricing principles of financial securities and derivatives
- to be able to evaluate the relative price level and attractiveness of financial securities
- to apply the learning outcomes of the course to the investment decision-making in practice
- to understand the applicability areas of the conventional portfolio performance measures and to be able to evaluate the risk-adjusted performance of investment portfolios

## **Contents:**

Securities, derivatives, asset pricing models, modern portfolio theory, methods of security analysis and portfolio performance measurement.

### **Teaching Methods:**

Lectures or video lectures 18 h, 4th period. Exercises 18 h and preparation for exercises 54 h, 4th period. Written exam and preparation for exam, 70 h. Total workload for student 160 h.

### **Examination in Examination schedule (Yes/No):**

Yes

# **Examination in Moodle (Yes/No):**

No

# Examination in Exam (Yes/No):

No

# Assessment:

Grade 0 – 5 on the basis of the exam and exercise performance. Evaluation 0-100 points, written exam 90-100% and exercises 0-10% depending on the student's activity in exercises.

### **Course Materials:**

1. Bodie-Kane-Marcus: Investments, 2003 or newer edition or Sharpe, William F. - Alexander, Gordon J. - Bailey, Jeffrey V.: Investments, Prentice-Hall, 1999

2. Lecture material

# **Prerequisites:**

Fundamentals of Corporate Finance or alternatively, Fundamentals of Finance or Corporate Finance.

# Places for exchange-students? (Yes, number/No):

No

### Places for Open University Students?(Yes, number/No):

15-

# A250A1200: Financial Markets and Institutions, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Heli Arminen

Year:

B.Sc. (Econ. & Bus. Adm.) 2-3

Period:

1

# **Teaching Language:**

**Finnish** 

# Teacher(s) in Charge:

D.Sc (Econ.) Heli Arminen D.Sc. (Econ.) Heikki Lehkonen

### **Examination in Examination schedule (Yes/No):**

Yes

# BM20A1801: Linear Optimization, 6 cr

Validity: 01.08.2008 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Engineering Science

**Grading:** Study modules 0-5,P/F **Teachers:** Sirkku Parviainen

# Lectured every other academic year (Yes, next realization year/Leave empty):

Yes, next realization year 2018-2019.

Year:

B.Sc. (Tech.) 2-3

# Period:

3

## **Teaching Language:**

Finnish

# Teacher(s) in Charge:

Sirkku Parviainen, Lic.Phil., lecturer

### Aims:

In the end of the course the student should

- know how formulate various linear programming models
- know how to solve different kinds of linear programming problems
- understand the principles of solution algorithms and be able to analyze the results
- know how to use optimization software.

#### **Contents:**

Introduction to operations research. Examples of formulating LP models. Solving LP problems with the simplex method and analyzing the solution. Introduction to integer programming. Transportation problem and algorithm. Some network problems and algorithms. Introduction to multiple objective linear programming. Application of linear optimization software.

# **Teaching Methods:**

Lectures 28 h, exercises 28 h, 3rd period. Assignment 50 h. Self study and exam 54 h. Total work load 160 h.

# **Examination in Examination schedule (Yes/No):**

Yes

## **Examination in Moodle (Yes/No):**

No

# **Examination in Exam (Yes/No):**

No

## **Assessment:**

0-5, exam 100 %. Assignment.

#### **Course Materials:**

Lecture handout. Hillier, F.S., Lieberman, G.J.: Introduction to Operations Research, McGraw-Hill, 1990. Taha, H.A.: Operations Research, An Introduction, Prentice-Hall, 2007.

### **Prerequisites:**

Recommended BM20A6700 Mathematics I, and BM20A6900 Mathematics III , or A130A0600 Mathematics for Business and Economics

### Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

max 10

# BM20A6800: Mathematics II, 6 cr

Validity: 01.08.2017 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Engineering Science

Grading: Study modules 0-5,P/F

**Teachers:** Jouni Sampo

### Note:

The course must be done and registered in two parts, 3 ECTS cr and 3 ECTS cr. It is not possible to complete the course at the extent of 6 ECTS cr.

Part A replaces courses BM20A5820 Integraalilaskenta ja sovellukset 3 ECTS cr and part B BM20A5830 Differentiaaliyhtälöiden peruskurssi 3 ECTS cr.

#### Year:

B.Sc. (Tech.) 1 (In degree programmes Energy Technology, Mechanical Engineering, Electrical Engineering and Environmental Technology the course will be taken in second year)

### Period:

3-4

### **Teaching Language:**

Finnish

### Teacher(s) in Charge:

University Lecturer, D.Sc. (Tech.) Jouni Sampo

#### Aims:

After course, student can use integrals and differential equations to model and solve simple problems. Student can make elementary calculations with complex numbers.

#### **Contents:**

PART A:

Integral calculus of one variable with applications: applying differentials, solids of revolution, length of curve, parametric curves and integration. Application examples from various fields. PART B:

Complex numbers: basic calculus with complex numbers, complex plane, roots, Euler's formula. Differential equations: 1. order differential equations, 2. order linear differential equations, differential equation systems

# **Teaching Methods:**

The course is carried out in two parts which are separate entries in the study register.

PART A

Third period: Lectures 42 h, exercises 21 h. Preparation for exercises and lectures 14 h. Exam 3h. A total of 80 hours.

PART B:

Fourth period: Lectures 42 h, exercises 21 h. Preparation for exercises and lectures 14 h. Exam 3h. A total of 80 hours.

### **Examination in Examination schedule (Yes/No):**

Yes

#### **Examination in Moodle (Yes/No):**

Nο

### **Examination in Exam (Yes/No):**

No

### **Assessment:**

0-5, exams 100 %. Each part will be graded separately and each must be passed.

#### **Course Materials:**

Study material will be informed and distributed through the Moodle portal.

### **Prerequisites:**

Recommended BM20A6700 Matemathics I.

### Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

max 15

# KaSOYrijuri: , 24 - 35 cr

Validity: 01.08.2016 -

Form of study:

Type: Study module

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Obligatory studies 24 cr

# A210A0650: Corporate Tax Regulation and Business, 6 cr

Validity: 01.08.2014 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Pasi Syrjä

Year:

M.Sc. (Econ. & Bus. Adm.) 1

Period:

4

# **Teaching Language:**

**Finnish** 

# Teacher(s) in Charge:

Professor, D.Sc. (Econ. & Bus. Adm.) Syrjä Pasi

#### Aims:

The aim of the course is to give basic skills about the following topics The subject and principles of taxation - taxation process - tax compliance - good taxation system - tax avoidance and evasion - corporate taxation and corporate social responsible - taxation in different company forms International taxation - consolidated company taxation - transfer pricing - tax heavens Corporate taxation in the accounting research tradition

General aim of the course is to improve following personal skills of the students: - group work skills - problem solving

### **Contents:**

Tax process and principles of taxation International taxation and tax planning Tax research as a part of accounting research tradition

# **Teaching Methods:**

Introduction lecture 2 h 4th period. Independent studies 78 h. Leaning diary 40 h. Exam and preparing to the exam 40. Total work load 160 h.

### **Examination in Examination schedule (Yes/No):**

No

# Examination in Moodle (Yes/No):

No

# Examination in Exam (Yes/No):

Yes

### **Assessment:**

Grade 0-5, evaluation 0-100 points, written exam and learning diary 100%. Exam has to be written in the Exam Aguarium. More information in Moodle.

#### **Course Materials:**

Course materials will be informed in Moodle.

# **Prerequisites:**

B.Sc. studies.

Places for exchange-students? (Yes, number/No):

No

Places for Open University Students?(Yes, number/No):

15-

### A250A0300: Business Credits and Securities, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Helena Sjögrén

Year:

B.Sc. (Econ. & Bus. Adm.) 3

Period:

1

# **Teaching Language:**

Finnish

# Teacher(s) in Charge:

D.Sc. (Econ. & Bus. Adm.) Helena Sjögrén

### Aims:

A student knows the credit situations of entrepreneurship and security arrangements of both immovable goods and pieces of real estates, and a student understands the preconditions of an efficient security arrangement and to master the legal foundations of credit and security relations.

### **Contents:**

Core content: Basics of credit granting and different types of securities. Additional content: The legal regulation of credit granting, personal securities, real estate liens and security arrangements with immovable property. Special content: The securities of trade.

# **Teaching Methods:**

Lectures 14 h and preparation for lectures 14 h. Written exam and preparation for exam 132 h. 1st period. Total workload for a student 160 h.

# **Examination in Examination schedule (Yes/No):**

Yes

# **Examination in Moodle (Yes/No):**

No

### **Examination in Exam (Yes/No):**

Nο

### Assessment:

Grade 0-5, evaluation 0-100 points.

#### **Course Materials:**

1. Lecture leaflet 2. Wuolijoki, Sakari ja Hemmo, Mika, Mika: Pankkioikeus, 2013

## **Prerequisites:**

Recommended A130A0700 Basic Course in Business Law

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

max 15

### A250A0901: Company Law, 6 cr

Validity: 01.08.2015 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Helena Sjögrén

Year:

B.Sc. (Econ. & Bus. Adm.) 2-3

Period:

2

# **Teaching Language:**

Finnish

### Teacher(s) in Charge:

Associate Professor, D.Sc. (Econ. and Bus. Adm.) Helena Sjögrén

#### Aims:

A student knows the principles of corporations and understands legal questions related to corporations and different relationships between the directors, owners and lenders.

## **Contents:**

The basic features of the Finnish commercial corporations. Establishment, administration, financing and funding of commercial corporations. Transformation of the form of a corporation and dissolution of a corporation.

## **Teaching Methods:**

Lectures 2 h, independent study, learning diary & group work or alternatively exam. Total workload for a student 160 h.

### **Examination in Examination schedule (Yes/No):**

No

# **Examination in Moodle (Yes/No):**

No

# **Examination in Exam (Yes/No):**

Yes

### **Assessment:**

Grade 0-5 points, evaluation 0-100 points

#### **Course Materials:**

1. Lecture slides 2. Mähönen, Jukka – Villa Seppo: Osakeyhtiö II. Pääomarakenne ja rahoitus, 2006. 3. Mähönen Jukka – Villa Seppo: Osakeyhtiö III, Corporate Governance. 2006. Luvut I, II, III ja V (pp. 227-343).

# **Prerequisites:**

Recommended A130A0700 Basic course in Business Law

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

max 15

# A370A0250: Labour Law, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Helena Sjögrén

#### Year:

B.Sc. (Econ. & Bus. Adm.) 2-3

### Period:

4

# **Teaching Language:**

**Finnish** 

### Teacher(s) in Charge:

Associate Professor D.Sc.(Econ. And Bus. Adm.) Helena Sjögrén

# Aims:

A student knows the basics of labour as a subject of legal regulation.

#### **Contents:**

Labour as a subject of legal regulation and determination of the legal position of the employee. Collective labour law. Regulation of working time and safety at work.

# **Teaching Methods:**

Lectures 20 h and preparation for lectures 11 h. Written exam and preparation for exam 129 h. 4th period. Total workload for a student 160 h.

# **Examination in Examination schedule (Yes/No):**

Yes

### **Examination in Moodle (Yes/No):**

No

### **Examination in Exam (Yes/No):**

No

# **Assessment:**

Grade 0-5, evaluation 0-100 points.

### **Course Materials:**

1. Koskinen, S. - Ullakonoja, V.: Oikeudet ja velvollisuudet työsuhteessa, 2012. 2. Koskinen, S. - Nieminen, K. - Valkonen, M.: Työsuhteen päättäminen, 2012. Lecture slides.

# **Prerequisites:**

Recommended A130A0700 Basic course in Business Law

Places for exchange-students? (Yes, number/No):

No

Places for Open University Students?(Yes, number/No):

max 15

# TUSOdigan: Digitalization and Analytics, 24 - 36 cr

Validity: 01.08.2018 -Form of study:

**Type:** Study module

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

No course descriptions.

Obligatory courses 12 cr

# A210A0601: Information Systems in Corporate Management and Decision-making, 6 cr

**Validity:** 01.08.2014 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Mikael Collan

#### Note:

Weekly quizzes that will be open for three days each week.

Year:

M.Sc. (Econ. & Bus. Adm.) 1

Period:

2

# **Teaching Language:**

English

# Teacher(s) in Charge:

professor, D.Sc. (Econ. & Bus. Adm.) Mikael Collan

#### Aims:

The aim of the course is to give extensive general knowledge about corporate information systems and how they are used in corporate decision-making, business control, and as a driver of business development. After the course the students: have an understanding of the corporate information systems stack and the most common types of corporate information systems and where they are used, are able to view a business as a system and its parts as parts of a system, know how information systems can collect, summarize, and analyze corporate information, understand what the practice of fact based management is based on and how it is connected to information systems, know the concept of intelligent systems, know selected methods and tools, understand the types of results that they can provide, and the importance of such results for, for example, making the business more effective through optimization, can identify situations where information systems can be used to develop business practices

#### **Contents:**

Core content: corporate information stack, business intelligence

Additional content: controlling in a modern corporation based on IS, intelligent systems in business process development, concepts of optimization, machine learning, neural networks, simulation, and fuzzy logic

Special content: importance of visualizing knowledge

# **Teaching Methods:**

Lectures 20 h, independent reading assignments (articles), essay writing, and preparation for lectures 53h. Peer essay evaluation 2h, Quizzes, written exam and preparation for the quizzes and the exam 85 h. Total workload for the student 160 h.

# Examination in Examination schedule (Yes/No):

Yes

### Examination in Moodle (Yes/No):

No

## **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points, Quizzes 40%, Essay 20%, Written exam 40%.

#### **Course Materials:**

Lecture slides, lecture videos, assigned video material, assigned reading, collection of articles. All materials will be available via Moodle.

# **Prerequisites:**

For master's level students only

# Places for exchange-students? (Yes, number/No):

15-

# Places for Open University Students?(Yes, number/No):

max 5

## A220A0053: Investment and Business Analysis with Excel, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Azzurra Morreale, Mariia Kozlova

### Note:

The course requires practicing Excel and self-study on top of the exercises and lectures. If the course enrollment is more than the course maximum, then students are accepted in the following order: students from MSF and MBAN programmes, other master's programme students, other students.

#### Year:

M.Sc. (Econ. & Bus. Adm.) 1

# Period:

3

# **Teaching Language:**

English

# Teacher(s) in Charge:

D.Sc. (Econ. & Bus. Adm.), Post-doc researcher Mariia Kozlova

D.Sc. (Eng.), Post-doc researcher Azzurra Morreale

#### Aims:

After the course the students:

- are able to prepare and handle data ina spreadsheet environment performing tasks such as data classification and ordering
- are able to plan and perform various business and finance related analyses
- know how to create simple models for optimization and to perform statistical analyses on data.

#### Contents:

Planning and performing various analyses relevant to business and corporate finance, simple optimization and statistical analyses, importing data into the spreadsheet from other software, creating graphics for reporting results.

# **Teaching Methods:**

Seminars 10 h, preparing for the course with reading and video materials 20 h, independent exercise work 70 h, course project 50h, peer to peer evaluation 10 h. Total workload for the student 160h. Moodle is used in this course.

### Examination in Moodle (Yes/No):

Yes

### **Examination in Exam (Yes/No):**

Nο

#### **Assessment:**

Grade pass-fail, evaluation 0-100 points, exercises 70%, course project 30%.

#### **Course Materials:**

Lecture materials, video materials, assigned reading Beginning Excel What-If Data AnalysisTools: Getting Started with Goal Seek, Data Tables, Scenarios, and Solver, PaulCornell, 2006, Apress - available as an eBook in the library database.

### **Prerequisites:**

Lecture materials, video materials, assigned reading Beginning Excel What-If Data AnalysisTools: Getting Started with Goal Seek, Data Tables, Scenarios, and Solver, PaulCornell, 2006, Apress - available as an eBook in the library database.

# Limitation for students? (Yes, number, priorities/Leave empty):

Yes, max 200 students. Order of priority: students from MSF and MBAN programmes, other master's programme students, other students.

# Number of exercise groups where enrollment is in WebOodi (Number/Leave empty):

4

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

No

and minimum 12 cr of the following

# BM20A5001: Principles of Technical Computing, 4 cr

Validity: 01.08.2014 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Engineering Science

**Grading:** Study modules 0-5,P/F **Teachers:** Matylda Jablonska-Sabuka

Year:

B.Sc. (Tech.) 2., M.Sc. (Tech.) 1

Period:

1

## **Teaching Language:**

English

# Teacher(s) in Charge:

D.Sc. (Tech.) Matylda Jablonska-Sabuka

#### Aims:

Students get a good understanding of Matlab syntax and programming, gain fluency in principles of technical computing and are able to apply the skills to basic mathematical and engineering problems (the skills are applicable in big part to Octave and R programming, too).

#### **Contents:**

Working with various data structures (multidimensional arrays, cell arrays, etc.) and variable types (numeric, logical, textual, etc.), Matlab symbolic functionality, conditional statements (if-else, switch-case), loops (for and while), using built-in functions, handling external data, 2-D and 3-D plotting, writing user-defined functions, optimization of code speed, style and efficiency.

# **Teaching Methods:**

Lectures 12 h, computer class exercises 24 h, independent study 30 h, preparation for exam 34 h, 1st period. Total 100 h. EXAM-tentti.

# Examination in Examination schedule (Yes/No):

No

### **Examination in Moodle (Yes/No):**

No

## **Examination in Exam (Yes/No):**

Yes

# **Assessment:**

0-5, examination 100 %.

#### **Course Materials:**

Lecture material available in Moodle, based partly on textbook: Gilat, A.: An Introduction to Matlab with Applications.

# **Prerequisites:**

Basic university calculus required. Recommended first year university calculus necessarily including matrix calculus.

### Places for exchange-students? (Yes, number/No):

max 10

# Places for Open University Students?(Yes, number/No):

max 5

# BM20A6500: Simulation and System Dynamics, 6 cr

Validity: 01.08.2017 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Engineering Science

Grading: Study modules 0-5,P/F

Teachers: Azzurra Morreale, Virpi Junttila

Year:

M.Sc. (Tech.) 1

Period:

2-3

# **Teaching Language:**

**English** 

### Teacher(s) in Charge:

Post-Doctoral Researcher, D.Sc. (Tech.) Virpi Junttila Post-Doctoral Researcher, Ph.D. Azzurra Morreale

#### Aims:

The course gives an introduction to the concepts of discrete and continuous simulation models and methods together with numerical examples. After the course, the student is able to create and use different simulation models to solve practical problems. Among the discrete-event based models, the student is able to model basic queuing, server, scheduling and storage size problems. Also, the student is able to create basic operations and model dynamic systems with Simulink and use Simulink to solve different simulation problems.

#### **Contents:**

Basic concepts of discrete and continuous systems. Model-based design, basic modeling work-flow, basic simulation work-flow, running the simulations and interpreting the results. Random numbers, discrete event generation by random numbers. Statistical and empirical distributions for event generation. Building numerical simulation examples with Matlab and Simulink. Modeling dynamics systems and simulation models for dynamic systems with Simulink.

Application examples: queuing systems, storage size optimization, profitability analysis, supply chain management, investment analysis

# **Teaching Methods:**

Lectures 21 h, exercises 14 h, homework 21 h, 2nd period. Lectures 21 h, exercises 14 h, homework 21 h, 3rd period. Practical assignment 22 h, preparation for examination and the examination 22 h, 2nd-3rd period. Total 156 h.

# Suitability for doctoral studies (Yes/Leave empty):

Yes

### **Examination in Examination schedule (Yes/No):**

Yes

### Examination in Moodle (Yes/No):

Nο

## Examination in Exam (Yes/No):

No

#### **Assessment:**

0-5, examination 80 %, homework and practical assignment 20 %.

#### **Course Materials:**

Course material is given in the course homepage.

# **Prerequisites:**

Recommended BM20A1401 Tilastomatematiikka I and BM20A5001 Principles of Technical Computing.

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

max 15

# CS31A0720: Basics of ERP systems, 6 cr

Validity: 01.08.2017 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

**Teachers:** Lasse Metso

#### Note:

Students need own computers (Windows) to which SAP client is installed.

Year:

M.Sc. (Tech.) 1 or 2

## Period:

3-4

# **Teaching Language:**

English

### Teacher(s) in Charge:

Junior Researcher Lasse Metso, M.Sc. (Tech.)

#### Aims:

After completing the course students will be able to:

- evaluate the benefits of ERP system
- develop and modify master data to ERP system
- support business processes by use of ERP system

#### **Contents:**

Theory of ERP systems and security of ERP systems. SAP business processes:

#### Logistics

- Purchasing
- Inventory Management
- Warehouse Management
- Production Contro
- Sales and Distribution
- Plant maintenance
- Project Management

# <u>Accounting</u>

- Financial Accounting
- Controlling

# **Human Capital Management**

# **Teaching Methods:**

This course is using distance education methods. All material will be in Moodle or links in Moodle. Students can participate regardless of time and place. SAP client implementation and definition of needed connections (12 h), SAP assignment (90 h) and learning diary (54 h). Total workload 156 h.

# Examination in Examination schedule (Yes/No):

No

### Examination in Moodle (Yes/No):

Nο

### Examination in Exam (Yes/No):

No

### **Assessment:**

SAP assignments 60 % and learning diary 40 %.

### **Course Materials:**

Materials used in this course are mainly based on SAP UCC material which are given to students and scientific articles (defined during course).

# Places for exchange-students? (Yes, number/No):

max 10

# Places for Open University Students?(Yes, number/No):

max 5

# CS38A0040: Marketing analytics, 6 cr

Validity: 01.08.2017 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Jyrki Savolainen

#### Note:

If the course enrollment is more than the course maximum, then students are accepted in the following order: students from MBAN programme, students from MIMM programme, other master's programme students, other students.

#### Year:

M.Sc. (Tech) 1

## Period:

4

# **Teaching Language:**

**English** 

# Teacher(s) in Charge:

Jyrki Savolainen, D.Sc.(Econ. & Bus. Adm.), Post-doc researcher

### Aims:

The aim of the course is to offer extensive knowledge on the use of various analytical techniques in marketing. The students will be introduced to the process of decision support in marketing using analytics in various typical problems. Through several practical examples, the course aims to provide the tools that focus on data understanding and preprocessing, modelling choices and implementation until the interpretation, visualization and utilization of the analysis in various marketing-related problems. The course will provide hands-on lectures to using the various methodologies with the selected software environments. After the course the students: have an understanding of the process of performing marketing analytics, know how to collect, understand and preprocess data to be used in marketing problems, know the most important applications and can identify the appropriate tool for a specific problem, are capable of performing marketing analytics using software, understand the role of big data in marketing.

#### **Contents:**

Core content: role of data in modern marketing, traditional methods (clustering, forecasting, market-basket analysis), machine learning-based methods in marketing (recommendation systems, advertising on the web)

Additional content: social network analysis, sentiment analysis

Special content: use of the introduced methods with relevant software

# **Teaching Methods:**

Lectures 20 h, computer room tutorials 10 hours, course assignments involving data analysis with software 75h. Written exam and preparation for the exam 55 h. Total workload for the student 160 h.

# **Examination in Examination schedule (Yes/No):**

Yes

### Examination in Moodle (Yes/No):

No

### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Course assignments (70% of the grade), written examination (30% of the grade), grading 0-5.

#### **Course Materials:**

The course will largely be based on the free online book (<a href="http://www.mmds.org/">http://www.mmds.org/</a>) Leskovec-Rajaraman-Ullman: Mining of Massive Datasets Additional material will be distributed during the course via Moodle.

# **Prerequisites:**

The course will use an analytics capable software (to be announced later; Matlab or R, perhaps even Excel) - the students are expected to know how to use the software. Basic knowledge in statistics.

# Limitation for students? (Yes, number, priorities/Leave empty):

Yes. 50, priority to MBAN students (Masters program in business analytics), then students from MIMM programme, other master's programme students, other students.

# Places for exchange-students? (Yes, number/No):

No

### Places for Open University Students?(Yes, number/No):

No

# CT70A4000: Business Process Modelling, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Ajantha Dahanayake

Year:

M.Sc. (Tech.) 1

Period:

1-2

# **Teaching Language:**

English

## Teacher(s) in Charge:

Professor, PhD Ajantha Dahanayake

### Aims:

- 1. Identify the principles of a business process modelling language and the dimensions of quality in a process model
- 2.Apply the process of process modelling ("method") and the social aspects of process modelling
- 3.Use the modelling language to express and abstract from a realistic business process
- 4.Apply a method for modelling business processes in all its stages
- 5.Evaluate the model and the modelling process as a social process
- 6. Investigate a business and research question related to business process modeling

### **Contents:**

Introduction of the concept and relevance of a business process, role modeling, dimensions of model quality and measurement, BPM and modeling methods, application to business process modeling and digital transformation, research issues.

# **Teaching Methods:**

Lectures 14 h, homework work 20 h, 1. period.

Lectures 14 h, homework 20 h, 2. period.

Reading assignments, 2 hands on team project assignments 88 h. Total 156 h.

# **Examination in Examination schedule (Yes/No):**

No

# **Examination in Moodle (Yes/No):**

No

### Examination in Exam (Yes/No):

No

### **Assessment:**

0-5. continuous evaluation. Assessments 50%, Project 50%

### **Course Materials:**

- Silver, Bruce: BPMN Method and Style, 2nd Edition, with BPMN Implementer's Guide: A structured approach for business process modelling and implementation using BPMN 2.0. Cody-Cassidy Press, 2011
- Weske, Mathias: Business Process Management: Concepts, Languages, Architectures. Springer, 2007

# Places for exchange-students? (Yes, number/No):

max 5

### Places for Open University Students?(Yes, number/No):

No

### Elective

### CS38A0020: Optimization in business and industry, 6 cr

Validity: 01.08.2017 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Sirkku Parviainen, Pasi Luukka

Year:

M.Sc. 1.

Period:

4

### **Teaching Language:**

English

### Teacher(s) in Charge:

Pasi Luukka, D.Sc. (Tech.), Associate Professor Sirkku Parviainen, Lic.Phil., Lecturer

#### Aims:

By the end of the course student will be able to

- select/ employ mathematical models for various optimization problems
- use optimization software
- interpret information from optimization results
- understand the basic principles of different optimization algorithms for linear, mixed-integer linear, and nonlinear optimization

### **Contents:**

Formulation of optimization models. Linear programming and mixed-integer linear programming, nonlinear optimization algorithms.

Solving optimization problems using Matlab Optimization Toolbox. Business and industry oriented practical examples, i.e. factory, warehouse, sales allocation models etc.

## **Teaching Methods:**

Lectures 28 h, exercises 28 h, 4th period. Independent study 74 h, practical assignment 30 h. Written examination. Total work load 160 h.

### **Examination in Examination schedule (Yes/No):**

Yes

### **Examination in Moodle (Yes/No):**

No

### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

0-5, examination 100 %

### **Course Materials:**

Taha, H.A.: Operations Research an introduction, 8th edition, Pearson/Prentice-Hall, 2007. Hillier, F.S., Lieberman, G.J.: Introduction to Operations Research, 8th edition, McGraw-Hill, 2004.

# **Prerequisites:**

Experience in programming or using mathematical software required.

BM20A4301 Johdatus tekniseen laskentaan or BM20A5001 Principles of Technical Computing

# Number of exercise groups where enrollment is in WebOodi (Number/Leave empty):

2

# Places for exchange-students? (Yes, number/No):

Yes, max 15

## Places for Open University Students?(Yes, number/No):

Yes, max 10

# TuSOEntr: Entrepreneurship, minor, 20 - 35 cr

Validity: 01.08.2016 - Form of study:

Type: Study module

**Unit:** LUT School of Business and Management

Obligatory course 6 cr

# CS34A0302: Entrepreneurship Theory, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Marita Rautiainen, Timo Pihkala

#### Note:

Course is also a part of the Entrepreneurship minor subject.

Year:

M.Sc. (Tech.) 1

Period:

1

# **Teaching Language:**

**English** 

#### Teacher(s) in Charge:

Professor, D.Sc. (Econ. & Bus. Adm.) Timo Pihkala D.Sc. (Econ. & Bus. Adm.) Marita Rautiainen

#### Aims:

The aim ofthis course is to give an overview of different forms of entrepreneurship, itsimportance for economies and the people involved. Besides studying and discussing a selection of academic articles, students will be actively involved in the entrepreneurial process through practical cases. After the course, students should be able to:

- Prove evidence of a comprehensive knowledge of the concepts and theories used in the course
- Prove evidence of (research and case-based) empirical knowledge regarding the different topics covered by the course
- Be able to link theoretical knowledge with empirical insights and apply it to practical cases, in particular:
  - Be able to analyze a business case and critically assess the quality of entrepreneurial strategies and tactics based on theoretical and practical insights
  - Be able to find and evaluate relevant literature and empirical evidence to support the analysis of specific topics covered by the course
  - Be able to critically assess the validity of statements based on empirical research

### **Contents:**

Basic concepts of entrepreneurship, entrepreneurship theory, entrepreneurial person and the latest theoretical directions.

# **Teaching Methods:**

Independent studies 148 h, lectures 8 h, total 156 h.

# Suitability for doctoral studies (Yes/Leave empty):

Yes

# Doctoral School course where enrollment is in WebOodi (Yes/Leave empty):

Yes

### Examination in Examination schedule (Yes/No):

No

# **Examination in Moodle (Yes/No):**

Yes

# **Examination in Exam (Yes/No):**

No

### **Assessment:**

0-5, Moodle-exams (50%) and written assignment (50%).

### **Course Materials:**

Bridge, S., O´Neill, K. and Cromie, S. (2003): Understanding, Enterprise, Entrepreneurship and Small Business. (2nd ed.) Palgrave-MacMillan Shane, Scott: A general theory of entrepreneurship. The individual-opportunity nexus. Edward Elgar. Lecture materials

# Limitation for students? (Yes, number, priorities/Leave empty):

Yes, maximum 100. Priority is given to the student in Entrepreneurship masters program and students of entrepreneurship minor.

# Places for exchange-students? (Yes, number/No):

15-

# Places for Open University Students?(Yes, number/No):

15-

## Elective studies

# CS30A1372: Creative Design and Problem Solving, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Andrzej Kraslawski

Year:

M.Sc. (Tech.) 1

#### Period:

1-2

### **Teaching Language:**

**English** 

### **Teacher(s) in Charge:**

Professor, Ph.D. Andrzej Kraslawski

# Aims:

Learning outcomes: After fulfilling all requirements of the course, the students will be able to: 1. Understand the principles of creative problem solving 2. Know the basic methods of creative design 3. Work in team during the design process 4. Apply methods of creative design to products, processes, services and business methods

#### **Contents:**

The major subjects of the course are: Major Steps in Problem Solving Types of Problems Types of Design Concept of Creativity Survey of Intuitive and Structured Methods of Creativity Enhancement Types of Brainstorming Check lists Morphological analysis Synectics Case-based Reasoning Graphical Methods Evaluation of Ideas

# **Teaching Methods:**

The course is organised as a combination of regular lectures and interactive problem-solving sessions and project works. The in-class problem-solving sessions will be based on the team work realised by the groups of 3-5 students. The 3-4 project works will be realised by the groups of 3-4 students during the out-of-class activities and it will be finished with the preparation of the project report. In-class teaching and problem-solving sessions 42 h, project works 88 h. Total workload 130 h.

Lectures, in class activity, period 1. Project work, out-of - class activity, period 2. Project work 88 hours

# Suitability for doctoral studies (Yes/Leave empty):

Yes

# Doctoral School course where enrollment is in WebOodi (Yes/Leave empty):

Yes

### **Examination in Examination schedule (Yes/No):**

Yes

# **Examination in Moodle (Yes/No):**

No

### **Examination in Exam (Yes/No):**

No

### **Assessment:**

Final grade 0-5. Evaluation: Generated solutions of the in class problems 40 %, project reports 30 %, written exam 30%. Obligatory presence during 80% of in-class activities.

#### **Course Materials:**

Course slides.

Tony Proctor Creative problem solving for managers Routledge, 3rd edition, 2009

H. Scott Fogler and Steven E. LeBlanc Strategies for Creative Problem Solving Prentice Hall, 3rd edition, 2013

David Silverstein, Philip Samuel, Neil DeCarlo The Innovator's Toolkit: 50+ Techniques for Predictable and Sustainable Organic Growth Wiley, 2009

Alexander Osterwalder and Yves Pigneur Business Model Generation Osterwalder and Pigneur, 2010

## **Prerequisites:**

Basic courses of management. Basic knowledge of engineering disciplines (e.g. process or mechanical engineering).

# Limitation for students? (Yes, number, priorities/Leave empty):

Yes, 80

## Places for exchange-students? (Yes, number/No):

15-

# Places for Open University Students?(Yes, number/No):

max 5

# CS30A1691: Social Sustainability, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Rakhshanda Khan, Helinä Melkas, Suvi-Jonna Martikainen, Satu Pekkarinen, Suvi Konsti-Laakso

Year:

B.Sc. (Tech.) 3

Period:

4

# **Teaching Language:**

English

# Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Helinä Melkas Rakhshanda Khan, PhD, Senior Researcher Satu Pekkarinen, PhD, Senior Researcher Suvi Konsti-Laakso, M.Sc., Researcher Suvi-Jonna Martikainen, MA, Researcher

#### Aims:

After completion of the course, students will be able to

- explain and analyze the significance and meaning of social sustainability in development of business, organization and product and service processes
- discuss both theoretical and practice-based viewpoints as well as the kinds of tools and methods that enable social sustainability to become part of business, management and product and service development
- determine and compare appropriate situations for applying these methods
- differentiate between elements for critical thinking concerning social sustainability.

### Contents:

Core content: social sustainability at different levels (global, societal and organizational), social innovation, frugal innovation, social enterprise, end-user involvement, employee involvement. Supplementary content: practical cases, methods and Living Lab activities.

# **Teaching Methods:**

Lectures (intensive teaching) and small group assignments during the lectures 5 h, case exercise to be given during the lectures 60 h, independent and/or group studies 60 h, presentation of case exercises in a closing seminar 10 h, personal learning diary 21 h = total 156 h.

# **Examination in Examination schedule (Yes/No):**

No

### Examination in Moodle (Yes/No):

Νo

# Examination in Exam (Yes/No):

No

#### **Assessment:**

0 - 5. Case exercise 70%, learning diary 30%.

### **Course Materials:**

The study materials consist of course slides and selected articles (will be announced later).

# **Prerequisites:**

None.

# Places for exchange-students? (Yes, number/No):

max 15

## Places for Open University Students?(Yes, number/No):

max 5

## CS34A0352: Leading business growth, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Mikko Pynnönen

Year:

M.Sc. (Tech.) 1

### Period:

1

# **Teaching Language:**

**English** 

# Teacher(s) in Charge:

Mikko Pynnönen, D.Sc. (econ.), Professor

### Aims:

The students become familiar with the basic concepts of entrepreneurial growth, growth strategies and the latest theoretical directions within entrepreneurship research. After the course, the students are able recognize different forms of growth, growth potential and routes for business development.

# **Contents:**

Models, theories and approaches on entrepreneurial growth, growth strategy and SME development.

### **Teaching Methods:**

Lectures 18h, 1st period. Prior reading and assignments 106 h, essay writing, 30 h. In total 154 h.

# **Examination in Examination schedule (Yes/No):**

No

### Examination in Moodle (Yes/No):

No

### **Examination in Exam (Yes/No):**

Nο

### Assessment:

0-5, Group assignments 50%, essay 50%.

### **Course Materials:**

Cases and articles delivered during the course. Lecture materials.

## Places for exchange-students? (Yes, number/No):

max 5

# Places for Open University Students?(Yes, number/No):

max 5

# CS34A0401: Strategic Entrepreneurship in an Age of Uncertainty, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Marko Torkkeli, Ekaterina Albats, Justyna Dabrowska

Year:

M.Sc. (Tech.) 1

Period:

3

# **Teaching Language:**

English

# Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Marko Torkkeli

#### Aims:

Managing in a knowledge-based economy, Managing by Core Competences, Knowledge intensive firms, Uncertainty. Are they the latest buzz words or another passing managerial fad? Old wine in new bottles? Or perhaps, just perhaps, fundamental means of survival and success for modern day corporations? Given the amount of effort that has been devoted to the topic by both academics and practitioners, it appears worth taking a deep and dispassionate look at the role of entrepreneurial thinking in sustained competitive advantage. The goal is to learn as you go and effectively convert assumptions to knowledge at a low cost.

By the end of the course, students will be able to identify business opportunities and analyze them using different tools of uncertainty management. Students will be able to understand the main components of different pitches and be able to design and present a pitch.

### **Contents:**

During the course students learn to develop and test a business idea following the feasibility analysis, discovery driven planning steps as well as using the uncertainty management tools of Attribute Mapping, Supply Chain Analysis, Differentiation, Quizzing and Market-Busters. The course does not teach business plan writing but rather focuses on opportunity recognition and feasibility assessment. Moreover, it adds the elements of lean startup as well as social entrepreneurship as possible avenues in dealing with entrepreneurial challenges.

Entrepreneurial thinking, uncertainty management, strategic entrepreneurship, discovery-driven planning.

# **Teaching Methods:**

Lectures 20 h, Independent study 73 h, seminar work writing 63 h, Total 156 h.

# Suitability for doctoral studies (Yes/Leave empty):

Yes

### **Examination in Examination schedule (Yes/No):**

No

# Examination in Moodle (Yes/No):

No

### Examination in Exam (Yes/No):

Nο

#### **Assessment:**

0 - 5. Based on assignment and in-class work, participation in the lectures required (possibility to substitute absence with literary work).

#### **Course Materials:**

Lectures and additional reading provided in the class. Book: McGrath Rita and MacMillan Ian, (2000). The Entrepreneurial Mindset. Harvard Business School Press.; McGrath Rita and MacMillan Ian, (2005). MarketBusters: 40 strategic moves that drive exceptional business growth. Harvard Business Press.

# Limitation for students? (Yes, number, priorities/Leave empty):

60, priority for GMIT students and others to whom this course is part of the major.

# Places for exchange-students? (Yes, number/No):

Yes, max 15

# Places for Open University Students?(Yes, number/No):

This course has 1-5 places for open university students. More information on the web site for open university instructions.

# CS34A0551: Business Idea Development, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Timo Pihkala, Suvi Konsti-Laakso

Year:

M.Sc. (Tech.) 1

Period:

2

### **Teaching Language:**

English

# Teacher(s) in Charge:

Timo Pihkala, D.Sc. (Econ. & Bus. Adm.), Professor Suvi Konsti-Laakso, M.Sc.(Tech.), Project researcher

#### Aims:

Student can explain and analyze key theoretical approaches associated to business idea development. The student learns to identify, develop and assess future-oriented business opportunities and ideas. The student can use different systematical tools and techniques related to business idea development.

### **Contents:**

Fuzzy-front end of entrepreneurial process, opportunityrecognition, innovation, sources of business ideas, creativity and systematicgeneration of ideas

Supplementary content: innovation and creativity Specific content: customer/user involvement

# **Teaching Methods:**

12 h of lectures/seminars, learning diary and assignments 80 h. Written group assignment 64 h. In total 156 h.

## **Examination in Examination schedule (Yes/No):**

No

**Examination in Moodle (Yes/No):** 

No

Examination in Exam (Yes/No):

No

**Assessment:** 

Grades 0-5, Learning diary (60%) and group work and presentation (40)%.

**Course Materials:** 

Study materials will be available in Moodle.

Places for exchange-students? (Yes, number/No):

15-

Places for Open University Students?(Yes, number/No):

15-

## CS34A0712: Business Governance and Entrepreneurial Renewal, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Tuuli Ikäheimonen, Timo Pihkala

Year:

M.Sc. (Tech.) 1

Period:

2

# **Teaching Language:**

**English** 

## Teacher(s) in Charge:

D.Sc. (Econ. & Bus. Adm.) Tuuli Ikäheimonen Professor, D.Sc. (Econ. & Bus. Adm.) Timo Pihkala

#### Aims:

After completing the course the student:

- Knows the key theories in the field of governance, and understands thetheoretical starting points for governance research
- Understands the overall governance system and its various actors, and therole of the actor in the governance system.
- Understands the relationships between governance actors, key stakeholders and business environment
- Is able to analyze the company's characteristics, business and environmentand, basing on this, to provide suggestions for governance solutions that suitthe company's situation.
- Is able to identify the role and possibilities of the board of directors and itsindividual members in corporate renewal and business development.
- Is able to analyze the company boards and provide suggestions for their development

# **Contents:**

Different types of businesses (e.g. SMEs, family businesses, start-ups). Owners and stakeholders influence on governance. The concept and content of ownership strategy. Governance mechanisms. Advisory

boards, familycouncils, the board of directors, top management teams. The structure,processes and roles of the board of directors. Governance research, theoreticalbase and research objectives. Development of governance. The role of the boardand individual board members in company renewal and business development.

## **Teaching Methods:**

Lectures 20 h, 2nd period. Independent study 71 h, Course assignments 65 h. Total workload 156 h.

## Examination in Examination schedule (Yes/No):

No

#### **Examination in Moodle (Yes/No):**

Yes

# **Examination in Exam (Yes/No):**

No

#### **Assessment:**

0-5, course assignments 100%.

#### **Course Materials:**

Will be announced later.

# Places for exchange-students? (Yes, number/No):

15-

## Places for Open University Students?(Yes, number/No):

max 10

## CS34A0721: Entrepreneurship, ownership and family firms, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Timo Pihkala, Marita Rautiainen

Year:

M.Sc. (Tech.) 1

Period:

3

## **Teaching Language:**

**English** 

## Teacher(s) in Charge:

Professor, D.Sc. (Econ. & Bus. Adm.) Timo Pihkala D.Sc. (Econ. & Bus. Adm.) Marita Rautiainen

#### Aims:

The course introduces the student with the phenomenon of entrepreneurship, ownership, andfamily firm. The course aims to enhance students' understanding of thecharacteristics, contributions, and issues surrounding family business. Throughcase studies, student research and guest speakers, we consider questions ofownership, succession, conflict resolution, sibling rivalry, compensation, attracting and retaining both family and nonfamily talent, estate planning, andfinancing the family owned enterprise. After the course, students should beable to define and understand the conceptual special characteristics and thecentral theories of these phenomena. In addition, students learn to applydifferent theories in the analysis of practical cases as well as aboutways to manage the transitional processes such as family business succession. Itcombines rigorous learning with practical group works. The course

willappeal to those who are interested in starting up their own business, as wellas those interacting with small firms and family businesses as advisors, managers and policy-makers.

#### **Contents:**

Course explores the unique challenges and opportunities involved in managing a family firm. The course will address a wide variety of topics, including: the strengths and weaknesses of a family firm, the dynamics of family interactions, family business culture, conflict resolution in a family firm, transferring ownership of a family firm, planning for a family firm's growth and continuity, effective leadership and communication, and planning for succession.

### **Teaching Methods:**

Lectures 20 h 3rd period. Prior reading and assignments 106 h. Preparation for lectures 30 h. In total 156 h

## **Examination in Examination schedule (Yes/No):**

No

## **Examination in Moodle (Yes/No):**

Yes

### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Individual exercise 50 %, group exercise 30 % moodle exam 20 %

#### **Course Materials:**

- 1.Ernesto J. Poza (2010). Family Business, South-Western, Cengage Learning.
- 2.Materials indicated during lectures
- 3. Cases and articles delivered during the course.

## Limitation for students? (Yes, number, priorities/Leave empty):

Yes, maximum 80. Priority is given to the student in Entrepreneurship masters program and students of entrepreneurship minor.

## Places for exchange-students? (Yes, number/No):

15-

#### Places for Open University Students?(Yes, number/No):

15-

#### CS34A0733: New Venture Creation, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Kirsi Snellman, Henri Hakala

#### Note:

Schedule: intensive lecturing at the beginning of the period, independent group work, business planin pitching competition at the end of the period

#### Year:

M.Sc. (Tech.) 1

## Period:

2

# **Teaching Language:**

#### English

## Teacher(s) in Charge:

Professor, D.Sc. Henri Hakala

Post-doctoral researcher, D.Sc, Kirsi Snellman

#### Aims:

The course targets on the entrepreneurial phenomenon and especially on start-up analysis. After the course the student is familiar with entrepreneurship theory that integrates creativity, resource-based characteristics and finance. In addition, the student will understand the start-up process, and is able to prepare a business plan.

#### **Contents:**

Entrepreneurship process, start-up theory, start-up strategies, financial analysis of the business concept, business plan and evaluation criteria.

## **Teaching Methods:**

Lectures 8 h. Pitching competition 8 h, Online study and independent reading 76 h. Written assignment 70 h. In total 162 h.

## **Examination in Examination schedule (Yes/No):**

No

## **Examination in Moodle (Yes/No):**

No

#### **Examination in Exam (Yes/No):**

Nο

#### **Assessment:**

Grades 0-5, evaluation 0-100 points. Assignments 100%. (pitching competition 30%, written business plan 70%)

#### **Course Materials:**

Kubr, T., Marchesi, H., Ilar, D., Kienhuis, H. (2013). Starting Up: achieving success with professional business planning. McKinsey.

Lecture/Moodle material

#### Limitation for students? (Yes, number, priorities/Leave empty):

Yes, maximum 80. Priority is given to the student in Entrepreneurship masters program and students of entrepreneurship minor.

#### Places for exchange-students? (Yes, number/No):

No

#### Places for Open University Students?(Yes, number/No):

No

# KaSOMIntm: International Marketing, 24 - 35 cr

**Validity:** 01.08.2016 -

Form of study:

Type: Study module

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

## Aims:

Learning outcomes:

- Understand and assess the challenges of international marketing environments

- Evaluate and design marketing strategies
- Apply analytical frameworks of international marketing to solve strategic marketing problems
- To show market-oriented mind-set

Elective courses min. 24 cr.(Please note that A330A0550 is lectured every other year.)

# A330A0010: Contemporary Issues in International Marketing, 3 cr

Validity: 01.08.2012 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Sanna-Katriina Asikainen, John Cadogan

#### Note:

The course is only for Master's level students.

A student can include this course many times in his/her studies, because the course has different contents every year.

#### Year:

M.Sc. (Econ. & Bus. Adm.) 1

#### Period:

4, intensive week 9

## **Teaching Language:**

English

# Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Sanna-Katriina Asikainen

Professor, Ph.D. John W. Cadogan, Loughborough University, UK

#### Aims:

The learning outcomes of the course are the following. After the course participants should be able to:

- 1. To assess the contemporary concepts and issues ("hot topics") in international marketing.
- 2. To synthesize and evaluate contemporary international marketing phenomena.
- 3. To debate on special topic of international marketing (specified later)
- 4. To manage and facilitate cross-cultural collaboration.

## **Contents:**

The specific content of this course will vary depending on the visiting international professor. However, the course covers chosen contemporary concepts and issues affecting international marketing today.

## **Teaching Methods:**

30 hours of intensive integrated lectures and exercises (assignments and cases) by the international guest lecturer. 20 hours of preparation for lectures and exercises. 30 hours of preparation for written exam. Course total 80 h.

## **Examination in Examination schedule (Yes/No):**

Yes

# Examination in Moodle (Yes/No):

No

#### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Final grade 0-5. Evaluation 0-100 points: Exam (50 points), In-class assignments (30 points), Class participation (20 points)

#### **Course Materials:**

Material to be assigned in the class.

## **Prerequisites:**

Basic knowledge of international marketing

Limitation for students? (Yes, number, priorities/Leave empty):

Only for Master's level students

Places for exchange-students? (Yes, number/No):

No

Places for Open University Students?(Yes, number/No):

No

# A330A0060: Managing Customer Relationships and Business Networks, 6 cr

**Validity:** 01.08.2017 - 31.12.2018 **Form of study:** Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Joona Keränen, Hanna Salojärvi, Asta Salmi

#### Note:

New course. Will replace CS10A0152 International Business Networks, CS10A0151 Business Relationships and Networks and A330A0050 Customer Relationship Management.

#### Year:

M.Sc. (Econ. & Bus. Adm.) 1, M.Sc. (Tech.) 1

#### Period:

3

### **Teaching Language:**

English

## Teacher(s) in Charge:

Professor, D.Sc. (Econ. & Bus. Adm.) Asta Salmi Associate Professor, D. Sc. (Econ. & Bus. Adm.) Hanna Salojärvi

## Aims:

After completing the course the students are familiar with the theories of relationship marketing and network management, related concepts and models. The course provides the participants tools for understanding business relationships and networks, the strategic behavior of firms in this environment, and the managerial capabilities involved. The strong theoretical basis is combined with current relationship and network management material and implications.

On successful completion of the course, students: 1. Know the key theoretical frameworks related to business relationships and networks, and understand the principles of relationship marketing theory 2. Are familiar with customer relationship management as an organization wide strategic approach to managing customer relationships, 3. Are able to critically analyze the customer base, evaluate performance of customer relationships, and apply various strategies for managing customer relationships, 4. Understand the drivers of customer value and are able to design sustainable customer value propositions. 5. Identify the challenges of cross-sectoral and cross-national networks, 6. Understand and are able to evaluate the features of eco-industrial and sustainable business networks, and sustainable supply chains, and contemporary challenges in managing them, 7. Have developed skills in teamwork, in active participation in discussions, in oral presentations, in writing reports, as well as in reflecting on and taking the responsibility for their own learning.

#### **Contents:**

The course focuses on the following main contents: Theoretical approaches to inter-organizational relationships and business networks. Strategic management of customer relationships, B2B marketing, customer value and value-based selling. Supplier relationships and sustainable supply chains. Challenges and management of cross-sectoral networks. Sustainable and eco-industrial networks and challenges of managing them.

## **Teaching Methods:**

Lectures, assignments including reflection papers and learning diary, case studies. Active participation in class is required.

In class hours (34 hours): 26 hours of lectures and 8 hours of case study workshops. Out-class hours: Preparation for lectures 10 h, individual reflection papers and learning diary 80 h, preparation for case studies 36 h. Total workload 160 hours.

### **Examination in Examination schedule (Yes/No):**

No

## **Examination in Moodle (Yes/No):**

No

### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points, Learning diary (including reflection papers) 70 % and case studies 30 %.

#### **Course Materials:**

Assigned readings (collection of articles). Lecture slides.

### **Prerequisites:**

Basic knowledge of marketing. A330A0300 Strategic Global Marketing Management recommended.

# Limitation for students? (Yes, number, priorities/Leave empty):

Number of students attending is limited to 120 students. Priority is given to LBM degree students.

## Places for exchange-students? (Yes, number/No):

Yes, 1-5, if they fit within the total number of 120 students after accepting LBM degree students.

#### Places for Open University Students?(Yes, number/No):

This course has 1-5 places for open university students. More information on the web site for open university instructions

## A330A0061: B2B Marketing, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Asta Salmi, Joona Keränen

#### Note:

New course. Will replace A330A0060 Managing Customer Relationships and Business Networks. The course is only for Master's level students.

## Year:

M.Sc. (Econ. & Bus. Adm.) 1, M.Sc. (Tech.) 1

## Period:

3

### **Teaching Language:**

English

## Teacher(s) in Charge:

Associate Professor, D. Sc. (Tech.) Joona Keränen Professor, D.Sc. (Econ. & Bus. Adm.) Asta Salmi

### Aims:

On successful completion of the course, students:

- 1. Are able to understand and analyze the special characteristics and contemporary trends in B2B markets, and know the key theoretical frameworks related to B2B marketing
- 2. Are able to understand why and how companies transition towards service- and solutions oriented value propositions in B2B markets, and analyze and categorize different service and solution strategies
- 3. Are able to evaluate the drivers, key characteristic, and related challenges of different value-based business strategies in B2B markets, and design resonating value propositions
- 4. Are able to apply the key principles, theoretical approaches, and key challenges in relationship marketing and network management
- 5. Are able to identify and analyze the features of sustainable business networks, and evaluate the key challenges related to managing cross-sectoral and cross-national networks
- 6. Are able to analyze the key features of digitalization, and examine its effects to business relationships and networks in B2B markets
- 7. Have developed skills in teamwork, active participation in discussions, oral presentations, writing reports, as well as in reflecting on and taking the responsibility for their own learning.

#### **Contents:**

The course focuses on the following main contents: Special characteristics and contemporary trends in B2B marketing, transition strategies towards service & solution offerings, customer value management and value-based business strategies, principles of key account management, theoretical approaches to inter-organizational relationships and business networks, sustainable business networks, cross-sectoral and cross-national networks, and digitalization.

### **Teaching Methods:**

Lectures, assignments including reflection papers and a learning diary, case studies. Active participation in class is required. In class hours (30 hours): 22 hours of lectures and 8 hours of case study workshops. Out-class hours (130 hours): Preparation for lectures 22 h, individual reflection papers and learning diary 80 h, preparation for case studies 28 h. Total workload 160 hours.

### **Assessment:**

Grade 0-5, evaluation 0-100 points, Learning diary (including reflection papers) 70 % and case studies 30 %.

#### **Course Materials:**

Assigned readings (collection of articles). Lecture slides.

# **Prerequisites:**

Basic knowledge of marketing. CS10A0010 Basics of Marketing and A330A0300 Strategic Global Marketing Management recommended.

# Limitation for students? (Yes, number, priorities/Leave empty):

Number of students attending is limited to 120 students. Priority is given to LBM degree students.

## Places for exchange-students? (Yes, number/No):

Yes. 15-

## Places for Open University Students?(Yes, number/No):

Yes, 15-

## A330A0112: Strategic Marketing Project, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Jari Varis, Lasse Torkkeli

Note:

Replaces the course A350A0111 Strategy Project, only for Master's level students.

Year:

M. Sc. (Econ. & Bus. Adm.) 1

Period:

3-4

## **Teaching Language:**

**English** 

## Teacher(s) in Charge:

Associate Professor Lasse Torkkeli Associate Professor Jari Varis

#### Aims:

Learning outcomes:

- 1. To be able to explain the most commonly used strategic tools & frameworks.
- 2. To analyze the real-life situation and context of a given case organization.
- 3. To discuss and select the appropriate strategy tools and frameworks for the given case problem.
- 4. To apply the frameworks and tools of strategy and marketing to compose a justified and concrete plan of action.
- 5. To be able to collaborate in teams.
- 6. To be able to plan and execute a project work in a given time-line.
- 7. To develop a professional written project report.
- 8. To propose a solution and recommendations verbally for the case.

## **Contents:**

This course applies problem-based learning to a concrete strategy development task on marketing from a real case organization. Students work in groups with the given project that starts with a situational analysis and continues with both strategy development and marketing description activities, resulting in a concrete strategic action plan for the organization. Each group gets individual coaching from a project supervisor. The course is organized in cooperation with Green Campus Innovations.

## **Teaching Methods:**

21 h of pre-work in groups: returning a strategy tool -related presentation in Moodle, 8 hours of introductory seminar,

16 hours of seminars including final presentations of the projects to the representatives of the case organisations,

7 h of project coaching meetings with the project supervisor, Independent project work in teams: 100 h (finding literature, group meetings, Information gathering, analysis, writing the report) Written final report, presentation of the project work (preparation 8 h). Total student workload: 160 h.

#### **Examination in Examination schedule (Yes/No):**

No

## **Examination in Moodle (Yes/No):**

No

#### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points. Strategy tool pre-assignment: pass/fail. Max 100 points from project work. Grading of projects: 70 % supervisors, 30 % firm representative.

#### **Course Materials:**

Handout materials. Other material depending on the project work.

## Limitation for students? (Yes, number, priorities/Leave empty):

Yes, 80. Only for M.Sc. level students in business administration.

Places for exchange-students? (Yes, number/No):

No

Places for Open University Students?(Yes, number/No):

Nο

### Description and DL of the company assignment:

A350A0111 STRATEGIC MARKETING PROJECT, 6 ects

Strategic marketing project course is a Master's level course taught in the EPAS-accredited Master's in International Marketing Management –programme offered by LUT School of Business & Management. The course applies problem-based learning to a concrete strategy development task related to marketing from a real case organization. Students work in groups with the given project that starts with a situational analysis and continues with both strategy development and business model description activities, resulting in a concrete strategic marketing action plan for the organization. Each group gets individual coaching from an academic project supervisor.

Strategy development tasks from the case organizations can be related to all kinds of real-life challenges that are strategically important from the business perspective and relate to marketing. Prior challenges solved on the course have for example been related to the development of marketing strategy, social media marketing strategy, competitor analysis, internal branding and business model development. Usually, there will be two groups working with the same topic.

From the case organization the course requires max two hours of time for initial briefing meeting with the students and the academic instructor (either face-to-face/skype, schedule separately agreed) at the end of January/beginning of February and participation in the final seminar at the end of the course on April (exact time to be confirmed). Company representatives participate in the final evaluation of the project work (worth 30 % of the total assessment).

The teaching language of the course is English and groups are internationally diverse. Participation is free of charge.

All case topics need to be confirmed latest on week 2.

## A330A0300: Strategic Global Marketing Management, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Sanna-Katriina Asikainen, Olli Kuivalainen

Note:

Only for Master's level students.

Year:

M.Sc. (Econ. & Bus. Adm.) 1

Period:

1

## **Teaching Language:**

English

### Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Sanna-Katriina Asikainen Professor, D.Sc. (Econ. and Bus.Adm.) Olli Kuivalainen

#### Aims:

After taking the course the students should to be able to:

- 1. assess underlying concepts and analytically compare theoretically perspectives of marketing management strategy,
- 2. assess firm's internal and external environments from strategic marketing management perspective
- 3. describe and assess the range of marketing strategies available to organizations in a range of environmental contexts
- 4. describe and assess marketing programmes
- 5. understand the basics in marketing performance measurement
- 6. develop a marketing plan
- 7. design and deliver a professional presentation of a marketing plan.

#### **Contents:**

Assessment of the competitiveness of the firm, assessment of the external marketing situation, STP-process, developing marketing strategies and programmes, standardization versus adaptation, relationships in value chain, budgeting, controlling, marketing plan, marketing performance measurement. Corporate social responsibility strategy, customer behavior, customer relationship management.

# **Teaching Methods:**

Lectures, assignments, workshop, seminar, exam.

In-class (32 hours): 2 hour introductory lecture, 20 hours of lectures, 10 hours of term paper presentations in a seminar meeting.

Out-class (128 hours):10 hours for lecture preparation, 43 hours for exam preparation, 70 hours for preparing term paper, 5 hours for preparing a presentation. Course total: 160 hours.

## **Examination in Examination schedule (Yes/No):**

Yes

### **Examination in Moodle (Yes/No):**

Nο

#### Examination in Exam (Yes/No):

No

#### **Assessment:**

Final grade 0-5. Evaluation 0-100 points: Assignments (50 points): a) term paper (a group work) (40 points). b) presentation of term paper (10 points). c) personal presentation skills within the term paper presentation (pass/fail) Exam (50 points). All assignments (including the exam) must be passed to acquire the final grade. NOTE: Peer evaluation of the group work may have an effect on the grade.

#### **Course Materials:**

- 1. Hollensen, Svend (2010) Marketing Management. A Relationship Approach. Second Edition. FT Prentice Hall.
- 2. Assigned readings.

# Limitation for students? (Yes, number, priorities/Leave empty):

Only for Master's level students.

# Places for exchange-students? (Yes, number/No):

15-

## Places for Open University Students?(Yes, number/No):

No

## A330A0550: Essential Sales and Negotiation Skills, 3 cr

Validity: 01.08.2016 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Peter Spier, Olli Kuivalainen

#### Note:

The course is an intensive course taught by an international visiting professor. The course is only for Master's level students. The number of students attending the course may have to be limited if the number of students exceeds 40. In registration, priority is given to LUT School of Business and Management, MIMM Programme students.

The course will be lectured every other year, next during the academic year 2018-2019.

## Lectured every other academic year (Yes, next realization year/Leave empty):

Yes. 2018-19

Year:

M.Sc. (Econ. & Bus. Adm.) 1

Period:

4. Provisional dates 15.4.-18.4.2019

## **Teaching Language:**

English

## Teacher(s) in Charge:

Professor, D.Sc. (Econ. & Bus. Adm.) Olli Kuivalainen Visiting Professor, Ph.D. Peter Spier, Skema Business School

#### Aims:

After completing the course the students should be able to:

- analytically evaluate how sales and other types of business negotiations work
- distinguish, compare and organize various types of sales and negotiation situations
- critically evaluate the main sales techniques: transactional, relationship selling, solution selling,
- evaluate and develop sales and negotiation-related core competencies
- convince and negotiate effectively
- appraise the importance of 'people' skills: empathy, trust, active listening

#### **Contents:**

This course provides a comprehensive introduction to sales and negotiation. It will cover a range of topics:

- Structure of sales negotiation,
- Individual negotiation styles
- Different types of sales and negotiation situation
- The mutual gains approach in negotiation
- The main sales techniques: transactional, relationship selling, solution selling, challenger sales
- Move from an approach based on 'convincing' to one based on 'persuasion'
- The scope of our approach to include: 'other' (interests, culture...), situation...
- Communication, both verbal and non-verbal
- The use of enquiry & guestioning
- The use of framing techniques and other 'nudge' approaches
- Conflict management
- · Interact with others

#### **Teaching Methods:**

The course will balance theory and practical application, with considerable use of case studies and student project work. 28 h of interactive lectures and cases, 4rd period (intensive format). 52 h of preparation for lectures and assignments and individual research report. Total workload 80 h.

### Examination in Examination schedule (Yes/No):

## **Examination in Moodle (Yes/No):**

No

## Examination in Exam (Yes/No):

No

#### **Assessment:**

Final grade 0-5. Evaluation 0-100 points: Individual research report (100 points) Active class participation, including in-class assignments (accepted – fail) All assignments must be passed.

#### **Course Materials:**

Readings and assignments to be announced before / in the class

## **Prerequisites:**

Bachelor's degree, A330A0300 Strategic Global Marketing Management or equivalent basic marketing course.

## Limitation for students? (Yes, number, priorities/Leave empty):

40, priority is given to LUT School of Business and Management, MIMM Programme students.

# Places for exchange-students? (Yes, number/No):

max 15

### Places for Open University Students?(Yes, number/No):

max 5

Interchangeable 6 cr (please note that A330A5000SS is Summer School course, lectured every other year, next time 2019-20)

## A330A5000SS: International Marketing of High Technology Products and Innovations, 3 cr

Validity: 01.06.2012 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Sanna-Katriina Asikainen, Sanjit Sengupta

## Note:

Only for Master's level students. The course topics are related to sustainable development.

# Lectured every other academic year (Yes, next realization year/Leave empty):

Yes, 2019-20

### Year:

M.Sc. 2

#### **LUT Summer School time:**

Summer 2019

# **Teaching Language:**

English

## Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Sanna-Katriina Asikainen, LUT

#### Aims:

Learning outcomes:

- Distinguish the special characteristics of high technology marketing environment (like the type of innovation, market and technology uncertainties, network externalities) and assess external high technology environments (e.g. relating to competitive landscape, consumer behavior, markets) in global scale.
- Evaluate and justify marketing strategies in high technology environments.
- Make marketing decisions in high technology environments.

Course aims to provide a deep understanding of the functions of marketing regarding challenges and opportunities in high technology products and markets; assist the participants to understand the virtue and limitations of traditional marketing thinking and tools in emergent high technology markets.

#### **Contents:**

- Strategy and corporate culture in high tech firms.
- Partnerships and alliances.
- Marketing research in high tech markets.
- Understanding high tech customers.
- Product development and management issues in high tech markets.
- Pricing considerations in high tech markets.
- Advertising and promotion in high tech markets.

## **Teaching Methods:**

- Lectures and in-class assignments 30 hours
- Preparing for lectures 25 hours
- Preparing for exam 25 hours

Total workload 80 hours.

#### **Assessment:**

Final grade 0-5. Evaluation 0-100 points:

- Exam 50 points
- In-class assignments 30 points
- Class participation 20 points

### **Course Materials:**

- Mohr, Jakki, Sanjit Sengupta, and Stanley Slater (2010) Marketing of High-Technology Products and Innovations. Third Edition. Pearson Prentice Hall. Web site <a href="http://marketinghightech.net/">http://marketinghightech.net/</a>
- Assigned reading.

## **Prerequisites:**

For summer school students: previous studies in business recommended.

For MIMM degree students at LUT: Internationalization of the Firm and Global Marketing, Strategic Global Marketing Management, Technology and Innovation Management.

# A330A0221: Marketing of High Technology Innovations: Applications, 3 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Sanjit Sengupta, Sanna-Katriina Asikainen, Agnes Asemokha

### Note:

This course can only be taken if one has read 3 ECTS Summer School course: A330A5000 International Marketing of High Technology Products and Innovations.

The course is only for Master's level students.

#### Year:

M.Sc. (Econ. & Bus. Adm.) 2

#### Period:

1-2

## **Teaching Language:**

English

## Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Sanna-Katriina Asikainen

Professor, PhD. Sanjit Sengupta

Junior Researcher M.Sc. (Econ. and Bus. Adm.) Agnes Asemokha

#### Aims:

After the course, student should be able to:

- 1. solve real life high technology marketing problems
- 2. create and develop skills in theory application, information acquisition, analyses, and communications.
- 3. develop social and intercultural competence by working in intercultural groups.

Course aims to provide a deep understanding of the functions of marketing regarding challenges and opportunities in high technology products and markets, assist the participants to understand the virtue and limitations of traditional marketing thinking and tools in emergent high technology markets.

#### **Contents:**

Contingency model of high technology marketing. Special characteristics of high technology markets. Strategy and Corporate Culture in High-Tech firms. Partnerships and Alliances. Marketing Research in High-Tech Markets. Understanding High-Tech Customers. Product development and Management issues in High-Tech markets. Pricing Considerations in High-Tech Markets. Advertising and Promotion in High-Tech Markets. New product launch strategies.

## **Teaching Methods:**

This is an online course.

Assignments, seminars and online instructions session.

#### Online sessions:

6 h of online seminars, 2.period. 1 h of case method introduction, 1. period. 2 h business case online session/lecture, 2. period. Total 9 h.

Other assignments:

41 h for doing assignments, 10 h for preparing presentation, 20 h for business case. Total 71 h. Total workload for student 80 h.

## Examination in Examination schedule (Yes/No):

No

### **Examination in Moodle (Yes/No):**

No

#### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Final grade 0-5. Evaluation 0-100 points: Case assignments (groupwork) (55 points). NOTE: Peer evaluation of the group work may effect on the grade. Business case (groupwork) (30 points). Presentation (15 points).

#### **Course Materials:**

Mohr, Jakki, Sanjit Sengupta, and Stanley Slater (2010) Marketing of High-Technology Products and Innovations. Third Edition. Pearson Prentice Hall. Web site http://marketinghightech.net/

### **Prerequisites:**

Principles in marketing, Strategic Global Marketing Management

#### Limitation for students? (Yes, number, priorities/Leave empty):

Yes, this course can only be taken if one has read 3 ECTS Summer School course: A330A5000 International Marketing of High Technology Products and Innovations.

## Places for exchange-students? (Yes, number/No):

No

Places for Open University Students?(Yes, number/No):

No

## A330A0201: Marketing of High Technology Innovations, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Agnes Asemokha, Sanna-Katriina Asikainen, Sanjit Sengupta

#### Note:

The course is only for Master's level students. The number of students attending the course is limited to 60. In registration, priority is given to LBM MIMM degree students followed by LUT LBM degree students.

#### Year:

M.Sc. (Econ. & Bus. Adm.) 2

#### Period:

1-2

# **Teaching Language:**

English

### Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Sanna-Katriina Asikainen Professor, PhD Sanjit Sengupta Junior researcher, M.Sc. (Econ. & Bus.Adm.) Agnes Asemokha

## Aims:

After the course, student should be able to:

- 1. assess the special characteristics of high technology marketing environment and evaluate relevant opportunities and threats for a global business.
- 2. build and evaluate marketing strategies in high technology environments
- 3. formulate marketing decisions in high technology environments
- 4. solve real life high technology marketing problems
- 5. create and develop skills in theory application, information acquisition, analyses, and communications.
- 6. develop social and intercultural competence by working in intercultural groups

Course aims to provide a deep understanding of the functions of marketing regarding challenges and opportunities in high technology products and markets, assist the participants to understand the virtue and limitations of traditional marketing thinking and tools in emergent high technology markets.

### **Contents:**

Contingency model of high technology marketing. Special characteristics of high technology markets. Strategy and Corporate Culture in High-Tech firms. Partnerships and Alliances. Marketing Research in High-Tech Markets. Understanding High-Tech Customers. Product development and Management issues in High-Tech markets. Pricing Considerations in High-Tech Markets. Advertising and Promotion in High-Tech Markets. New product launch strategies.

### **Teaching Methods:**

Online lectures, homework and case assignments, seminars, exam.

This is an online course.

Lecture sessions:

6 h of live online sessions, 1.period. 1 h of case method introduction (online), 1. period. 6 h of live online seminars, 2.period. 2 h business case online lecture, 2 period. Total 15 hours.

Other assignments:

30 h of exam preparation, 10 h for preparing for online sessions, 13 h for doing homework assignment, 65 h for doing case assignments, 25 h for solving the business case. Total: 143 h. Final written exam. 2h

Total workload for student 160 h.

### **Examination in Examination schedule (Yes/No):**

Nο

### Examination in Moodle (Yes/No):

No

## **Examination in Exam (Yes/No):**

Yes

#### **Assessment:**

Final grade 0-5. Evaluation 0-100 points: Exam (35 points), Homework assignments (10 points), Case assignments (groupwork) (30 points) and case presentation (groupwork) 10 points. NOTE: Peer evaluation of the group work may effect on the grade. Business case (groupwork) (15 points)

#### **Course Materials:**

Mohr, Jakki, Sanjit Sengupta, and Stanley Slater (2010) Marketing of High-Technology Products and Innovations. Third Edition. Pearson Prentice Hall. Web site http://marketinghightech.net/

## **Prerequisites:**

Principles in marketing, Strategic Global Marketing Management

## Limitation for students? (Yes, number, priorities/Leave empty):

The number of students attending the course is limited to 60. In registration, priority is given to LBM MIMM degree students followed by LUT LBM degree students, exchange students with earlier knowledge on marketing/international business/technology management.

## Places for exchange-students? (Yes, number/No):

No

## Places for Open University Students?(Yes, number/No):

No

# KaSOMTijo: Knowledge and Innovation Management, 24 - 35 cr

Validity: 01.08.2016 -Form of study: Type: Study module

Type. Study Module

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

No course descriptions.

Obligatory studies 24 cr

#### A365A0251: Organizational Learning, 6 cr

Validity: 01.08.2017 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Anna-Maija Nisula

#### Note:

Organizational Learning course can be conducted first time as a virtual self-learning and group learning course. In addition, there will be a voluntary PBL exercise in the classroom for interested students.

## Year:

M.Sc. (Econ. & Bus. Adm.) 2

#### Period:

1

### **Teaching Language:**

English

## Teacher(s) in Charge:

D.Sc. (Econ. & Bus. Adm.), Post doctoral researcher, Anna-Maija Nisula

### Aims:

The aim of the course is to give extensive general knowledge about organizational learning as a theoretical phenomenon and utilization of it in development and management of organizations. By the end of the course, students will be able to:

- familiarize themselves with the state of the art literature on the studied subject,
- identify basic concepts and theories of organizational learning
- identify functioning principles and enabling tools for organizational learning.
- Learn to apply Problem Based Learning (PBL) approach
- apply organizational learning literature and methods to future work, learning situations and management.

#### **Contents:**

The course consists of the following parts:

- 1) individual literature study: independent and intensive reading and reporting of the provided course materials (scientific articles),
- 2) group work study: participation in a group work assignment: a PBL case analysis, written group work report, presentation, and related reflection.
- 3) voluntary participation in a PBL exercise

## **Teaching Methods:**

Independent study phase: virtual introduction lecture (8 hours), Independent reading assigned articles and writing summaries (70 hours),

Group work study phase: Group work and PBL case analysis, written group work report, and group work presentation (90 hours), Total workload for the student 160 hours.

#### **Examination in Examination schedule (Yes/No):**

No

## **Examination in Moodle (Yes/No):**

No

#### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points, individual study 30% and group work 70%.

### **Course Materials:**

Assigned reading and collection of scientific articles

## **Prerequisites:**

No

Places for exchange-students? (Yes, number/No):

max 15

Places for Open University Students?(Yes, number/No):

max 5

## A365A0301: Organizing in Knowledge-Based Networks, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Kirsimarja Blomqvist, Argyro Almpanopoulou

### Note:

Replaces the course A365A0300 Knowledge-based networks.

Year:

M.Sc. (Econ. & Bus. Adm.) 2

Period:

2-3

## **Teaching Language:**

English

#### Teacher(s) in Charge:

Professor, D.Sc. (Econ. & Bus. Adm.) Kirsimarja Blomqvist PhD student, M.Sc. (Econ. Bus. Adm.) Argyro Almpanopoulou

#### Aims:

- Students can describe the key theoretical concepts and theories on knowledge-based organizing
- Students can apply the theory and key skills related to working a digital platform to solve real-life complex problems
- Students can reflect their individual and team behavior
- Students can present effectively their project outcomes to customer
- Students can discuss their solution constructively, give & get feedback and document the lessons learned by the project team

#### **Contents:**

- Key concepts related to organizing knowledge in networks
- Alliance, collaboration and network orchestration capability
- Innovation ecosystems, collaborative crowdsourcing, temporary teams and digital platforms

The course is related to entrepreneurship and sustainability.

## **Teaching Methods:**

Lectures and interactive seminars 16 h, 2-3. periods,

Independent studying online 80 h

Course assignment work (real-life sustainability related problem solving in hybrid teams) 64 h Total workload for student 160 h

## **Examination in Examination schedule (Yes/No):**

No

#### **Examination in Moodle (Yes/No):**

No

### Examination in Exam (Yes/No):

No

#### **Assessment:**

Grade 0 – 5. Individual exercises 60 % and group exercises 40 %.

#### **Course Materials:**

Articles distributed during lectures, online-material

## Limitation for students? (Yes, number, priorities/Leave empty):

Yes, 50. Number of students is limited due to real-life problem solving in temporary groups working on a digital platform

## Places for exchange-students? (Yes, number/No):

max 10

# Places for Open University Students?(Yes, number/No):

No

## CS30A1661: Open Innovation, 6 cr

Validity: 01.08.2013 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Antero Kutvonen, Daria Podmetina, Justyna Dabrowska, Ekaterina Albats

#### Year:

M.Sc. (Tech.) 2, M.Sc. (Econ. & Bus. Adm.) 2

### Period:

Periods 1-2, Periods 3-4

#### **Teaching Language:**

English

## Teacher(s) in Charge:

Researchers, D.Sc. Antero Kutvonen, D.Sc. Daria Podmetina and doctoral students, M.Sc. Ekaterina Albats, M.Sc. Justyna Dabrowska

#### Aims:

After completion of the course, students will be able to

- 1. explain the concept of open innovation through both theory and examples (to e.g. a company executive)
- 2. analyze open innovation activities in real life companies and the motives for engaging in them and the mechanisms through which they create value for the company
- 3. distinguish between different modes of open innovation (inbound, outbound and coupled)
- 4. analyze the relation between a company's strategic choices and application of open innovation
- 5. understand and apply the scientific literature on the theme and relate open innovation to the context of other innovation management theories.

#### **Contents:**

Must know: The fundamental definitions and concept of open innovation. Modes and implementations of open innovation, i.e. ways to manage purposive in- and outflows of knowledge to collaboratively develop and/or commercialize innovations. Difference between closed and open innovation in managing technology. Identifying open innovation activities in real life firms. Monetary and strategic motives for engaging in open innovation.

Should know: Process models of inbound, outbound and coupled open innovation. The relation between corporate strategy, technology strategy and open innovation activities. Models of distributed innovation such as crowd-based open innovation. Most common examples of firms used to explain open innovation. Platforms and ecosystems role in business and innovation. Varying topics from state-of-the-art open innovation research, depending on guest lecturer. Basics of IPR management in open innovation. Nice to know: Development of the open innovation concept on the basis of prior innovation management theories. Knowledge of the main scientific literature surrounding open innovation. Theoretical determinants of open innovation and future perspectives towards the phenomenon.

### **Teaching Methods:**

Lectures and guest speakers 35 h as intensive teaching. Small group assignments during lectures. Group exams (or substituting them with summaries of scientific articles, 16 h) on two of the intensive days, preparing for exams 16 h. Group-based case assignment 36 h. Independent study 44 h. Total 155 h.

# Suitability for doctoral studies (Yes/Leave empty):

Yes

## Doctoral School course where enrollment is in WebOodi (Yes/Leave empty):

Yes

# Examination in Examination schedule (Yes/No):

Nο

### **Examination in Moodle (Yes/No):**

No

## **Examination in Exam (Yes/No):**

No

#### Assessment:

0 - 5. Continuous evaluation based on small group exams (50%) and group-based case assignment (50%). Possibility to substitute group exams with literary work (summaries of scientific articles) in case of absence.

### **Course Materials:**

The course book and reading material will be announced at the first lecture.

## Limitation for students? (Yes, number, priorities/Leave empty):

Yes, 40 students, prioritized based on motivation letter submitted during registratio

# Places for exchange-students? (Yes, number/No):

max 5

### Places for Open University Students?(Yes, number/No):

max 5

## CS30A1671: Service Innovation and Management, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Kalle Elfvengren, Ville Ojanen

Year:

M.Sc. (Tech.) 1

#### Period:

3-4

## **Teaching Language:**

English

## Teacher(s) in Charge:

Associate Professor, D.Sc. (Tech.) Ville Ojanen

#### Aims:

Student can

- 1. recognize and categorize the variety of services and service firms in modern industrial environment as well as understand their influence in management of industrial innovations
- 2. identify the characteristics of services and evaluate the similarities, differences and links between services and physical products
- 3. define the dimensions of service innovations
- 4. explain the processes of new service development
- 5. summarize the main managerial challenges in service innovation management
- 6. select and apply the suitable frameworks, tools and methods, to overcome some typical real-world challenges in service innovation management

#### **Contents:**

Typologies of service firms. Characteristics of services. Product-service systems in manufacturing industry. Knowledge-intensive business services. New service development process. Dimensions of service innovations. Productization of services. Supporting methods for service innovation management. Managerial challenges in service innovation management. Utilization of frameworks, methods and tools in service innovation management. Roles of different types of firms in service systems and networks. Value creation through services. Customer-centric service development.

### **Teaching Methods:**

Lectures and exercises 20 h, 3rd period. Seminars 12 h, 4th period. Group assignments and project work 120 h. Total 152 h.

# Examination in Examination schedule (Yes/No):

No

## **Examination in Moodle (Yes/No):**

No

## **Examination in Exam (Yes/No):**

No

## **Assessment:**

0 - 5. Written reports and seminars 100 %.

#### **Course Materials:**

Lecture notes. Other material, books and articles announced in the beginning of the course.

### **Prerequisites:**

Recommended: B.Sc. on Industrial Engineering and Management, or equivalent knowledge

## Limitation for students? (Yes, number, priorities/Leave empty):

Yes, 50

## Places for exchange-students? (Yes, number/No):

max 5

## Places for Open University Students?(Yes, number/No):

max 5

# KaSOHajo: Supply Management, 24 - 30 cr

Validity: 01.08.2017 -

Form of study:

Type: Study module

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F

Pakolliset opintojaksot 24 op

#### A130A0220: Public Procurement, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Mika Immonen, Elina Karttunen

Year:

B.Sc. (Econ. & Bus. Adm.) 3

Period:

4

## **Teaching Language:**

**Finnish** 

### Teacher(s) in Charge:

Post-doctoral researcher, D.Sc. (Tech.) Mika Immonen; Junior researcher, M.Sc. (Tech) Elina Karttunen

#### Aims:

Upon completion of the course students understand the special features and implications of public-private cooperation. Students are able to exploit the special knowledge related to public procurement process and understand the phases of procurement process. Students are familiar with the legislation related to public procurement.

#### **Contents:**

Markets with regard the public procurement. Public procurement and purchase process. The characteristics of public procurement and challenges. Contemporary topics in public procurement.

### **Teaching Methods:**

Lectures 10 h and preparation for lectures 20 h. Group work and peer evaluation 56h. Reading the course materials 35 h. Written essay 35h. Total workload for student 156 h.

## Examination in Examination schedule (Yes/No):

No

#### **Examination in Moodle (Yes/No):**

No

### **Examination in Exam (Yes/No):**

Nο

### **Assessment:**

Grade 0-5, Group work 40%, Peer evaluation (pass-fail), essay 60%.

#### **Course Materials:**

- Lecture material
- Other course material will be announced

# **Prerequisites:**

No

## Places for exchange-students? (Yes, number/No):

No

## Places for Open University Students?(Yes, number/No):

No

## A380A0101: Supplier assessment and purchasing tools, 6 cr

Validity: 01.08.2017 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Katrina Lintukangas

#### Note:

Replaces the course A380A0100 Assessment of Business Relationships and Tools of Supply Management

#### Year:

B.Sc. (Econ. & Bus. Adm.) 3

#### Period:

2

## **Teaching Language:**

Finnish

## Teacher(s) in Charge:

D.Sc. (Econ. & Bus. Adm.) Katrina Lintukangas

#### Aims:

The aim of the course is to give extensive general knowledge about the useful tools, systems and methods related to evaluation and management of supply networks and supplier relationships. In addition, the course familiarizes students with the concepts of performance measurement and business process improvement in international organizations. After completion of the course students can:

- recognize different inventory management methods
- calculate the key figures related to material management
- recognize the criteria of supplier selection
- name and describe different supplier evaluation and management methods
- evaluate the applicability of these methods in different business environment
- participate to the development of evaluation methods
- name the main determinants related to performance measurement

#### **Contents:**

Key figures of inventory management, criteria of supplier selection, methods and systems of supplier management and evaluation, price and cost analyses, total cost management, business process improvement methods. Tools of decision and selection making. Concepts of total quality management.

#### **Teaching Methods:**

Lectures and preparation for lectures 14 h. Exercises 6 h including the instructions of case assignment. Calculations and writing of the case report 70 h. Exam and reading for exam 70 h, 2nd period. Total workload for student 160 h.

#### Examination in Examination schedule (Yes/No):

Yes

# Examination in Moodle (Yes/No):

No

### **Examination in Exam (Yes/No):**

Nο

#### **Assessment:**

Grade 0-5, evaluation 0-100 points, written exam 70%, case-report 30%, both assignments must be passed to obtain final grade

#### **Course Materials:**

Lecture slides, Assigned reading, collection of articles Lysons, K. & Farrington, B.,2006. Purchasing and supply chain management, 7th ed., Prentice Hall.

### **Prerequisites:**

The principles of purchasing and supply management

# Places for exchange-students? (Yes, number/No):

No

## Places for Open University Students?(Yes, number/No):

max 5

## A380A0131: Business Relationships in International Value Networks, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Anni-Kaisa Kähkönen, Terhi Tuominen

#### Note:

If student has taken the course of A380A0130 Kansainväliset liikesuhteet arvoverkostoissa, the student is not able to participate to this course.

#### Year:

B.Sc. (Econ. & Bus. Adm.) 3

# Period:

1

## **Teaching Language:**

**English** 

## Teacher(s) in Charge:

Associate Professor, D.Sc. (Econ. & Bus. Adm.) Anni-Kaisa Kähkönen Post-Doctoral Researcher, D.Sc. (Econ. & Bus. Adm.) Terhi Tuominen

#### Aims:

The aim of the course is to familiarize students with different business relationships in value networks, with the management of relationships and networks, and the characteristics of international business relationships and collaborative networks.

Upon completion the course students are able to

- understand the main concepts and theoretical backgrounds of collaboration and networks
- analyze the benefits and challenges of relationships and networks
- recognize and understand the characteristics of value networks
- define supplier and customer relationships
- participate to the development of relationships.

## **Contents:**

The concepts and theories of collaboration and networking, characteristics of value networks, the benefits and challenges of collaboration, managing of collaboration and networks, vertical and horizontal collaboration, the management of supplier relationships and customer relationships.

## **Teaching Methods:**

Online course, student driven content creation and discussion. Reading assignments and writing of essays 40 h. Case assignment including written reports, 60 h, in small groups. Independent Moodle exam and preparation for exam 60 h, 1stperiod. Total workload for student 160 h.

## **Examination in Examination schedule (Yes/No):**

No

### **Examination in Moodle (Yes/No):**

Yes

### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Grade 0-5, evaluation 0-100 points. Exam 40 %, case assignment 40 %, essays 20 %, all assignments must be passed to obtain final grade.

## **Course Materials:**

1. Selection of journal articles, 2. Assigned readings

### **Prerequisites:**

B.Sc. (Econ. & Bus. Adm.) General studies

## Places for exchange-students? (Yes, number/No):

15-

## Places for Open University Students?(Yes, number/No):

15-

# A380A0250: Export-Import Operations, 6 cr

Validity: 01.08.2011 -

Form of study: Basic studies

**Type:** Course

Unit: LUT School of Business and Management

**Grading:** Study modules 0-5,P/F **Teachers:** Sirpa Multaharju, Jari Varis

Year:

B.Sc. (Econ. & Bus. Adm.) 2

## Period:

1

# **Teaching Language:**

**Finnish** 

# Teacher(s) in Charge:

D.Sc. (Tech.) Jari Varis

D.Sc. (Econ. & Bus. Adm.) Sirpa Multaharju

## Aims:

The aim of the course is to provide the students with the knowledge of most central issues of firms' exporting and importing functions. After completion of the course the students are able to:

- analyze various export and import modes
- compare the functions of exporting and importing in companies
- evaluate the export and import readiness of a chosen company in practice and analyze the skills needed for starting and developing international business (market entry)
- recommend the most suitable payment and transportation modes in a given export/import situation.

- explain the most common documentation related to export/import operations.
- indicate the most important organizations for export/import assistance.
- understand the basic theories of international trade.
- conduct project work in teams regarding export/import related matters.

#### **Contents:**

Exporting and importing as concepts and various modes of exporting and importing; exporting and importing as a part of firm's operations; exporting, importing and marketing functions of the firm, export / import readiness, export / import planning and implementation; payment methods in international trade, international trade theories and Finnish foreign trade. Required documents related to exporting and importing, Sources of information for exporting. Real life examples of exporting and importing practices in various companies (group assignments).

## **Teaching Methods:**

Lectures 12 h, exercises 8 h, preparing for exercises 50 h, group assignment given on the lectures, 1st period. Compulsory written exam. Total workload for student 160 h.

## Examination in Examination schedule (Yes/No):

No

### Examination in Moodle (Yes/No):

Nο

## **Examination in Exam (Yes/No):**

Yes

#### **Assessment:**

Grade 0-5, evaluation 0-100 points: - Group assignment 40 points - Written exam 60 points

### **Course Materials:**

Lecture materials

Melin Kirsti, (2011) Ulkomaankaupan menettelyt

Albaum, G. & Duerr, E. (2008) International marketing and export management, 6th (or 7th) edition, Prentice Hall, FT (luennoitsijan ilmoittamat osat)

Other material informed by lecturers

## **Prerequisites:**

CS10A0010 Markkinoinnin perusteet, A130A0200 Hankintatoimen perusteet

#### Places for exchange-students? (Yes, number/No):

No

#### Places for Open University Students?(Yes, number/No):

This course has 1-5 places for open university students. More information on the web site for open university instructions.

# KaSOMSust: Sustainability, 24 - 35 cr

**Validity:** 01.08.2016 -

Form of study:

**Type:** Study module

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

No course descriptions.

Obligatory courses 9 cr

BH60A4400: Introduction to Sustainability, 3 cr

Validity: 01.08.2013 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Energy Systems **Grading:** Study modules 0-5,P/F

Teachers: Virgilio Panapanaan, Mirja Mikkilä, Risto Soukka

Year:

M.Sc. (Tech.) 1

Period:

1

## **Teaching Language:**

English

### Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Risto Soukka

#### Aims:

Upon completion of the course the students are expected to be able to:

- 1) explain the interaction between the environment, society and business and understand the relationships of various actors in these fields and their impacts on the society and the environment, 2) understand the core idea and thinking behind sustainability and its importance in order to limit or decelerate environmental damages and improve our quality of life while pursuing a more sustainable lifestyle and business within the planetary boundaries,
- 3) understand and apply practically the learned principles and concepts of sustainability in relation to current production and consumption habits,
- 4) know and be guided about the different value-adding activities and tools that promote sustainability

## **Contents:**

The idea is to learn and understand sustainability challenges and their interconnectedness, and find out how we could move or transit towards a more sustainable world.

#### **Teaching Methods:**

1st period: 14 h of lectures. Independent study (approx. 64 h): assignment (group work) and seminar (approx. 26 h). Preparation for the examination and the exam (approx. 38 h). Total workload 78 h.

#### Suitability for doctoral studies (Yes/Leave empty):

Yes

## **Examination in Examination schedule (Yes/No):**

No

#### **Examination in Moodle (Yes/No):**

Yes

## **Examination in Exam (Yes/No):**

Nο

## **Assessment:**

0 - 5. Examination 60 %, assignment 40 %.

#### **Course Materials:**

Will be announced during lectures. Moodle.

# Places for exchange-students? (Yes, number/No):

max 5

## Places for Open University Students?(Yes, number/No):

max 5

### CS30A1691: Social Sustainability, 6 cr

Validity: 01.08.2016 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Rakhshanda Khan, Helinä Melkas, Suvi-Jonna Martikainen, Satu Pekkarinen, Suvi Konsti-Laakso

Year:

B.Sc. (Tech.) 3

Period:

4

## **Teaching Language:**

English

## Teacher(s) in Charge:

Professor, D.Sc. (Tech.) Helinä Melkas Rakhshanda Khan, PhD, Senior Researcher Satu Pekkarinen, PhD, Senior Researcher Suvi Konsti-Laakso, M.Sc., Researcher Suvi-Jonna Martikainen, MA, Researcher

#### Aims:

After completion of the course, students will be able to

- explain and analyze the significance and meaning of social sustainability in development of business, organization and product and service processes
- discuss both theoretical and practice-based viewpoints as well as the kinds of tools and methods that enable social sustainability to become part of business, management and product and service development
- determine and compare appropriate situations for applying these methods
- differentiate between elements for critical thinking concerning social sustainability.

#### Contents:

Core content: social sustainability at different levels (global, societal and organizational), social innovation, frugal innovation, social enterprise, end-user involvement, employee involvement. Supplementary content: practical cases, methods and Living Lab activities.

## **Teaching Methods:**

Lectures (intensive teaching) and small group assignments during the lectures 5 h, case exercise to be given during the lectures 60 h, independent and/or group studies 60 h, presentation of case exercises in a closing seminar 10 h, personal learning diary 21 h = total 156 h.

## **Examination in Examination schedule (Yes/No):**

No

#### **Examination in Moodle (Yes/No):**

Nο

## **Examination in Exam (Yes/No):**

No

#### Assessment:

0 - 5. Case exercise 70%, learning diary 30%.

#### **Course Materials:**

The study materials consist of course slides and selected articles (will be announced later).

## **Prerequisites:**

None.

Places for exchange-students? (Yes, number/No):

max 15

Places for Open University Students?(Yes, number/No):

max 5

Elective courses, min. 15 cr. Recommended, if not included elsewhere in the degree

### A310A0761: Green Logistics, 6 cr

**Validity:** 01.01.2018 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

**Grading:** Study modules 0-5,P/F

Teachers: Sirpa Multaharju, Pietro Evangelista

Year:

M.Sc. (Econ. & Bus. Adm.) 1

Period:

Intensive week 43, 2nd period

**Teaching Language:** 

English

#### Teacher(s) in Charge:

Post Doctoral Researcher, D.Sc. (Econ & Bus. Adm.) Sirpa Multaharju Adjunct Professor, D.Sc. Pietro Evangelista

#### Aims:

The main aim of the course is to transfer to the students the knowledge about key green logistics management principles and practice. Particular emphasis will be given to the changing role of logistics service providers in the supply chain and the importance assumed by environmental sustainability in their business models and strategies. By the end of the module, the students will be able to show a critical understanding of: the basic principles of logistics and SCM, identify and analyse major evolving trends in logistics and SCM, recognise different type of logistics service providers and assess their development stage, explore benefits and challenges in implementing the principles of green logistics, analyse the role of environmental sustainability in the strategy of logistics service providers, define and implement a green logistics auditing plan, identify a decarbonization strategy for logistics.

## **Contents:**

- Foundation concepts of logistics and SCM
- Evolving trends in logistics and SCM
- The importance of logistics outsourcing
- Main changes affecting the logistics service industry
- The environmental impact of transport and logistics
- Principles of green logistics management
- Environmental sustainability in the strategy of logistics service providers
- Green logistics auditing plan,
- Decarbonization strategy for logistics

#### **Teaching Methods:**

16 hours of lectures, 32 hours for preparing to the lectures and 112 hours for preparing for the exam, total workload 160 h. Moodle is used in this course. Written exam 100%.

#### **Examination in Examination schedule (Yes/No):**

No

### Examination in Moodle (Yes/No):

Nο

## **Examination in Exam (Yes/No):**

Yes

#### **Assessment:**

Final grade 0-5, evaluation 0-100 points, 100% exam

#### **Course Materials:**

- Lecture slides
- Alan McKinnon, Michael Browne, Maja Piecyk, Anthony Whiteing (2015) Green Logistics: Improving the Environmental Sustainability of Logistics, 3rd edition, Kogan Page
- Donald Waters, Stephen Rinsler (2014) Global Logistics: New Directions in Supply Chain Management, 7th edition, Kogan Page

## **Prerequisites:**

**B.Sc.** studies

## Places for exchange-students? (Yes, number/No):

15-

# Places for Open University Students?(Yes, number/No):

max 5

## A350A0500: Sustainable Strategy and Business Ethics, 3 cr

Validity: 01.08.2013 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Karl-Erik Michelsen, Laura Olkkonen, Paavo Ritala

#### Note:

Only Master-level students, i.e those that have completed a Bachelor's degree or equivalent before the beginning of the course, are allowed to enroll.

#### Year:

M.Sc. (Econ. & Bus. Adm.) 1

### Period:

2

# **Teaching Language:**

English

# Teacher(s) in Charge:

Professor, D.Sc. Paavo Ritala Professor, Ph.D. Karl-Erik Michelsen Post-doctoral Researcher, Ph.D. Laura Olkkonen

#### Aims:

This course concentrates on the topical phenomena and concepts related to the creation and development of sustainable strategy, shared value creation and business ethics in organisations. The concepts will be investigated both from the viewpoints of academic research and practical relevance.

Students will learn to discuss and synthesize the recent literature, examine the links of contemporary topics to previous research and assess the practical relevance of the issues through concrete examples. The learning outcomes of the course are the following:

- 1.To assess the topics of sustainable strategy and business ethics in the firm level as well as within the broader institutional context from both academic and practitioner perspectives.
- 2.To discuss and debate on the conflicting perspectives of sustainability and ethics in business.
- 3. To be able to analyze the practical relevance of sustainable business strategy

#### **Contents:**

The content of the course is based on topical issues related to sustainable strategy and business ethics from different approaches.

The core content includes: - Basics of sustainability and ethics in business context - Recent trends and developments of sustainable strategy and corporate responsibility - Sustainability issues in the supply network - Key business ethics challenges

### **Teaching Methods:**

In-class hours: 2. period: 12 hours of lectures, 6 hours of interactive theme sessions and seminars, and an interactive panel session with business and societal experts (4 hours).

Out-class hours: Preparation for the theme sessions and seminars: 8 h. Course assignment in groups 50 h. Total hours: 80 h.

## **Examination in Examination schedule (Yes/No):**

No

#### **Examination in Moodle (Yes/No):**

No

#### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

No written exam. Final grade 0-5. 100 points based on course assignment conducted in groups.

#### **Course Materials:**

Academic and practitioner-oriented articles on sustainability and business ethics. Readings list distributed in Moodle.

# **Prerequisites:**

Only Master-level students, i.e. those that have completed a Bachelor's degree or equivalent before the beginning of the course, are allowed to enroll.

## Places for exchange-students? (Yes, number/No):

max 10

#### Places for Open University Students?(Yes, number/No):

max 5

## A350A0560: Sustainability Reporting and Communication, 6 cr

Validity: 01.01.2018 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Business and Management

Grading: Study modules 0-5,P/F

Teachers: Laura Albareda, Päivi Maijanen-Kyläheiko

#### Note:

Sustainability reporting and communication -course is an online course for individual learning. It is open throughout the academic year in Moodle. Students will proceed individually through the course. The course is available for Master's students of MSIS and Accounting.

#### Year:

M.Sc 1-2

#### Period:

Open throughout the academic year 1-4, summer

## **Teaching Language:**

**English** 

# Teacher(s) in Charge:

Associate Professor Laura Albareda

Post-Doctoral Researcher, Päivi Maijanen-Kyläheiko

#### Aims:

By the end of the course, students will be able

- to define sustainability reporting and the main objectives for companies to report, fundamental concepts and the main dimensions and guiding principles
- to identify and apply different methods (sustainability reporting and integrated reporting) and the different elements and stages in preparing an integrated report
- to identify and analyze alternative ways to communicate sustainability as part of the business
- to identify the risks related to sustainability reporting and communication
- to evaluate the strategic value of sustainability reporting and communication (e.g. sustainable value creation, sustainable business models).

#### **Contents:**

Main content is connected to course aims:

Understand sustainability reporting

- The concept of materiality and sustainability reporting
- Fundamental and guiding principles

Identify and apply different methodologies

- Sustainability and Integrated reporting: main principles, values and framework
- Assignment: to prepare a chapter of integrated reporting
- Understand and analyze alternatives ways to communicate sustainability
- How is sustainability communicated
- Sustainability communication and brand building

Identify the risks related to sustainability reporting and communication

- Different risks related to sustainability reporting and communication
- How to handle these risks

Evaluate the strategic value of sustainability reporting and communication

- Value creation & business models
- Global agenda: sustainability reporting and stakeholder engagement
- Assignment: case analysis.

### **Teaching Methods:**

Independent learning based on the course materials, concept maps, videos with short lectures, power point or digital presentations, case studies, stimulating questions, (50 h)

- Online tests/multiple choice (20h)
- Assignments: formulation of a chapter for a sustainability report, case analysis, communication assignment (90 h)

Total workload: 160 hours.

## **Examination in Moodle (Yes/No):**

Yes

#### **Examination in Exam (Yes/No):**

No

#### **Assessment:**

Assessment on the scale 0-5

40 % of the grade based on online tests/assignments in Moodle

60 % of the grade is based on assignments evaluated by the teachers (formulation of a chapter for a sustainability report, case analysis, communication assignment).

#### **Course Materials:**

Books, research articles and other material will be published in Moodle.

## **Prerequisites:**

B.Sc level studies.

# Limitation for students? (Yes, number, priorities/Leave empty):

The course is available for Master's students of MSIS and Accounting in LUT School of Business and Management.

# Places for exchange-students? (Yes, number/No):

No

## Places for Open University Students?(Yes, number/No):

No

## BH61A0600: Bioenergy, 3 cr

Validity: 01.08.2011 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Energy Systems **Grading:** Study modules 0-5,P/F

Teachers: Tapio Ranta

Year:

M.Sc. (Tech.) 1

Period:

1

# **Teaching Language:**

English

### Teacher(s) in Charge:

Tapio Ranta, D.Sc. (Tech.), Professor

# Aims:

Upon completion of the course the student will be able to understand the meaning of bioenergy, alternative biomass resources, supply methods, refining and end-user applications; describe the quality properties of solid biofuels and how they are measured and evaluated by using standards; and explain the meaning of sustainability in bioenergy systems.

### **Contents:**

The role of bioenergy in the EU energy policy, incentive programmes and future plans. Raw-material sources of bioenergy, potential resources and current use. Biomass supply systems and logistics. Refined biofuel commodities, biogas and liquid biofuels. Biomass international trade. Quality properties of solid biofuels, quality measurement and standards. Sustainable bioenergy.

# **Teaching Methods:**

1st period: 12 h of lectures. Written examination 3 h. 63 h of self-study. Total workload 78 h.

## **Examination in Examination schedule (Yes/No):**

Yes

#### **Examination in Moodle (Yes/No):**

No

## **Examination in Exam (Yes/No):**

No

#### Assessment:

0 - 5. Examination 100 %.

#### **Course Materials:**

Energy Visions 2050, VTT. 2009. Chapters 2, 4.4, 5.2- 5.4. Additional material will be announced later during lectures.

# Places for exchange-students? (Yes, number/No):

15-

### Places for Open University Students?(Yes, number/No):

max 5

## BJ02A1090: Environmental and Industrial Analytics, 5 cr

Validity: 01.01.2017 -

Form of study: Basic studies

Type: Course

**Unit:** LUT School of Engineering Science

Grading: Study modules 0-5,P/F

Teachers: Satu-Pia Reinikainen, Eeva Jernström, Maaret Paakkunainen

#### Note:

The course is suitable for distance learning.

Year:

M.Sc. (Tech.) 1

Period:

4

## **Teaching Language:**

**English** 

#### Teacher(s) in Charge:

Satu-Pia Reinikainen, D.Sc. (Tech.), Professor Maaret Paakkunainen, D.Sc. (Tech.) Eeva Jernström, D.Sc. (Tech.)

#### Aims:

By the end of the course, the student is expected to be able to

- understand role and state-of-art of analytics in environmental and industrial contexts
- understand the effect of digitalization as the 4th industrial revolution
- be able to apply process management skills in implementation of project work.

### **Contents:**

Main themes addressed are reliable sampling, traceability of measurements, modern instrumentation, data handling, process and environmental control/monitoring, and license to operate. Students will carry out a project work on one of these topics, report and present it as the visual synthesis. In addition a study visit aiming at

improved understanding of analytics will be carried out with a problem based learning procedure. Course contains tutorial lectures on the topics, hands on workshops on sampling, statistical process monitoring, and study visits.

## **Teaching Methods:**

8 h of Tutorials, 2 h Study visit, 20 h Online workshops, 30 h Project work, 70 h Independent work. Total workload 130 h.

# Suitability for doctoral studies (Yes/Leave empty):

Yes

### **Examination in Examination schedule (Yes/No):**

No

### **Examination in Moodle (Yes/No):**

Yes

### **Examination in Exam (Yes/No):**

Yes

#### **Assessment:**

Numerical assessment (0-5); 40 % Electronic or Moodle Exam, 30 % Project Work, 30 % Other Homework.

### **Course Materials:**

To be announced.

### Places for exchange-students? (Yes, number/No):

max 15

## Places for Open University Students?(Yes, number/No):

max 5

### BL40A2600: Wind power and solar energy technology and business, 5 cr

Validity: 01.08.2013 -

Form of study: Basic studies

**Type:** Course

**Unit:** LUT School of Energy Systems **Grading:** Study modules 0-5,P/F

Teachers: Olli Pyrhönen, Katja Hynynen

#### Year:

B.Sc. (Tech.) 3

#### Period:

3-4

## **Teaching Language:**

Finnish

## Teacher(s) in Charge:

D.Sc. (Tech.) Katja Hynynen

#### Aims:

Upon completion of the course the student will be able to: 1. model the process from wind energy into company turnover at the principle level, 2. identify and describe the key technologies related to wind power, the core business principles, environmental issues,

energy policy and their development trends, 3. describe the mutual effects of wind power and electric power systems, 4. identify and describe the technologies related to solar power., 5. describe the basic principle of photovoltaic cells, 6. estimate the performance and profitability of a PV plant.

### **Contents:**

Process modelling from kinetic energy of wind into company turnover and from solar radiation to turnover. Basic components of a wind

power plant (turbine, gearbox, generator, power electronics, power electronics, tower), environmental effects of wind power, wind park planning, grid effects of wind power, economic feasibility of wind power under different circumstances, wind conditions in Finland. Solar energy technologies, operating principle of solar panels, PV solar power plant structure.

## **Teaching Methods:**

Lectures 14 h, homework, 3rd period. Lectures 14 h, 4th period. Weekly homework. Two assignments. Total workload 130 h.

# Examination in Examination schedule (Yes/No):

No

# **Examination in Moodle (Yes/No):**

No

## Examination in Exam (Yes/No):

No

## **Assessment:**

0-5, project works 60 %, homework 40 %.

## **Course Materials:**

Material handed out in class. Moodle.

## **Prerequisites:**

Basics of physics (mechanics, thermodynamics, electricity)

# Places for exchange-students? (Yes, number/No):

No

# Places for Open University Students?(Yes, number/No):

max 5