Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- **Administration and Organization**
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

ADM705 Research methods and proposal

Course Code
ADM705

Course Name
Research methods and proposal

Credits
7.50

Prerequisites

Completed first year of the master program in question.

Overlap the content of another course

IDR705 Philosophy of Science and Research Methods. ADM712 Samfunnsvitenskapelige grunnlagsproblemer og metode.

Semester
Autumn

First time autumn 2015.

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lecture per week. Supervision of assignment.

Evaluation
4-hour written examination. Written assignment (master thesis proposal) with oral presentation.

Support materials for examination
Separate list, see below

Special support materials
Dictionary (english / mother tongue) allowed at written examination.

Grades
Pass/fail

Learning outcome

After completing this course, the student will

- have an understanding of theories and applications of business research methods.
- learn how to formulate research questions for a given problem and to develop a research design.
- achieve basic requirements for how to write a master's degree thesis.

Content

The course will cover the following topics:

- Defining a research problem and designing the research Project.
- Collecting, validating and analysing empirical data.
- Ethics in business research
- Writing scientific reports and presentation of research results

Literature

Leady, P.D. and Omrod, J.E. *Practical Research Planning and Design*, 9th ed., Pearson Education International, 2010.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- **Administration and Organization**
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

ADM720 Management of value systems

Course Code
ADM720

Course Name
Management of value systems

Credits
15.00

Prerequisites

Same as the requirements for the MSc programme in Logistics.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
2-3 hours of lectures per week. The course contains two full-week case studies. During these two weeks all courses that are scheduled together with LOG720 are stopped.

Mandatory Assignments
The students will have to write summaries from articles and make oral presentation. This is done as groupwork.
It is mandatory to be present during the case weeks

Evaluation
5 hours written examination counts as 60% of the final grade. Two written assignments counts as 40%.

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Grades
Letter (A - F)

Learning outcome

After completing the course the student should:

- Know how to reflect and conceptualize on what is going on in the business today
- Know how to play a part in the reconfiguration of value chains, networks and value systems
- Know how to reconfigure value systems and networks
- Know the need for, and understand, what kind of different leadership is needed through business life cycle, and
- Learn about own personality and leadership style

The main purpose of the course is to give students insight into the processes and structural arrangements in organisations that bring about growth but also stagnation and crises and what to do with it.

Content

Supply chains are, in reality, networks. Networks are complex webs of partly independent but interdependent organizations. Changes in supply chains and networks happen all the time. Creativity and change is needed at some point in the business life cycle and at other points structural arrangements and performance are or should be high lightened.

The first part of the course challenges the students on management and management styles. Learning that there is more than one reality and the reality as we as individuals or organisations recognise it, depends of many elements.

To generate relevant strategies in different developmental situations require understanding of structures and processes that respectively promote or hinder growth and success. Knowledge and understanding of above mentioned processes and elements are essential premises to perform effective or good leadership. Strategic challenges will in many ways be a continuous reconfiguration and integration of the organisations.

Literature

Quinn, Robert E. 1991. *Beyond Rational Management.* Jossey Bass Publ.
Normann, Richard. 2009. *Reframing Business.* John Wiley & Son, Ltd.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- **Administration and Organization**
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

ADM900 Forms of organization and management

Course Code
ADM900

Course Name
Forms of organization and management

Credits
15.00

Prerequisites

A bachelor's degree in Sport Management, Social Sciences, Business and Administration or equivalent.

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English or Norwegian, depending on the regulations of the student's Master's programme.

Instruction
Seminars

Evaluation
Home exams

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Grades
Letter (A - F)

Learning outcome

The students will acquire in-dept knowledge in the relationship between forms of organization and management and about change processes in organizations. Students should have knowledge of the most basic mainstream theories to be able to make their independent judgements of organization and management designs and processes

Content

- Theories on organizational context and change
- Theories on organizational forms
- Theories on leadership and forms of management
- Theories on organizational change
- Theories on top management

Literature

Clegg, S., Kornberger, M. & Pitsis, T. (2005). *Managing and Organizations*. Sage Compendium

Courses

- Doctoral Courses in logistics
- Logistics
- **Business Administration**
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

BØK716 Decisions under Uncertainty

Course Code
BØK716

Course Name
Decisions under Uncertainty

Credits
7.50

Semester
Spring

Location
Molde

Language Instruction
Englsih

Language Assignments and Evaluation
English

Instruction
x timer forelesning per uke.

Support materials for examination

Grades

Courses
- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

DRL001 History of Logistics

Course Code
DRL001

Course Name
History of Logistics

Credits
5.00

Prerequisites

The course is aimed at PhD students within the field of logistics and supply chain management, economics and business, management science, with background in probability theory and statistics.

Semester
Irregularly

The course is offered in spring 2015, and will be offered next in spring 2017.

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
According to the PhD regulations

Language Literature
English

Instruction
30 hours lectures. All lectures are mandatory.

Evaluation
Home exam

Support materials for examination

Grades
Pass/fail

Learning outcome

The main purpose of this course is to give an overview of the development of logistics through time. Some topics like purchasing, transportation, inventory theory, vehicle routing and production theory will be highlighted.

Content

- Introduction to the history of logistics in general, starting from the middle of 18th century until today, changes in supply chains over the centuries due to changes in technologies, needs of the societies, and market situations.
- The history of purchasing; an overview over the development of theoretical frameworks within industrial purchasing and business-to business marketing, including industrial marketing and buying behavior, inter-organizational issues in buyer-seller relationships and the network approach of inter-firm business.
- The history of inventory theory starting from early last century and the research during the last 100 years; when and how did it start, when was stochastic problems introduced, when was discount introduced, etc.
- The history of transportation economics with relations to logistical issues; the peak load problem, classical localization theory, development of the spatial dimension in logistical models, technological development within the transport sector.
- The history of production; the history and development of optimization techniques and how these techniques are used in combination with better developed computers and software to solve practical problems in production, logistics and workforce planning.
- History of distribution and vehicle routing starting with early results in routing going back to 18th century, and the development of the travelling salespersons problem, vehicle routing and arc routing problems from the middle of the last century until today.

Literature

Selection of book chapters and scientific articles

Courses
- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

DRL007 Cost Benefit Analysis

Course Code
DRL007

Course Name
Cost Benefit Analysis

Credits
5.00

Semester
Irregularly

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
According to the PhD regulations

Language Literature
English

Instruction
30 h lectures + student presentations. All lectures are mandatory.

Evaluation
Home exam

Support materials for examination

Grades
Pass/fail

Learning outcome

To learn about the state of the art in Cost-Benefit Analysis for various sectors.

Content

There is an increasing need for evaluation and ranking of projects within constrained public budgets. CBA is one of the methods that are extensively used in economic impact assessment of projects in the public sector. Originally, it was developed and applied within transportation, but has gained increasing attention also within environmental assessment, health care and cultural economics. The course covers fundamental theoretical and empirical issues, and applies these to actual case studies. Decisions under uncertainty and real option theory are also covered.

Literature

Boardman A E et al (2006). Cost-benefit analysis : concepts and practice. Upper Saddle River, N.J. : Pearson Prentice Hall. ISBN: 978-0-13-143583-4

Courses
- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

DRL019 Advanced discrete event simulation modeling

Course Code
DRL019

Course Name
Advanced discrete event simulation modeling

Credits
7.50

Prerequisites

The course is aimed at PhD students within the field of logistics and supply chain management, economics and business, management science, with background in probability theory and statistics.

Semester
Irregularly

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Evaluation
The evaluation of the course will be based on the assignment to each student of a case study to be implemented in ARENA together with the written report

Support materials for examination

Grades
Letter (A - F)

Learning outcome

As the result of the course, students are intended to be equipped to conduct a comprehensive simulation research project: build a model of a discrete system, implement it in a simulation software, perform computational experiments, interpret the results and answer the research questions.

Content

Simulation is a widely used tool for analysis of systems characterized by uncertainty in demand, lead times, capacity, prices, etc. The main objective of this course is to learn techniques and methodologies to model systems both of discrete and continuous nature; with deeper insights into the advanced modeling techniques for discrete systems, identification of the main system components and analysis of their random behavior. The course discusses the choice of simulation software and its limitations for some advanced techniques. The course provides examples from various fields: supply chain systems, production and inventory systems, transportation/distribution systems, upstream offshore logistics, health care and other service systems. Topics of the course include:

- Introduction to systems modeling
- Discrete dynamic stochastic systems: elements of Queuing Theory
- Fundamentals of continuous modeling
- Modeling tools for discrete systems
- Review of discrete simulation approaches and associated simulation software
- Input data generation and analysis
- Design of simulation experiments
- Analysis of simulation outputs
- Cases of simulation-based decision support systems

Courses
- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

Du er her: Studietilbud / Doctoral Courses in logistics / DRL022 Partial Least Squares Structural Equations Modeling (PLS - SEM)

DRL022 Partial Least Squares Structural Equations Modeling (PLS - SEM)

Course Code
DRL022

Course Name
Partial Least Squares Structural Equations Modeling (PLS - SEM)

Credits
4.00

Overlap the content of another course
Relevant master degree

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Evaluation
• Participants will receive two introductory articles on PLS-SEM long before the course start.
• The course will start with a 30 minutes exam regarding the required readings.
• The final course grade is based on the written exam and the course participation.

Support materials for examination
All printed and written supporting material

Grades
Pass/fail

Learning outcome
This PhD course is designed to familiarize with the potentials of using the multivariate analysis method PLS-SEM in international business research. The objectives of this course are to provide an in-depth methodological introduction into the PLS-SEM approach (the nature of causal modeling, analytical objectives, some statistics), (2) the evaluation of measurement results, and (3) complementary analytical techniques. More specifically, participants will understand the following topics:

- Model development and fundamentals of PLS-SEM
- Assessment and reporting of measurement and structural model results
- A new criterion for discriminant validity: The heterotrait-monotrait ratio of correlations (HTMT)
- Mediating effects
- Moderating effects (interaction effects)
- Multigroup analysis
- Measurement invariance testing
- Higher-order constructs (so-called second-order models)
- New segmentation tools, such as FIMIX-PLS and PLS-POS

This course has been designed for PhD students and full-time faculty who are interested in learning how to use the PLS-SEM method in their own research applications. A basic knowledge of multivariate statistics and SEM techniques is helpful, but not required.

Content

- The course is based on the PLS-SEM textbook:
  Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. 2016. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2nd edition. Thousand Oaks, CA: Sage.
- Presentations: The session will cover theory and its application.
- Computer exercises using the latest SmartPLS 3 version: Specifically, theoretical explanations underlying the software procedures and practical exercises where participants will apply their learning to real-world examples provided by the instructors.
- Before the course, all participants get a license key for using SmartPLS 3 Professional.

Partial least squares structural equation modeling (PLS-SEM) has recently received considerable attention in a variety of disciplines, including marketing (Hair et al 2011, according to Google scholar the most-cited article ever published in JMTP; Hair et al. 2012a, according to Google scholar the most-cited JAMS article since 2012), strategic management (Hair et al. 2012a, according to Google scholar the most-cited LRP article since 2012), and management information systems (Ringle et al. 2012, according to Google scholar the second-most cited MIS Quarterly article since 2012).

The goal of PLS-SEM is the explanation of variances (prediction-oriented character of the methodology) rather than explaining covariances (theory testing via covariance-based SEM). The application of the PLS-SEM method is of particular interest if the premises of covariance-based SEM are violated and the assumed relations of cause-and-effect are not sufficiently explored. An additional advantage of the PLS-SEM method is the unrestricted incorporation of latent variables in the path model that either draws on reflective or formative measurements models.

This four days PhD course introduces participants to the state-of-the-art of PLS-SEM using the SmartPLS 3 software. The first day of the seminar provides a profound introduction to PLS-SEM. Participants will learn the foundations of PLS-SEM and how to apply it by means of the SmartPLS software. The instructors will make use of several examples and exercises. Starting at the second day and continuing on the third day, the seminar covers extensions and new developments to PLS-SEM.

Literature
The Book on PLS-SEM:

Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2nd edition. Thousand Oaks, CA: Sage.

Journal Articles:

Becker, J.-M., Rai, A., Ringle, C. M., & Völckner, F. (2013). Discovering Unobserved Heterogeneity in Structural Equation Models to

Avert Validity Threats. *MIS Quarterly*, 37(3), 665-694. http://pls-institute.org/uploads/Becker2013MISQ.pdf

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-151. http://dx.doi.org/10.2753/MTP1069-6679190202

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An Assessment of the Use of Partial Least Squares Structural Equation Modeling in Marketing Research. *Journal of the Academy of Marketing Science*, 40(3), 414-433. http://dx.doi.org/10.1007/s11747-011-0261-6

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. *Advances in International Marketing*, 20, 277-320. http://dx.doi.org/10.1108/S1474-7979(2009)0000020014

Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., Ketchen, D. J. J., Hair, J. F., Hult, G. T. M., & Calantone, R. J. (2014). Common Beliefs and Reality about Partial Least Squares: Comments on Rönkkö & Evermann (2013). *Organizational Research Methods*, 17(2), 182-209. http://dx.doi.org/10.1177/1094428114526928

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

EVM705 Event Economics

Course Code
EVM705

Course Name
Event Economics

Credits
7.50

Prerequisites
IDR720 Introduction to Sport and Event Economics

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Module based

Mandatory Assignments
Students are required to write essays on assigned topics during the course.

Evaluation
The submitted mandatory essays are counting 60 % of the final grade and a 4 hours written exam counting 40 %.

Support materials for examination

Grades
Letter (A - F)

Learning outcome
After completing the course the student will:
- Understand the essentials in the market behavior of producers and consumers operating in general markets

- Understand the principles and rationale behind the regulations of markets

- Be able to analyze the factors and mechanisms that influence the size and distribution of the revenues and costs from events.

Content
The following topics will be discussed in the course:

- Market power and price strategies

- Game theory

- Principal agent theory

- Demand analysis

- The economics of the public sector

- Analyzes of the revenues and costs from hosting events

- Analyzes of the non-monetary effects from hosting events

Literature
- Pindyck, R. & Rubinfeld, D. (2012). *Microeconomics*. Pearson Education.

- Gratton, C. & Solberg, H.A. (2007). *The Economics of Sports Broadcasting*. Routledge.

- Articles

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

EVM710 Event Logistics

Course Code
EVM710

Course Name
Event Logistics

Credits
15.00

Prerequisites

LOG707 Fundamentals of Logistics or similar knowledge

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lecture per week.

Evaluation
4-hour individual written examination (Open book).

Support materials for examination
All printed and written supporting material

Grades
Letter (A - F)

Learning outcome

After completeing the course the student will
- be able to apply classical (mass production) logistics theory into “extreme” project-oriented events.
- understand concepts like dynamic prising, project logistics and uncertainty related to events.
- be able to apply mathematical modelling and other quantitative methods to analyse Event Management issues.

Content

The following topics will be discussed in the course:
- Forecasting Event demand, principles and practice
- Mathematical modelling and solution strategies
- Project planning, management and operation under uncertainty
- Dynamic- and Event pricing, Demand based Management
- Project Logistics
- Facility Layout
- Customer transportation

Literature

Recomended:

K. K. Haugen, *Event Logistics*, Molde Specialized University, forthcoming 2010

S, Nahmias, *Production and Operations Analysis 5th ed.*, McGraw-Hill, 2005, ISBN 007-123837-9

Updated reading lists will be presented when starting the course.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

EVM720 Event Organization

Course Code
EVM720

Course Name
Event Organization

Credits
7.50

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 seminars, each of 2 days duration. Consisting of classroom teaching (36 hours). Individual work, as well as working in groups between seminars.

Evaluation
Home exam (60 %). Assignments (40 %).

Support materials for examination

Grades
Letter (A - F)

Content
The course focuses on project organization and management with a special treatment of event studies.

Literature
Getz, D. (2007), Event Studies. Theory, Research and Policy for Planned Events. Elsevier

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

EVM730 Applied Event Management

Course Code
EVM730

Course Name
Applied Event Management

Credits
7.50

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
2 hours of lecture per week. In addition there will be practical training.

Evaluation
The students will be involved with local practitioners in event planning and organization and will be given group or individual exercises to complete upon passing each module.

Support materials for examination

Grades
Pass/fail

Content

The course will be conducted through on-location work at local event organizers; *Molde International Jazz festival*, *Teatret Vårt*, *Molde fotballklubb* and *Molde Forum*. Local organizers as well as lecturers from Molde University College will take part in the course. The course consists of modules (4) one for each event organizer and each module must be passed for a course pass. The assignments may range from practical event organisational tasks, through case studies to analysis.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

EVM740 Event Tourism

Course Code
EVM740

Course Name
Event Tourism

Credits
7.50

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lecture per week

Evaluation
Coursework (75%) and oral presentation (25%)

Support materials for examination

Grades
Letter (A - F)

Content

The course focuses of five key aspects of event tourism; concepts and definitions, demand and supply, planning and management, collaboration and stakeholder relations, and sustainable development

Literature

D. Getz, *Event Management and Event Tourism*, 2nd ed., Cognizant Communication Corporation, 2005, ISBN 978-1882345465
M.Weed, *Sports Tourism: Participants, Policy and Providers*, Butterworth-Heinemann, 2009, ISBN: 978-0750683753
M. Weed, *Sport & Tourism: A Reader*, Routledge, 2008, ISBN: 978-0415426886

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

EVM810 International Module

Course Code
EVM810

Course Name
International Module

Credits
15.00

Prerequisites

EVM700 Event Economics, EVM720 Event Organisation and EVM730 Applied Event Management

Semester
Autumn

The students shall travel abroad for approximately a week to get a deep insight into event organization in the field. The basic idea is that the students tour around accompanied by two academics, who are very knowledgeable in theories of event management. Both shall have the necessary network, to ensure that approximately 15 practitioners (guest speakers) can be invited. They are also in charge of organizing the morning lectures (theoretical approach) and the evening seminar as well as they will have to organize the trip tour (including accommodation, seminar rooms, bus transfers).

During the tour the students shall learn from both academics but in particular from various stakeholders of small/huge, one off/returning events as well as from sport/cultural events.

The academics accompany the start of each day with a “theoretical based lecture” (90 min.) and finish the day with a 90 min. seminar at late afternoon/early evening where students make small presentations (which they prepared at home) as well as the practical information gathered over the day will be critically discussed and placed into a theoretical frame.

During the day the students experience 2-3 presentations (each 1 hour) from various practitioners being involved in event organization. The presentations can be given at a meeting room of the accommodation but in a particular venue (e.g. by making a guided stadium tour).

All students have to prepare the tour by

- reading basic texts

- preparing a fact sheet about the institutions that are going to be visited

- preparing a 15 min. short presentation on a given topic to present and discuss in the evening seminars

Location
Relevant European event sites

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Evaluation
Participation and travel report. The report should be at least 10 pages recalling the knowledge gained and connecting that knowledge to the respective theory.

Support materials for examination

Grades
Pass/fail

Content

A detailed travelling and lecture schedule will be developed in due time before the travel. Example of sites to visit are Nyon (UEFA), Lausanne (IOC), Magglingen (BASPO), Lucern (Rütter & Partner), Bern, Lichtenstein, Innsbruck, Kitzbuehel, Salzburg, Munich, etc.

This module will imply economic contribution from both the students and the college. The students will need to carry their own travel cost from Molde to the first location and from the final location to Molde. They will also need to carry accommodation costs for all days. The college will, however, help to organize contact with sponsors in order to obtain financial support for the module. The cost for the college will include travel and accommodation for two professors, entrance fees, meeting rooms, guest lecture honorarium and bus travel between the locations.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

EVM950 Master's Degree Thesis

Course Code
EVM950

Course Name
Master's Degree Thesis

Credits
30.00

Prerequisites

All courses within the Event Management programme. Only students enrolled at the master's degree programme in Event Management can write a thesis.

Semester
Spring

Location
Molde or any European location defined within the supervising pool.

Language Instruction
English

Language Assignments and Evaluation
Norsk

Language Literature
English

Instruction
The master's thesis is an independent work done by a single student or two students together and supervised by a faculty advisor. It is the duty of each student to obtain a supervisor at the latest in the start of Semester 3.

Evaluation
Submission of the written thesis and an oral thesis defence are required. The final grade is a combination of grades received on the thesis and the oral presentation. Only one final grade will be presented to the student.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

A thesis is an independent, extensive work that is done under the guidance of an advisor/professor in the discipline. Not more than two students can work on the same thesis. Possible supervisors can be chosen among local professors or within a pool of European professors. The student can choose the amount of time spent abroad together with the foreign professor if a foreign supervisor is chosen.

The most important objective is to give training in independent project work that has a strong professional basis. Students should employ methods and knowledge that has been learned in their courses, and show that they can apply these methods in the explanation and solution of problems in Event Management.

Content

Candidates are relatively free to choose topics. A thesis can be either applied, related to an event organizer or an agency/governmental body, or it can be a theoretical investigation.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

GSU1 Global Energy

Course Code
GSU1

Course Name
Global Energy

Credits
3.00

Prerequisites

Equivalent to requirements for the MSc program in logistics, basic micro economics.

Semester
Spring

Location
Moscow

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
The course will be taught intensive, from Monday to Friday, lasting for two weeks with 2-3 hours of classes per day. The instruction will be a mix of lectures, assignments, group work and discussions.

Mandatory Assignments
None

Evaluation
3 hours written exam.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

After having completed the course students will be able to understand the activities of world oil and gas industry, analyse world as well as national energy balances; describe the principles of energy markets functioning; perform the estimation of world and national energy resources, supply and demand; analyze oil and gas value chain; describe the challenges and risks in world oil and gas trade including volatility of oil prices and peculiarities of gas pricing; describe the activities of international energy organizations; identify the basics of national energy policies and energy security issues, geopolitical risks and opportunities; analyze the long-term forecasts of the world energy complex.

Content

The aim of the course is to give students a comprehensive grounding in all aspects of the world oil and gas industry as well as understanding of other sectors of world energy complex. The course comprises background information on distribution, production and consumption of hydrocarbon resources in the world, world energy markets, oil and gas value chain, world oil and gas trade movements, producing and importing countries, international organizations that constitute the global energy space, the basics of national energy policies and energy security issues, geopolitical risks and opportunities, and an forecasts of the world energy complex. Also profound information is given on Russian oil and energy complex, Russian gas industry including Gazprom and independent gas producers, national oil and gas companies, Russian pipeline infrastructure - both domestic and export, Russian energy strategy to 2030.

Literature

Ergin, D.: *The Prize – An Epic Quest for Oil, Money and Power*, New York, Free Press, 2008.
The Quest – Energy, Security and the Remaking of the Modern World, England, Penguin Books, 2012.

Courses
- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

GSU2 Transportation and Forwarding of Hydrocarbons in a Supply Chain

Course Code
GSU2

Course Name
Transportation and Forwarding of Hydrocarbons in a Supply Chain

Credits
5.00

Prerequisites

Equivalent to requirements for the MSc program in logistics

Semester
Spring

Location
Moscow

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Two weeks of intensive teaching, 15 hours of lectures per week.

Mandatory Assignments
It is mandatory to submit 3 individual assignments counting for 10%, 20% and 10% of the final grade.

Evaluation
4 hours individual written final examination that counts 60% of the final grade.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

By completing the course students will get in-depth knowledge of specific issues and techniques for transportation of oil, gas and petroleum products using different modes of transport in various logistics settings. Students will know oil and gas forwarding systems, stevedore main issues, international laws and practice to organize the transportation of oil, gas and petroleum products.

Content

The course covers existing approaches of hydrocarbons transport management. The products in oil and gas industry (crude oil, gas and petroleum products) exist in three phases (gas, liquid, and solid) and are transported by pipelines, railway (cisterns), road, maritime and inland water (tankers, barges), containers (solid cargo). In this course the choice of transportation mode, regimes of transportation, physical and chemical properties of products, existing routes, tariffs etc. are studied. The course covers the following topics:

- Technical characteristics of pipelines, railway, road, maritime and inland water transport (rolling stock, tanker fleet, barges);
- Basics of oil and gas cargo properties. Conditions for cargo transportation, and choice of transport modes;.
- Basics of transport economy. Lot-sizing (transport batches) in different transport sectors, inventory management of hydrocarbons, terminals, oil depots, interaction with different modes of transport;
- Pricing in transport sphere. Tariff's policies in different transport sectors;
- Transportation costs reduction. Organization of transport processes. Transport mode choice methods;
- Oil and gas transportation in harsh climate and weather conditions. The Northern Sea Route as a transit link from Europe to Asia;
- General logistics management principles in transportation companies (in vertical integrated oil and gas companies, outsourcing etc.).
- International sale-and-purchase contracts (basis principles of contract design; transportation terms for contracts INCOTERNS 2010; insurance of contract subjects)
- Ways of purchasing to the global markets (brief characteristics of the ways - vehicle, railroad, maritime, mixed, pipeline; logics of choosing the optimal route of transportation; logics of choosing the optimal providers of transport and logistics services);
- Contract of carriage (compilation of contract of carriage; contractual liability and insurance; negotiable and unnegotiable shipment document; consignment and their role in trading; shipment document, as a proof of execution of contract obligations);
- Financial aspects if international contracts (documents controlling disposition of the goods; crucial notes: general principles and rules; role of UCP-600 in transport provision of foreign trading);
- Particularity of acceptance and returns of goods in the case of 3GL (general rules, terms and conditions in different cases).

Literature

Burke, R., *International Logistics and Petroleum Forwarding*, Manual, 4th Edition, CBFCA, Australia, 2000-2014.
Glass, D.A., *Freight Forwarding and Multimodal Transport Contracts*, Taylor&Francis, 2012.
Shcherbanin, Y. and Golubchik, A.: *Theoretical and Practical Course*, Compendium, 2015.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

GSU3 International Oil and Gas Logistics

Course Code
GSU3

Course Name
International Oil and Gas Logistics

Credits
5.00

Prerequisites

Equivalent to requirements for the MSc program in logistics

Semester
Spring

Location
Moscow

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Two weeks of intensive teaching, 15 hours of lectures per week.

Mandatory Assignments
It is mandatory to submit 3 individual assignments counting for 10%, 20% and 10% of the final grade.

Evaluation
4 hours individual written final examination that counts 60% of the final grade.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

After the completing the course students will get in-depth knowledge of main world oil and gas sources location (as a starting points in supply chain) and main destination points, world transport system, transport expenses in different regional of oil and gas markets. Students will also know managerial processes in frame of oil and gas supply chain, specific problems and solutions associated to the management of logistics activities and significant points like supply management of oil and gas depot, maritime ports depot, supply of refineries, distribution of products in relation to petroleum logistics, basics of calculation of capacities, transportation possibilities.

Content

The aim of the course is to study main logistics issues for crude oil exporting countries and their companies, and study specific items concerning the international flows of hydrocarbon raw materials and petroleum products. It covers points of origin of crude oil and petroleum products (mainly maritime ports and their characteristics), final points of destination (ports, refineries), pipeline systems in different regions in the world for crude oil, petroleum products and natural gas. The course describes and analyses three main oil and gas supply chain blocks – marine terminals, oil depot, and pipelines. Several forms of industrial companies are presented including vertical integrated oil companies and independent companies. The course deals with the world tanker fleet and conditions of transportation (freight, price formation, types of tankers and their use for different routes etc.), both for oil, petroleum products and liquefied natural gas. It considers logistics costs including transportation, storage, cargo transshipment, pumping etc. Several technological issues (characteristics of refineries, conditions of transportation of oil and petroleum products using tankers or via pipeline etc.) will be discussed from the logistics point of view.
The main topics of the course are:

- World resources of oil, gas and coal and their location, and their evaluation in terms of transport accessibility.
- Organizational form of oil and gas companies, vertically integrated oil and gas companies, independent oil and gas producers, service oil and gas companies;
- Means of delivering oil, oil products, and liquefied natural gas to the world markets.
- Infrastructure for transportation of hydrocarbons. Transportation and storage of oil, gas and petroleum products, and their place in petroleum supply chain. Characteristics of global network of maritime oil and liquefied natural gas transportation.
- Maritime terminals, their role as logistics centers. Operations at the independent offshore crude oil and petroleum product terminal for bunkering trade. Measurement and calculation of cargo (Gross Volume, Net Volume). Draft survey. Use of trade information systems for managing sales operations;
- Oil depot as an object of dispatch control, its operations divided into transshipment, distribution, and technological units. Main depot operations: receiving, storage, rental, metering and accounting. Operations management;
- Control of operating modes of trunk oil and petroleum products pipelines. Tasks dispatching services at various levels of management and the order of interaction between them. Technical documentation dispatchers. Procedure for acceptance of operations in the pipeline system. Record of the number and definition of quality of oil. System changes in the quantity and quality parameters of oil. Scheme of normal (technological) oil traffic.
- Main routes of oil and petroleum products supply. Problems of hydrocarbon flow transit. Overview of the major maritime routes, and the largest transport companies. Energy security and transport routes.

Literature

Oil and gas production handbook: An introduction to oil and gas production, transport, refining and petrochemical industry, ABB oil and Gas, 2013.
Burns, M.G., *Port Management and Operations*, CRC Press, 2014.
Valois, P. Tankers: *An Introduction to the Transportation of Oil by Sea*, Witherby, 1997.
Crude Oil Tanker Basics, Witherby, Seamanship International, 2009.
Mesner, T.O., Leffler, W. L., *Oil & Gas Pipelines in Nontechnical Language*, Penwell, 2006.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

GSU4 Energy Resources Trading on World Market

Course Code
GSU4

Course Name
Energy Resources Trading on World Market

Credits
2.00

Prerequisites

Equivalent to requirements for the MSc program in logistics

Semester
Spring

Location
Moscow

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
One week of intensive teaching (15 hours), including practical exercises, trading games and cases.

Mandatory Assignments
One mandatory assignment which counts 25% of the final grade.

Evaluation
2 hours individual written final examination counting 75% of the final grade.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

After the completing the course the student will get in-depth knowledge of oil and gas world trade.

Content

- Global and regional oil markets (structure of oil market: real, futures-trading, forward and derivatives markets; factors which influence the markets; demand, supply and prices and their collaborative engagement; participants of the global energy industry, regions, oil and gas trading flows, global petroleum trade centers)
- Characteristics of oil and petroleum products (benchmark oil), differentiation with respect to quality, crude oil trade, storage and blending (history of oil origins and world market of crude oil; oil benchmarks; units of measurement, API (American petroleum Institute); quality requirements in oil trading; crude oil trading - valuating commercial profit, netback pricing, procedures of contract)
- Oil refining (geography of global oil refining, volumes, technical specificity in different countries; refining capacities in the world, demand and supply of them; choosing of benchmarks and main processes of refining, quality requirements, quality optimization)
- Independent inspection and survey companies (main tasks and purposes of these companies in the global chain of oil industry; provided services on oil refineries, storages, rigs and transportation systems; methods and inspection procedures; leading world inspection and survey companies)
- Crude oil pricing (evolution Trading strategies and trade financing (principles and specifics of oil and oil products trading in global and regional markets, interregional trade operations; futures prices structure, spreads, contango and backwardation; "bulls and bears"; arbitrage and pricing)of the pricing system in crude oil markets, demand and supply as the main pricing factor; pricing models, price technical, quotations and indices, specificity of formula pricing; sources of price estimation, their methodology and work with them in real-time mode; pricing process according to absolute reference prices, use of Platts, Argus quotations, pricing manipulations)
- Forward and futures markets (history of the markets; main reasons and necessity of futures market development, terms for successful contracts; comparison of forward and futures contracts; overview of futures contracts on oil, gasoil and gasoline, EFP (exchange futures for physical), long and short terms)
- Exchange business (history of exchange business and its development; commodity exchanges; goals and functions of oil commodity exchange; leading world oil exchanges; use of derivative financial instruments, risk hedging, gambling)
- Price risks (interpretation of price risks, instruments of their control; risk hedging, gambling; price risks control in oil markets, including forwards, futures, swops and options; market of “CFD”; realization of risk management)
- Derivative financial instruments (introduction to derivative financial instruments; use of derivative financial instruments in risk analyses; swaps and swap-options; crude swaps, basis swaps, fixed and liquid swaps; CFD as a part of swaps; "call" and "put" options)

Literature

Jago, C., Bossley, L., *Trading Refining Oil Products. A Consilience Guide*, Consilience Energy Advisory Group Ltd, 2013.
Bossley, L., *Trading Crude Oil. A Consilience Guide*, Consilience Energy Advisory Group Ltd, 2013
Woenzel, S., *The Oil Traders' word(s)*, Author House Bloomington, 2012.
Katiukha, P., *Compendium*, 2015.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

GSU5 Basics of Oil and Gas Technology

Course Code
GSU5

Course Name
Basics of Oil and Gas Technology

Credits
2.00

Prerequisites

Basics of petroleum logistics

Semester
Spring

Location
Moscow

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
2 hours of lectures and seminars per week.

Mandatory Assignments
Weekly in-class assignments.

Evaluation
Final grade for the course consists of semester rating (60%) and final exam (40%). Semester rating is calculated as the sum of the results of weekly on-line assessments. Final exam is conducted in written form followed by an interview covering the key topics of the course.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

Upon completing the course, students should have achieved solid understanding of the main concepts and issues in the hydrocarbons oilfield development, in particular, the students should be able to:

- Explain the reservoir formation process
- Describe the main phases of the hydrocarbon reservoir development lifecycle (Upstream)
- Describe transportation and refinery processes and identify key issues (Downstream)
- Name the key methods of reservoir characterization
- Qualitatively describe reservoir and pipeline hydraulics laws and name the key parameters involved
- Discuss key issues of reservoir development, extraction and transportation along with approaches employed to handle them.

Content

The course provides basic coverage of the topics related to hydrocarbon field exploration, appraisal, development and production processes. It starts with a discussion of the modern view of hydrocarbon field formation followed by a review of reservoir development lifecycle and methods for reservoir characterization. Formal treatment of simple mathematical models (e.g. Darcy's and Forchheimer's laws) is given to emphasize key issues in hydrocarbons extraction and transportation. Hydrocarbon chemical composition and properties are discussed from the perspective of the refining process. Typical problems associated with reservoir management along their mathematical formulation and possible approaches are discussed. To further solidify understanding of the reservoir as a complex natural object, modern software tools used to create reservoir models and maintain them up-to-date are studied using Petrel seismic simulation software.

Literature

Jahn F., Cook M., and Graham M., *Hydrocarbon Exploration and Production, Aberdeen, Elsevier B.V., 2008.*

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

GSU6 Basic Principles of Shelf Field Development

Course Code
GSU6

Course Name
Basic Principles of Shelf Field Development

Credits
3.00

Prerequisites

Basis of Oil and Gas Technology

Semester
Spring

Location
Moscow

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
2 hours of lectures per week

Mandatory Assignments
There will be three home tasks (28%) and three written tests (15%), all of them are compulsory in order to pass the exam. Lesson attendance is also compulsory (17%).

Evaluation
1-hour individual written examination, counting 40% of the final grade with further oral discussion.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

After having completed the course, the candidate is supposed to:

- be able to choose the type of oil platform for the offshore field development;
- be able to describe all main features of each type of the offshore field development;
- understand the connection between the reservoir properties and types of wells and production platforms;
- understand the principles of treatment system design;
- be able to choose the method of hydrocarbon transportation taking into account the particularities of the offshore field;
- know how to make risk assessment for accident prevention.

Content

The course will mainly focus on the key aspects of the offshore development in modern conditions, as well as on the overview of some of key tasks that should be solved at different stages of the life cycle of the offshore field development. First lessons will be devoted to the description of the continental shelf itself, current state of the world and Russian shelf development. Main stages of the offshore field development will be discussed, facilities used on different stages of the field development will be described. Next point of discussion will be particularities of field arrangement including offshore drilling, design, construction and installation of production platform (mentioning the main features of the treatment system of the top side of the platform). In the end of the course main aspects of health safety and environment (HSE) during the offshore project implementation will be given as well as the most powerful accidents (as a consequences of non-observance of HSE aspects) will be observed.

Literature

Zolotukhin, A.B., Gudmestad, O.T., Jarlsby, E.T., *Resourses of oil and gas. Shelf field development, Southampton, Boston, WITpress, 2012.*

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

GSU7 Research Practice

Course Code
GSU7

Course Name
Research Practice

Credits
10.00

Prerequisites

Completion of the first semester of the Master's degree program.

Semester
Spring

Location
Moscow

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Research practice is a preparatory work for the master thesis and there will be no instructions or lectures given for this, but the students should work in close cooperation with their supervisors. Research practice includes the search of the potential topic for the master thesis, literature search, choice of research methodology and the written presentation of a literature review for the proposal for the master thesis to be defended in Semester 3. The research practice is an independent work done by a single student or two students together and supervised by two faculty advisors – one from Molde and one from Moscow. It is the duty of each student to obtain a supervisor at the latest in the start of Semester 2. The supervisor will usually also supervise the proposal and the master thesis. The supervision includes all aspects of this process like giving advice, reading drafts and so on.

Evaluation
Submission of the written literature review on the potential research topic is required.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

After finishing the research practice, the students will have gained a broader understanding of subject areas relevant to logistics and supply chain management. The research practice will provide theoretical capabilities that will help the students in the research process for the master thesis.

Content

A research practice is an independent, extensive work that is done under the guidance of an advisor/professor in the discipline. Not more than two students can work on the same topic. Candidates are relatively free to choose topics. A topic can be either applied, related to a company or an agency/governmental body, or it can be a theoretical investigation.
The research practice is about how to prepare research proposal, and is compulsory for all students.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IBE101 Web and Media

Course Code
IBE101

Course Name
Web and Media

Credits
7.50

Semester
Spring

Location
Molde

Language Instruction
Norwegian

Language Assignments and Evaluation
Norwegian

Instruction
2 hours lecture per week

Mandatory Assignments
Mandatory assignments.

Evaluation
Portfolio (The site developed during the course will serve as the portfolio)

Support materials for examination

Grades
Pass/fail

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IBE110 Information Technology

Course Code
IBE110

Course Name
Information Technology

Credits
7.50

Prerequisites

None. General knowledge about computers is an advantage.

Semester
Autumn

Location
Molde

Language Instruction
English / Norwegian

Language Assignments and Evaluation
English / Norwegian

Language Literature
English

Instruction
4 hour lecturing per week.

Mandatory Assignments
Mandatory exercises to be delivered within stated deadlines

Evaluation
4 hour written final exam

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

The candidate shall with completion of the course:

- Have a holistic understanding of information technology
- Understand the possibilities and limitations of the technology
- See where and how technology can be applied
- Could lead and manage the purchase of software and computer equipment and evaluate alternative solutions to build IT infrastructures.

Content

The course will cover technology (hardware, software, networks, Web), and it will provide an introduction to issues concerning user interfaces and systems development. Case examples will be a central part of the educational content. Cases will focus on current application areas. Web development will be an important component. Students will gain an understanding of new trends: social systems, systems based on cooperation and co-creation (eg. Wikipedia), indexing systems (eg. Google) and new technical solutions such as cloud computing.

Literature

Olsen, Kai A. (2012): *How Information Technology Is Conquering the World: Workplace, Private Life, and Society*. Scarecrow Press, desember 2012, Lanham, Maryland, Toronto, Oxford, ISBN 978-0-8108-8720-6.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IBE115 Networks and Server Management

Course Code
IBE115

Course Name
Networks and Server Management

Credits
7.50

Semester
Autumn to Spring

Location
Molde (spring) and Kristiansund (autumn)

Language Instruction
Norwegian

Language Assignments and Evaluation
Norwegian

Language Literature
English

Instruction
Lectures. Some parts of the course is offered as individual studies. Practical exercises take place in separate network labouratory.

Mandatory Assignments
Deliverables and partial examinations at certain dates.

Evaluation
Midsemester written 2 hr examination (1/3), project (1/3) and final written 2 hr examination (1/3). A partial examination has to be passed.

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IBE120 From business data to information

Course Code
IBE120

Course Name
From business data to information

Credits
7.50

Overlap the content of another course
IBE201: 5

Semester
Spring

Location
Molde and Kristiansund

Language Instruction
Norwegian

Language Assignments and Evaluation
Norwegian

Language Literature
Norwegian

Instruction
2 hours of lecture and 1 hours of laboratory with peer evaluation every other week

Mandatory Assignments
Mandatory Assignments

Evaluation
4-hour written final examination

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IBE151 Practical Programming

Course Code
IBE151

Course Name
Practical Programming

Credits
15.00

Overlap the content of another course
IBE150 Introduction to Programming (15 credits).

Semester
Autumn

Location
Molde

Language Instruction
Norwegian

Language Assignments and Evaluation
Norwegian

Language Literature
English

Instruction
6 hours lectures per week.

Mandatory Assignments
Exercises that must be handed in by a specified date.

Evaluation
6 hour written examination (100 %)

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

The student will get practical skills in programming for developing monolithic programs.

Content

Development of programs and logic, to understand variables and assignment, datatypes (numbers, strings, tables, hash, objects), typecasting, comparison of types, logical expressions (simple boolean algebra) and choice, repetitions (loops), modularization (procedures, functions, classes and methods; parameter transfer) and recursion. Simpler algorithms for sorting, merging and searching are described. Techniques in eventdriven processing are explained. Simple retrieval of data (from users, files and external sources), presentation of data (graphical, textual), and storage of text is covered. This course does not cover the development of larger software systems.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IBE201 Information Processing

Course Code
IBE201

Course Name
Information Processing

Credits
7.50

Overlap the content of another course

IBE200: 7,5
INF151: 2,5

Semester
Spring

Location
Molde and Kristiansund

Language Instruction
Norwegian

Language Assignments and Evaluation
Norwegian

Language Literature
Norwegian

Instruction
2 hours of lecture and 1 hours of laboratory with peer evaluation every other week

Mandatory Assignments
Mandatory Assignments

Evaluation
4-hour written final examination

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IBE430 Business processes

Course Code
IBE430

Course Name
Business processes

Credits
7.50

Semester
Høst

Location
Molde

Language Instruction
Norwegian

Language Assignments and Evaluation
Norwegian

Language Literature
English and Norwegian

Instruction
3 hour lectures per week and practice exercises.

Mandatory Assignments
Compulsory exercises that must be handed in by specified dates.

Evaluation
4 hour written examination

Support materials for examination

Special support materials
None

Grades
Letter (A - F)

Letter

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IBE700 Enterprise Resource Planning (ERP) with SAP

Course Code
IBE700

Course Name
Enterprise Resource Planning (ERP) with SAP

Credits
7.50

Prerequisites

This course is open for master students in logistics only. The maximum number of participants is 25.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Instruction
3 hours of lectures and guided exercises per week. Some weeks will be planned for more intensive hands-on training.

Mandatory Assignments
Presence in 80 % of the lectures is required. All exercises are mandatory.

Evaluation
A 3-hour written final individual examination counts 60% of the grade, and 2 written assignments that counts 20% each. Both assignments have to be delivered in full within a given deadline in order to be allowed to complete the final written exam.

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

After successfully completing this class, students should:

- Have practical skills in operation of the SAP ERP-system modules; Material Management, Sales and Distribution, Production Planning and Financial Accounting
- Have theoretical knowledge of; business processes, business process modeling and the history and evolution of ERP systems
- Have an understanding of how ERP- systems support and automate business processes

Content

The development of ERP-systems over the last decades has been one of the key advancements in organizations' use of information technology. An ERP-system supports and automates business processes across functional areas by integrating the organization's functional areas, and sharing information across the organization in real time. This course is a practical hands-on course to get an introduction to how business processes are executed with the support of an ERP system. Students will use a commercially available ERP-system (SAP) to build an understanding of the functional capabilities of such systems. Students will participate in two role plays. One address the operation of a global supply chain spanning several companies, while the other role play address the issue of how an enterprise selects an ERP system.

Literature

Simha R. Magal, Jeffrey Word, Wiley, *Integrated Business Processes with ERP Systems.*

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IBE720 Enterprise Systems

Course Code
IBE720

Course Name
Enterprise Systems

Credits
7.50

Semester
Autumn

Cancelled autumn 2015, first time hopefully autumn 2016.

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Instruction
x timer forelesning per uke.

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Grades

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDA710 Business processes and information modelling

Course Code
IDA710

Course Name
Business processes and information modelling

Credits
7.50

Prerequisites

Equivalent to requirements for the MSc programme in Logistics.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
2 hours of lectures per, plus mandatory exercises. There will also be group-work with assignments and self-study activities, which may comprise elements of the exam curricula, even if participation is not compulsory. Students who do not participate in the activities are themselves responsible to acquire equivalent material and lessons learned.

Mandatory Assignments
2 mandatory assignments will be given, both of which have to be passed in order to be able to receive a grade for the course. Exercises have to be handed in by specified deadlines, after which hand-in is void and the exercise will not count as passed regardless. Exercises need to be carried out in the same semester as the examination.

Evaluation
4-hour written individual examination (100 %).

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

Upon completing this course students will know what is meant by information systems-related *governance* principles and strategic alignment of pertaining technology. They need to recognize the organizational *stakeholders, options and solution spaces* for relevant use contexts, i.e., work and leisure-based for which Information- and Communication technology (ICT) may make a difference. We want students to understand and become able to operationalize ICT in *innovation* processes, as supporting technology as well as the catalyst of disruptive change in the marketplace. It is an important outcome to learn how the development of ICT is a *social as well as technical enterprise*, for which requirements' specifications, modelling and deployment needs to be seen as an integral and recursive part. Students have to learn to recognize the fundamental differences between various *development methods* and appreciate their strengths and weaknesses for different purposes. Students are expected to be able manage processes of business development with ICT systematically and in a well-documented way, which lends itself to continuous improvement throughout. Students will get an understanding of the role and importance of information systems in value chains, how to critically apply information systems to optimize and innovate processes in business scenarios, understanding implications and trade-offs.

Content

The course covers various process perspectives, presenting the most important process models to address on a a conceptual level the debate between prescriptive and agile development philosophies. It presents analysis and design methods with an emphasis on object-oriented techniques and UML modeling. Pattern-based approaches and Web-design are also considered. A central Quality Management module presents concepts, procedures, techniques, and methods that enable a team to assess development quality, review engineering work products, conduct improvement procedures and apply effective testing. Managing innovation in development and modelling projects will be addressed under a set of real economical umbrella terms, such as financial ambition, program funding, ideology and good governance, systematic evaluation and evolution of ideas and market deployment. Even more advanced topics will be addressed using cutting-edge research articles, which the students themselves contribute to present and discuss in the lectures. Generally, the content is going to be presented as interactively as possible and lively participation in exercises and arguments are expected.

Literature

Roger S Pressman. *Software Engineering: A Practitioner's Approach*, 7/e, McGraw-Hill, ISBN: 0073375977.

Selected articles.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDA715 Discrete Event Simulation

Course Code
IDA715

Course Name
Discrete Event Simulation

Credits
7.50

Prerequisites
Basic statistics

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week.

Mandatory Assignments
Submitted at specified times.

Evaluation
4-hour written final examination (100 %).

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

The candidate will know how to use discrete event simulation for studying the performance of a distribution system.

Content

Discrete events (random, deterministic), event scheduling and handling. Queues, queue scheduling and queueing networks. Input analysis/calibration (source arrivals, node service/failures, branching). Output analysis, performance metrics (response time, throughput, utilization). Flow management (classification, delay, storage/hold, routing). Requirements analysis and model design. Implementation using simulation software. Model verification and validation. Transient removal, stopping criteria, replications. Simulation as a tool in optimization (experimental design, comparing alternatives). Logistics case studies (transportation, supply chains, hospitals, manufacturing).

Literature

Manuel D. Rossetti, Simulation modeling and Arena, Wiley, 2010

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- **Informatics**
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDA725 Project Management

Course Code
IDA725

Course Name
Project Management

Credits
7.50

Prerequisites

Equivalent to the requirements for acceptance to the MSc in Logistics programme. Experience in the use of IT-based tools and some proficiency in statistics.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Instruction
2 hours of lecture per week, plus mandatory exercises. There will also be group-work with assignments and self-study activities, which may comprise elements of the exam curricula, even if participation is not compulsory. Students who do not participate in the activities are themselves responsible to acquire equivalent material and lessons learned.

Mandatory Assignments
2 mandatory assignments will be given, both of which have to be passed in order to be able to receive a grade for the course. Exercises have to be handed in by specified deadlines, after which hand-in is void and the exercise will not count as passed regardless. Exercises need to be carried out in the same semester as the examination.

Evaluation
4-hour written individual examination (100 %).

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

After having completed the course, the candidate should:

- Have a deep understanding of project work. We aim to teach the basic understanding of the project working model applied analytically as well as proactively to a wide range of situations. This also entails a comprehensive understanding of the challenges and corresponding success factors for project execution.
- Have a broad knowledge of methods and techniques to plan and conduct large projects, based on a systematic and evidence-based approach.
- Have a thorough understanding of the tools, methods, and processes for project planning and control, especially to analyze and evaluate project status based on progress information.
- Be able to analyze risk elements in projects and suggest how to deal with them. It will be necessary to be able to create an overview of different stakeholders' interests and responsibility in projects.

Content

The course will include the following topics:

- Identifying and organizing a project, governance and financing: Project initiation related to the organizational context: strategy, goal, and objectives.
- Managing project teams. The role of a project manager.
- Models for project organizing, pitfalls and conditions for success, the role of the project manager.
- Tools and techniques for identification, planning and budgeting. Estimating and controlling costs whilst dealing with project uncertainties.
- Resource planning, work breakdown structure and scheduling.
- Project risk management. Defining critical path and timelines
- Progress metrics and follow-up: Project control, progress reporting and evaluation: The *earned value method*.
- Quality control, documentation and change control management. Project termination and audit.

Literature

Pinto, Jeffery K. *Project Management, Achieving Competitive Advantage Global Edition: Pearson College*. Pearson Higher Ed, 2013. ISBN-13: 978-0-273-76742-8

Selected articles.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR200 Training Theory I

Course Code
IDR200

Course Name
Training Theory I

Credits
7.50

Semester
Autumn

Location
Molde

Language Instruction
Norwegian

Instruction
Three 2-day seminars of intensive lectures

Mandatory Assignments
Group assignments and individual examination

Evaluation
5-hour written examination counts 60% of the final grade and group assignments count 40%

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR210 Adventure Management

Course Code
IDR210

Course Name
Adventure Management

Credits
7.50

Prerequisites
Same as for the Bachelor in Sport Management programme

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
2-3 hours per week, with some full day seminars.

Evaluation
Coursework (75%), oral presentation (25%).

Support materials for examination

Grades
Letter (A - F)

Learning outcome
Students should:

- know the basics in adventure planning and operations management
- know the basics concerning entrepreneurship and innovation within the adventure industry
- know the role of adventure marketing and market research, and be able to do a market analysis
- Understand key elements of the adventure experience and how they can be managed
- understand how to manage physical and natural resources for adventure
- be able to identify trends and issues that are likely to influence the adventure industry of the future.

Content
This course investigates key principles and practices involved in the management of commercial outdoor tourism, sport and recreation that includes a significant element of excitement. The course begins by introducing the market for adventure and the size and scope of the adventure industry. The main focus of the course is then on how adventure is managed. For instance, entrepreneurship and strategic approaches to adventure, adventure planning and operations management, marketing management and the role of market research in adventure, managing the adventure experience, and the management of physical and natural resources for adventure. The course also considers trends and issues that are likely to influence the adventure industry of the future.

Literature:

Tittel	Forfatter	Forlag	Årsstall	ISBN	Type
Adventure Tourism: Meanings, Experience and Learning	Steve Taylor, Peter Varley, Tony Johnston (eds.)	Routledge	2013	978-0-415-52483-4.	Book
Adventure Tourism Management	Ralf Buckley	Routledge	2009	9781856178341	Book
Adventure Tourism: The New Frontier	John Swarbrooke, Colin Beard, Suzanne Leckie & Gill Pomfret	Taylor & Francis	2003	9780750651868	Bok
Sport and Adventure Tourism	Simon Hudson	Routledge	2002	978-0789012753	Book

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR300 Training Theory II

Course Code
IDR300

Course Name
Training Theory II

Credits
7.50

Semester
Spring

Location
Molde

Language Instruction
Norwegian

Instruction
Seminars

Mandatory Assignments
Practical introduction to testing and performance analysis

Evaluation
6-hour written examination

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR301 Performance Psychology II

Course Code
IDR301

Course Name
Performance Psychology II

Credits
7.50

Semester
Autumn

Location
Molde

Language Instruction
Norwegian

Instruction
Four hours per week

Mandatory Assignments
Group work and self-study

Evaluation
6-hour written examination

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR302 Leadership in Performance Organizations

Course Code
IDR302

Course Name
Leadership in Performance Organizations

Credits
7.50

Prerequisites

ADM100 Organization and Management

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
5-seminar sessions (each 5 days) during the semester consisting of lectures, group work, group assignments, and group presentations.

Mandatory Assignments
4-5 group assignments

Evaluation
4-5 group assignments form the basis for the final grade.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

After the completion of the course, the students will acquire in-depth understanding in:

- Sport psychology
- Team leadership strategies
- Team development
- Teamwork
- Performance Cultures
- Talent identification and development

After the completion of the course, the students will acquire skills in:

- Explaining terminology and theoretical approaches within sport psychology
- Work with real cases and presenting them
- Leadership
- Working in groups
- Talent development

Content

- Team leadership
- Talent development
- Sport psychology
- Performance leadership
- Performance management

Content

Collins, D. et al. (2011): Performance Psychology. Churchill Livingstone Elsevier

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR303 International Business of Sport

Course Code
IDR303

Course Name
International Business of Sport

Credits
7.50

Semester
Autumn

Location
Molde

Language Instruction
English|

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Lectures and seminars. The course builds on team and individual projects that aim at synthesizing knowledge and understanding.

Mandatory Assignments
Mandatory team assignment(s) during the course, where everybody is expected to participate. The team work's final presentation has to be presented in class. Students receiving a "Fail" on the team assignment(s) are not eligible to take the final course exam.
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Evaluation
Individual take home exam (final course exam, 60%) and team task(s) (40%)

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

Upon completion of the course the student will be able to:

- Understand the global significance and the distinctive nature of the international business of sport;
- Evaluate industry structure, corporate strategy and value creation in the sports and sports-related industries;
- Identify factors affecting modes of international operation in the sports industry;
- Analyse the major causes of cultural differences and change;
- Explain the ideas of global integration and local responsiveness;
- Grasp why international collaborative arrangements succeed or fail;
- Illustrate the different ways how sport businesses can accomplish their global objectives;
- Apply and communicate this understanding to real cases and problems using appropriate international business theories.

Content

In this course on the international business of sport students will explore:

- The forces driving globalization, international business and sport;
- The cultural environments facing business;
- Types of strategy and the organization of international business;
- Approaches to value creation: global integration versus local responsiveness;
- Strategic positioning and branding;
- Managing international collaborations;
- International human resources management;
- Research tools in international business research and analysis.

Literature

Lectures are generally accompanied by PowerPoint slides, textbook chapters and required readings. Main readings are from the following course books:

- Daniels, J.D., Radebaugh, L.H. and Sullivan, D.P. (2013) International Business. Environments and Markets, 14th ed., Harlow: Pearsons
- Söderman, S. and Dolles, H. (2013), Handbook of Research on Sport and Business, Cheltenham: Edward Elgar

Additional readings are provided when appropriate.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR305 Sports Economics

Course Code
IDR305

Course Name
Sports Economics

Credits
7.50

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
See class schedule

Evaluation
4-hour written examination

Support materials for examination

Grades
Letter (A - F)

Literature:

Tittel	Forfatter	Forlag	Årsstall	ISBN	Type
Sports Economics	Port, Rodney	Prentice Hall	2003		Book
Tippeligaen 1999. Økonomiske nøkkeltall.	Hervik, Ohr og Solum				Book

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR306 Game Theory and Sports Economics

Course Code
IDR306

Course Name
Game Theory and Sports Economics

Credits
7.50

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
See class schedule

Evaluation
Oral Examination

Support materials for examination

Grades
Letter (A - F)

Literature:

Tittel	Forfatter	Forlag	Årsstall	ISBN	Type
Always change a wining team. Atext on soccer and game theory.	Haugen, Kjetil K.				Book
Thinking Strategically	A.K. Dixit og B. J. Nalebuff				Book

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR501 The Organisation of Sport II

Course Code
IDR501

Course Name
The Organisation of Sport II

Credits
7.50

Prerequisites

IDR100 The Organisation of Sport I, ADM100 Organisasjon I and either ADM201 Innføring i samfunnsvitenskapelig metode or ADM205 Organisasjon II, or similar courses.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Cf. Course schedule

Mandatory Assignments
One mandatory assignment counting 40% of total grade

Evaluation
Home exam (60% of grade)
One mandatory assignment (40% of grade)

Support materials for examination

Grades
Letter (A - F)

Learning outcome

Upon completion of the course students should be able to:

- explain organization-sociological perspectives on the specificity of sport and sport's relationships and interaction with other organizations in society
- analyze sports organizations from the perspective of organization theory

Content

- Sport as a social institution
- The relationship between sport, market and the state
- Change processes in the organizations of sport
- Leadership in sport
- The transnationalization of sport

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR600 Project

Course Code
IDR600

Course Name
Project

Credits
15.00

Semester
Spring

Location
Molde

Language Instruction
Norwegian

Instruction
Individual supervision

Evaluation
Written project report

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR705 Team Sport History

Course Code
IDR705

Course Name
Team Sport History

Credits
7.50

Prerequisites
Same as for the MSc programme in Team Sport Management

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Seminar. Consisting of classroom teaching (36h), working in groups and individual work.

Evaluation
Home exam

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Grades
Letter (A - F)

Learning outcome

Knowledge

Completing this course the students should:

- know the origin, development and diffusion of major team sports
- know how national and international sport organizations were established, and how policy and power influenced on the development of these organizations.
- know how to apply gender-, identity- and culture theories in analyzing the cultural relevance of team sports in different European contexts.

Skills

Completing this course the students should:

- be abel to acquire knowledge of the history of major team sports such as soccer, rugby, basketball, ice hockey, handball and volleyball.
- be able to do analytical work of a historical phenomenon, both individually and as part of a group.
- be abel to present an historical analysis, both in writing and oral, in an theoretically informed manner.

General qualifications

Completing this course the students should:

- be abel to work independently analysing a historical problem
- be abel to discuss historically phenomenon orally in a group session
- recognize the qualities and the relevance of historical knowledge as part of understanding cultural expressions like sport of today.

Content

o The origin and invention of major team sports
o Migration and diffusion of team sports
o Regulation of team sports
o Team sport and gender relations
o Team sport and politics
o Team sport and identity
o The emergence of national and international organizations

Literature

Recomended literature:

Collins, Tony (2009), *A Social History of English Rugby Union.* London: Routledge

Lanfranchi, Pierre (2004), *100 years of football: the FIFA centennial book*. London: Weidenfeld & Nicolson

Lanfranchi, Pierre og Matthew Taylor (2001), *Moving with the ball: The migration of professional footballers*. Oxford : Berg

Updated reading lists will be presented when starting the course.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR710 Philosophy of Science and Research Methods

Course Code
IDR710

Course Name
Philosophy of Science and Research Methods

Credits
7.50

Overlap the content of another course
ADM712 Samfunnsvitenskapelige grunnlagsproblemer og metode (in Norwegian)

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
6 seminars, each of one day duration.

Evaluation
Take home exam (60%) and team task (40%).

Support materials for examination
Separate list, see below

Special support materials
Dictionary in native language/norwegian/english in paper format.

Grades
Letter (A - F)

Learning outcome

The course will give students an introduction to research methods and theories based on different philosophical streams of scientific enquiry. This includes the debate on scientific research versus applied, practical research, further the discussion of inductive vs. deductive research, framework- vs. model-based approaches, the selection of research methods and strategies for data gathering as well as data analysis. The course will emphasize the basic requirements for writing a master's thesis and support the students in this endeavor.

Content

The course will cover the following topics:

- Defining a research problem and designing the research project

- Steps in conducting a literature review

- Scientific research and practical/applied research

- Approaches to scientific enquiry within economics and social sciences, and the assumptions

underlying these theories and methods.

- Theories on scientific enquiry and the selection of appropriate research methods

- Strategies for data gathering in field research

- Analysing empirical material

Literature

Recommended readings:

Godfrey-Smith, Peter 2003. Theory and Reality. An Introduction to the Philosophy of Science, Chicago, ILL: University of Chicago Press.

Leedy, Paul D. & Ormrod, Jeanne E. 2012. Practical Research. Planning and Design, 10th ed., Boston: Pearson.

Söderman, Sten & Dolles, Harald. 2013. Handbook of Research on Sport and Business, Cheltenham: Edward Elgar

Veal, A.J. & Darcy, Simon. 2014. Research Methods in Sport Studies and Sport Management. A Practical Guide. Milton Park, Abingdon: Routledge.

Literature:

Tittel	Forfatter	Forlag	Årsstall	ISBN	Type
Practical Research Planning and Design	Leedy, P.D. and Ormrod, J.E.	Pearson Education International	2010 (9th ed.)		Bok
Theory and Reality An introduction to the philosophy of science	Godfrey-Smith, Peter	The University of Chicago Press	2003		Bok

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR720 Introduction to Sport and Event Economics

Course Code
IDR720

Course Name
Introduction to Sport and Event Economics

Credits
7.50

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Seminar

Evaluation
4 hours final written exam counts for 100% of grade.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

After completing the course the student will
- understand the microeconomic issues related to team sports and the hosting of major events.
- be able to analyze the factors and mechanisms that influence the size and the distribution of the revenues and costs from events.

Content

- Supply and demand
- Consumer behavior
- Production
- The cost of production
- Market theory
- Price strategies
- Game theory
- Externalities and public goods

Literature

Wladimir Andreff & Stefan Szymanski (Ed.). 2006.*Handbook on the economics of sport.* Cheltenham, Glos, Edward Elgar Publishing Ltd.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR725 Team Sport Economics

Course Code
IDR725

Course Name
Team Sport Economics

Credits
7.50

Prerequisites
IDR720 (or equivalent)

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Seminar

Mandatory Assignments
Students are required to write essays on assigned topics during the course.

Evaluation
The submitted mandatory essays are counting 60 % of the final grade and a 4 hours written exam counting 40 %.

Support materials for examination
All printed and written supporting material

Grades
Letter (A - F)

Learning outcome

After completion of the course, the student will:

- Understand the essentials in the market behavior of producers and consumers operating in general markets
- Understand the principles and rationale behind the regulations of markets
- Be able to analyze the factors and mechanisms that influence the economics of teams and sport governing bodies

Content

- Market power and price strategies
- Game theory
- Principal agent theory
- Demand analysis
- The economics of the public sector
- Analyzes of the market behavior of teams and sport governing bodies

Literature

- Pindyck, R. & Rubinfeld, D. (2012). *Microeconomics. Pearson Education.*
- Gratton, C. & Solberg, H.A (2007).- Pindyck, R. & Rubinfeld, D. (2012).
- Articles

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR803 Seminars in Football Management

Course Code
IDR803

Course Name
Seminars in Football Management

Credits
15.00

Prerequisites

Completion of the first year of the MSc in Sport Management

Semester
Autumn

First time autumn 2015.

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
5 seminars (3 ECTS each) given by invited guest lectures. Duration 1 week with lectures (25 h), working in groups and individual work.

Mandatory Assignments
Each seminar will include lectures, assignments, group work and discussions but the format may vary from seminar to seminar as they are given by different scholars from around the sport academic and practical world.

Evaluation
Attendance to all seminars is compulsory. The method of evaluation may vary from seminar to seminar but assignments and some home exams must be expected and there will be at least one large home exam (2 weeks) requiring a written assignment of 5-6000 words.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

To introduce the students to a scientific approach to up-to-date issues in team sport management. When going in depth, seminars will also train the students on how to approach narrow topics analytically. When being broad, the seminars will broaden the understanding of the students. Seminar topics will be based on academic fields such as sport law, sport psychology, the management of sport organizations, the sociology of sport, the ethics of sport and sport & media, etc.

Content

Seminar topics for the “Managing Football” specialization could include: the governance of European football; sports and subsidies - the role of sports organizations and regulators; talent-management in football and models for development of home-grown players; facility and arena management; player contract negotiations and player logistics; treatment of compensation, punishment, doping issues etc., including the legal perspective; team sport and the sociology of law; teams sports in an international perspective; psychological organizational effects of winning and loosing; industrial relations in professional team sports; corporate social responsibility and community relations of professional sport clubs.

Topics may vary, but topics for the seminars will be avaliable at the end of second term, or at the latest when starting the third term.

Literature

Depending on the specific seminar. About 4-600 pages per seminar. The reading list, literature and program for the specific seminar will be given in advance.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR804 Seminars in Marketing, media and sponsorship

Course Code
IDR804

Course Name
Seminars in Marketing, media and sponsorship

Credits
15.00

Semester
Autumn

First time autumn 2015.

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Consists of 5 different seminars of 3 ECTS each.

Evaluation
Attendance to all seminars is compulsory.

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR805 Sport and Event Marketing

Course Code
IDR805

Course Name
Sport and Event Marketing

Credits
7.50

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Lectures and seminars (36 hours in total). The course builds on team and individual projects that aim at synthesizing knowledge and understanding

Mandatory Assignments
Mandatory team assignment(s) during the course. The team work's progress and results is to be presented in class. A "pass" on the team assignment(s) is needed in order to write the take home exam.

Evaluation
Individual take-home exam, 2 weeks.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

Upon completion of the course the student will be able to:

- Understand the distinctive nature and significance of sports and event marketing
- Analyse the scope and potential of sports and event marketing
- Marketing in for-profit and not-for-profit sport organisations
- Evaluate relevant theoretical concepts, frameworks, and models related to sports and event marketing / sponsorship
- Segmentation, targeting and positioning in sports
- Apply and communicate this understanding to real cases and problems using appropriate tools such as market research and analyses
- Provide the benefits desired by sports fans and event consumers to create service innovation and customer value

Content

- Understanding the international sport marketing environment
- Concepts of sports and event marketing and marketing mix
- Sport and event consumer buying behaviour
- Sport organizations buying behaviour
- Strategic positioning and branding
- Value co-creation and service innovation in sports and for events
- Developing and extending sports brands
- Strategic sports and event sponsorship
- Social media and sports/event marketing
- Research tools in sport marketing research and analysis

Literature

A complete and updated reading list will be presented when starting the course.

Beech, John and Chadwick, Simon 2007: The Marketing of Sport. Harlow: Prentice Hall & Pearson Education

Söderman, Sten and Dolles, Harald (eds.) 2012: Handbook of Research on Sport and Business. Cheltenham: Edward Elgar

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR910 Internship

Course Code
IDR910

Course Name
Internship

Credits
15.00

Prerequisites

Completed first year of Master programme.

Semester
Autumn

Location
Clubs in different parts of Norway

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Overall, a workload of about 500 hours distributed over a period from June to December. It is expected that the student will work for 400 hours (approx. 10 weeks) as an intern in the sport industry, whereas the submission of mandatory work requirements to HiMolde counts for the rest. Students should follow the usual working hours for the firm or organization they are deployed in, but this might depend upon the firm or organization and more or less work should be clarified with the firm or organization as well as HiMolde in good time.

Mandatory Assignments
The student must submit different work requirements during the internship, including reports and a final assignment. The final assessment on the course will be either pass (thus having achieved the required learning outcome) or fail and this will be a joint decision by both supervisors.

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Grades
Pass/fail

Learning outcome

At the end of the internship students will...:

- have increased their ability to relate academic theory to the work environment;
- have developed identified work related skills;
- be able to critically evaluate their learning from the internship;
- have carried out, evaluated and reported on at least one work project;
- have enhanced their career knowledge.

Content

Student should gain relevant work experience and insider knowledge how the sports industry or institutions in sport operate. Working in a 'professional' environment will also raise the academic and personal potential of the student. This experience will take her or him from the world of a student to that of a young professional in preparation for her or his career pathway.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- **Sport**
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

IDR950 Master`s Degree Thesis

Course Code
IDR950

Course Name
Master`s Degree Thesis

Credits
30.00

Prerequisites

ADM710 (or ADM712) and IDR802
Only those students who are enrolled in the MSc programme in Team Sport Management can write a thesis. In addition, each candidate must have an approved proposal that has been prepared related to one of the seminars of IDR803.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Instruction
Supervision according to agreement. The master's thesis is an independent work done by a single student or two students together

Mandatory Assignments
A proposal of research project during second semester. Must be

Evaluation
Submission of the written thesis and an oral thesis defense are required. The final grade is a combination of grades received on the thesis and the oral presentation. Only one final grade will be presented to the student.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

The most important objective is to achieve training in independent project work with a strong professional basis.Students should employ methods and knowledge that has been learned in their courses, and show that they can use these in the explanation and solution of problems in team sport management.

Content

A thesis is an independent, extensive work that is done under the guidance of an supervisor/ professor in the discipline. Not more than two students can work on the same thesis.
Candidates are relatively free to choose topics, but as a norm they should be affiliated with a sport club or association or another organisation working with sport and do their thesis within this context. A thesis can also be applied, related to a company/club or an agency/governmental body. In exceptional cases it can be a theoretical investigation/ approach.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- **Administration and Organization**
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

JUR710 Contract Law

Course Code
JUR710

Course Name
Contract Law

Credits
7.50

Prerequisites

As for the master programs in logistics.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week.

Mandatory Assignments
Two home assignment, whereof one must be passed before examination.

Evaluation
4 hours Individual written exam. One (of two) home assignment must be passed as a prerequisite for taking the exam.

Support materials for examination
Separate list, see below

Special support materials
Printet version of UNIDROIT Principles of International Commercial Contracts without comments and general dictionary in mother tongue/Norwegian/English in paper version.

Grades
Letter (A - F)

Learning outcome

After completing the course the student will have

- knowledge of key contractual terms
- knowledge of fundamental principles of International Commerce Law, especially Service Level Agreements
- basic negotiation skills with regard to complex commercial contracts and understandings of dispute resolution

Content

- Choice of Law and Lex Mercatoria
- UNIDROIT Principles of Commercial Contracts
- Contract negotiation
- Dispute resolution
- Service Level Agreements

Literature

UNIDROIT Principles of Commercial Contracts 2010

Roger Fisher & William Ury: Getting to yes

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG206 e-Business

Course Code
LOG206

Course Name
e-Business

Credits
7.50

Prerequisites
None

Semester
Spring

Location
Molde

Language Instruction
English

Instruction
4 hours of lecture per week.

Mandatory Assignments
Compulsory exercises within given deadlines.

Evaluation
4-hour written final examination.

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Special support materials
None

Grades
Letter (A - F)

Learning outcome

The course will give an overview of the incentives and opportunities resulting from the development of e-business. Furthermore, there will be a discussion of relevant economic concepts, the character of organizations, participation in this new market place and use of information technology, which has caused a transition from traditional to electronic for the purpose of creating larger and faster increases in the value chain.

The successful candidate shall with fulfillment of this course:

- Have knowledge in the subject area
- Can evaluate the appropriateness and application of various methods in the use of ICT in an e-Business project
- Can make their own or evaluate a strategic plan for the use of ICT in business

Content

The course covers the transition from traditional to electron business. The following concepts are discussed:

- Incentives and problems in e-business
- Transition strategies for e-business
- Legal rights and problems and technical standards for cooperation
- Trade and trade channels: buyer, seller, distributors, competitors, network economics, lock-in
- New business structures: within companies, between companies, virtual business, models for trade between companies (B2B) and between companies and customers (B2C)
- Customer relations management (CRM)
- Supply chain management (SCM)
- Electronic document exchange
- Electronic payment, security
- Network infrastructure and internet technologies for e-business
- Pricing policies pricing of services
- Planning e-business to generate value increases

A required project must be handed in. The groups can consist of 1-2 students. The groups will be give a list of topics to choice from – only one topic per group. At least one person from each group will present the project. Projects may be reviewed by peer-review.

Literature

Turban et al, 2012. *Electronic Commerce 2012 - a Managerial and Social Networks Perspective*. 7th ed. Pearson Global Editions

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG500 Management Models and Operations Research

Course Code
LOG500

Course Name
Management Models and Operations Research

Credits
7.50

Prerequisites

Students must have passing grades in a 2-year Economics-Administration curriculum or equivalent and SCM200 or equivalent. It will be advisable to be able to use a spreadsheet in order to solve exercises and the assignments.

Semester
Autumn

Location
Molde and Kristiansund

Language Instruction
Usually English

Language Assignments and Evaluation
Norwegian and English

Language Literature
English

Instruction
3 hours of lectures per week

Mandatory Assignments
One mandatory assignments (pass / fail) in addition to the two mandatory assignments which is included in the final grade.

Evaluation
5-hour written final examination, counting 80%. Two mandatory assignments, counting 10% each.

Support materials for examination
All printed and written supporting material + calculator that may contain data

Grades
Letter (A - F)

Learning outcome

The course aims to describe simple models for different parts of the value chain for a manufacturing company. After completing the course, the candidate should have knowledge about and be able to use models for:

- Forecasting
- Aggregated planning
- Inventory and production management with deterministic and stochastic demand.
- Lot sizing
- Operations scheduling

Content

The course is a continuation of topics treated in SCM200. Models for managing the individual links in the value chain will be emphasized. The course will focus on problems in forecasting, distribution, inventory and production. Within production, major production planning and the management principles from MRP I (Material Requirements Planning) will be treated. Within aggregated production planning, the simplest situations are treated. In this connection, simple methods and tools from operation analysis are used. Within inventory management, the course treats deterministic models for families of goods, limitation of resources, discounts and some stochastic inventory models. Further, lot-sizing is discussed as a single topic, forecasting with simple models and some cases of scheduling. Several quantitative models for the topics mentioned will be presented and used explicit in formulation and solving actual problems.

Literature

Nahmias, Steven. 2009. *Production and Operations Analysis*. 6th edition. McGraw Hill

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG501 Management Models in Logistics 1

Course Code
LOG501

Course Name
Management Models in Logistics 1

Credits
15.00

Semester
Autumn

Location
Ålesund

Language Instruction
Norwegian in Ålesund, usually English in Molde.

Instruction
6 hours of lectures per week

Mandatory Assignments
Two assignments must be submitted, each counts 10%.

Evaluation
5-hour written final examination, counting 80%.

Support materials for examination

Grades
Letter (A - F)

Literature:

Tittel	Forfatter	Forlag	Årsstall	ISBN	Type
Production and Operations Analysis	Nahmias, Steven	McGraw Hill			Book

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG505 Purchase Management

Course Code
LOG505

Course Name
Purchase Management

Credits
7.50

Semester
Spring

Location
Molde, Kristiansund, Ålesund

Language Instruction
Norwegian

Instruction
A combination of appropriately 30 hours of ordinary lectures and daily seminars.

Mandatory Assignments
See syllabus

Evaluation
4-hour written final examination.

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG510 Value Chain Analysis

Course Code
LOG510

Course Name
Value Chain Analysis

Credits
7.50

Semester
Autumn

Location
Kristiansund, Molde

Language Instruction
Norwegian

Instruction
Intensive 6 weeks from the beginning of the semester.Oridnary weekly lectures in Ålesund and Kristiansund.

Mandatory Assignments
See syllabus

Evaluation
4-hour written examination after the teaching phase is complete.

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG530 Distribution Planning

Course Code
LOG530

Course Name
Distribution Planning

Credits
7.50

Semester
Spring

Location
Molde, Kristiansund

Language Instruction
Norwegian

Instruction
3 hours of lectures per week.

Mandatory Assignments
Exercises

Evaluation
Evaluation methods will be decided when the course starts. Compulsory assignments may be used. There will be a 6 hour written final examination using computers.

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG610 International Logistics

Course Code
LOG610

Course Name
International Logistics

Credits
15.00

Prerequisites

The students should have passed introductory courses in business and economics. Some knowledge of basic logistics is an advantage

Semester
Spring

Location
Classroom teaching in Molde and shown as videorecorded lessons for students in Ålesund.

Language Instruction
English

Language Assignments and Evaluation
Norwegian and English (for those not writing in Norwegian).

Language Literature
English

Instruction
An average of 3 hours per lecture or approximately 12 x 3 hours lectures

Mandatory Assignments
See assessment methods

Evaluation
4 hour written examination counts 70 %. The mandatory assignment counts 30 %. The final grade is calculated as a weighted sum of the grades given, and both the assignment and the written examination have to be passed to complete the course.

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

At the end of the course, students should have a better knowledge of important topics in the management of international logistics. They will be familiar with the different elements within international logistics like customers service, inventory management, transport systems like 3pl and 4pl, warehousing, material handling, packing, logistics information and not least purchasing, inbound logistics and packing where improvements will end up as a high-quality global logistics system. In addition students should know how logistic performance can be improved so companies can operate and survive in global markets by making logistic systems more efficient. An extra element is specific logistics subjects like organizing humanitarian and relief logistics and cooperation in production across borders to produce aircraft. In this way students should get a relevant background to work with and design logistics strategic decisions and to operate in an environment handling international and global logistics systems.

Content

The course covers topics: Porter's value chain, a logistics system model and the mix of logistics, effects of transport deregulation on logistics, principles of warehouse layout design, LIS and the global logistics environment. Relief and humanitarian operation after natural disasters, during conflicts and war is an important element in the course.

Literature

Kent N. Gourdin. 2006. *Global Logistics Management*. 2nd edition

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG640 Applied Logistics

Course Code
LOG640

Course Name
Applied Logistics

Credits
15.00

Semester
Spring

Location
Ålesund

Language Instruction
Norwegian

Instruction
Up to three hours per case with the presentation of cases. Occasionally theory will be discussed in conjunction with a case.

Mandatory Assignments
Intensive case studies in groups of two or more students. Written reports of all cases must be handed in. The full group will give an oral presentation of some of the cases.

Evaluation
Written and oral presentations of cases. The presentations will be graded by the teacher. The final grade in the course will be an average of the grades received on the cases. Both the professional and technical qualities of the reports, as well as the oral presentations will counts towards the grades.

Support materials for examination

Grades
Letter (A - F)

Literature:
Tittel **ForfatterForlagÅrsstallISBNType**
Utdelt materiale

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG707 Fundamentals of logistics

Course Code
LOG707

Course Name
Fundamentals of logistics

Credits
7.50

Prerequisites

Same as for the MSc programme in Logistics. Students who do not have a fair amount of logistics modeling or operations research in their background are advised to take this course. Students with more quantitative experience, wishing to follow this up, should instead consider LOG706 Mathematical Modeling in Logistics.

Overlap the content of another course

The course overlaps with "LOG501 Styringsmodeller i logistikk" / "LOG500 Styringsmodeller og operasjonsanalyse" and will not give extra credits in combination with that course.

Semester
Autumn

Every two years. Next autumn 2016.

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week

Mandatory Assignments
There will be two mandatory assignments.

Evaluation
4-hour individual written examination. Students are required to write one or more essays on assigned topics. These shall be submitted during the final examination and each of them will count for 10% of the final grade.

Support materials for examination
Calculator that may contain data + general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

After having completed the course, the candidate is supposed to:

- Be familiar with basic models for inventory management and production planning, including the EOQ (Economic Order Quantity) model
- Understand simple linear models for logistic problems
- Be familiar with Material Requirements Planning logic
- Have basic knowledge about purchasing processes
- Be familiar with basic forecasting methods, such as moving average and exponential smoothing
- Know the most important principles behind the Just In Time (JIT) philosophy

Content

The course will extend the core topics normally treated in an introductory course in logistics, such as elementary inventory theory, material requirement planning and just in time production. Models for managing the individual parts in the value chain will be a major part of the course. Special emphasis will be placed on problems in inventory and production, along with some prognosis. In addition, quantitative models will be presented for the aforementioned areas and used explicitly in formulating solutions to logistical problems. Students not familiar with the basic concepts will benefit from reading an elementary book in logistics before the course starts.

Literature

J. R. Tony Arnold, S. N. Chapman, L. M. Clive. *Introduction to Materials Management*. 6th Ed. Pearson Prentice Hall, 2008.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG708 Applied Statistics with SPSS

Course Code
LOG708

Course Name
Applied Statistics with SPSS

Credits
7.50

Prerequisites

The same as for the MSc program in logistics. LOG708 is a mandatory course for certain study programs. Students with sufficient background knowledge in statistics may apply for an exemption. Passing a test in the beginning of the semester will normally be required for students applying for exemption.

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Two hours of lectures per week, two hours of exercises per week

Mandatory Assignments
The students will be required to submit solutions to assignments during the semester.

Evaluation
Four-hour final school exam (100%)

Support materials for examination
All printed and written supporting material + calculator that may contain data

Grades
Letter (A - F)

Learning outcome

After finishing the course, the students should have knowledge and skills enabling them to do simple practical empirical work, using software tools, e.g. SPSS. Specifically, the students should be able to

- Use basic probability distributions for simple modeling and to find probabilities and moments
- Use statistical software (SPSS) to effectively organize and present information extracted from data
- Compute confidence intervals for central population parameters such as means, variances and proportions
- Perform tests of statistical hypotheses regarding central population parameters
- Perform simple and multiple regression analysis with statistical software
- Give practical interpretations and present the results of statistical analyses in nontechnical terms

Content

Random variables and probability distributions. Samples and populations, estimation and inference. Confidence intervals.
Testing of statistical hypotheses. Significance levels and P - values.
Methods: T – tests, Z – test for proportions, chi-square tests, simple nonparametric methods, basic regression analysis. Simple forecasting. Other statistical methods may also be treated.
SPSS: Managing data, descriptive statistics, performing analyzes, interpreting output.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG711 Supply Chain Management 1

Course Code
LOG711

Course Name
Supply Chain Management 1

Credits
7.50

Prerequisites

Equivalent to requirements for the MSc programme in Logistics.

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week

Mandatory Assignments
See Evaluation

Evaluation
Final written exam (55 %) and 3 written assignments (45 %). All assignments have to be delivered in full within a given deadline in order to be allowed to complete the final written exam.

Support materials for examination
Calculator that may contain data + general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

The main purpose of the course is to give the students intermediate knowledge in supply chain management (SCM), with an emphasis on terminology and basic decision problems. At the end of the course, the students should have an understanding of the most important elements in SCM in the manufacturing and service industries. They should also have an overview of the main elements in different supply chain strategies, and under what market conditions the different strategies are applicable.

Content

The course will cover core subjects dealing with supply chain management and management of different logistics processes within the organization. The students will learn theoretical skills in operational management focused on decisions made by upper level managers in an organization. Some special topics will be treated in case work and seminars. These can vary from year to year. Examples can be: The bull-whip effect, risk-pooling, green logistics, network design, cross cultural management, theory of constraints.

Literature

Harrison S and R van Hoek. *Logistics Management and Strategy: competing through the supply chain*. 4th edition. Prentice Hall, 2008.
Selected research papers.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG713 Models for Production Management

Course Code
LOG713

Course Name
Models for Production Management

Credits
7.50

Prerequisites

None, apart from being a master student in logistics accepted into the OM-variant.

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week.

Mandatory Assignments
It is mandatory to pass two assignments.

Evaluation
4 hours individual written final examination.

Support materials for examination
Calculator that may contain data + general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

The successful student is expected to be able to identify, analyse and solve problems within production management and planning and also be able to evaluate the different solutions to such problems. Extensive quantitative models for dealing with production will be presented and used specifically in the formulation and solution of logistical problems within production.

Content

Different topics concerning production planning will be treated like Little's law, scheduling problems with different objectives, line balancing and lot sizing. In a more general setting production philosophies like MRP, OPT/TOC, Lean /JIT and agile production will be treated.

Literature

Wallace and Hopp: *Factory Physics*. McGraw-Hill. Third edition, 2008.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG715 Business cases in SCM

Course Code
LOG715

Course Name
Business cases in SCM

Credits
7.50

Prerequisites

LOG 711 Supply Chain Management 1 or equivalent course. The course is open for master students in logistics only.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Presentation of the cases are arranged as one-day seminars. One week after the seminar the students attend in a question session for the case, where they have prepared questions for the company representative. The cases will vary from one year to the next. Depending of the subject in the case, there will also be organized day-seminars which are connected to the cases

Mandatory Assignments
All company presentations, question sessions and day-seminars are mandatory.
3 written assignments. Each assignment should consist of approximately 15 pages per student.

Evaluation
3 individual or group cases, all cases must be passed. One final grade.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

The objective is to give the students an opportunity to study and discuss specific firms and their logistical problems. The students will after the course have knowledge on solving business problems by applying theory to practical issues.

Content

The course will mainly consist of 3 cases taken from or presented by specific firms or public organizations. The students may work in small groups (no more than 2 students per group) or individually. The students will write and submit an assignment for each of the three cases. The assignments are written analyses of the logistical problem and should indicate solutions to the problem. The business cases will vary from one year to another.

Literature

Study material for each case will be handed out.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG716 Mathematical Modelling in Logistics

Course Code
LOG716

Course Name
Mathematical Modelling in Logistics

Credits
7.50

Prerequisites

A quantitative background is required.

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures and exercises per week.

Evaluation
Individually submitted assignments plus one case (85%). A final oral examination (15%).

Support materials for examination
All printed and written supporting material + calculator with empty memory

Grades
Letter (A - F)

Learning outcome

After completing the course the student will

- become familiar with using software to solve linear models
- get experience and training in developing and solving mathematical models, and to analyze the result.

Content

The mathematical models will be related to logistics problems taken from production planning, distribution planning, and combinations of these. The course also deals with logistic relations and the use of discrete variables in modelling. During this semester, the software programme, AMPL, will be used. The course is a combination of selected topics in logistics and an introduction to the use of software programmes.

Literature

Robert Fourer, David M. Gay, Brian W. Kernighan, *A Modeling Language for Mathematical Programming*, Thomson 2nd. Edition, 2003.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG722 Inventory Management

Course Code
LOG722

Course Name
Inventory Management

Credits
7.50

Prerequisites

The same as for the MSc program in logistics

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week.

Mandatory Assignments
It is mandatory to pass both assignments.

Evaluation
5 hours individual written final examination counts 80 % of the final grade. The two compulsory assignments count 10 % each.

Support materials for examination
Calculator that may contain data + general dictionary in mother tongue/Norwegian/English in paper version

Special support materials
None. Relevant formulas and normal distribution table will be handed out with the exam.

Grades
Letter (A - F)

Learning outcome

There will be emphasis placed on problems in management of inventory. Extensive quantitative models will be presented and used specifically in the formulation and solution of logistical problems. The successful student is expected to be able to identify, analyse and solve problems within the mentioned -field and also be able to evaluate the solutions to such problems.

Content

Different inventory management principles and models for deterministic and stochastic demands including the Newsboy problem will be discussed. Emphasis will be placed on the differentiation of products in connection with inventory management and its consequences, more specifically different approaches for treating slow-moving articles.

Literature

Edward A. Silver, David F. Pyke and Rein Peterson: *Inventory Management and Production Planning and Scheduling*. John Wiley and Sons 1998.
Handouts

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG730 Basics of Petroleums Logistics

Course Code
LOG730

Course Name
Basics of Petroleums Logistics

Credits
7.50

Prerequisites

Equivalent to requirements for the MSc program in logistics

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
The course will be a mix of intensive teaching periods and more ordinary weekly lectures. The course will start with an intensive part lasting for one week with 3 hours of lectures per day. Then it will be a part lasting for 5 weeks with ordinary lectures with 3 hours per week. The course will be finished with one intensive week with 3 hours of lectures per day.

Evaluation
Four part exams for each part of the course, counting for 30%, 30%, 30% and 10% of the final grade. Each of the first three exams consists of a class tests counting for 10%, and a compulsory home assignment counting for 20% of the final grade. The forth exam is a compulsory home assignment. The final grade will be comprised from summing up the results of four part exams.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

After having completed the course students will know world oil and gas suppliers and consumers, history of petroleum industry, laws and regulations, and trade. They will know the chemical and physical properties of oil and gas, the geology of oil and gas onshore and offshore, exploration, drilling and refining processes. The students will know the petroleum industry supply chain and its infrastructure (oil depots, gas storage facilities, etc.), the supply logistics for drilling, extraction and refinery processing, the inventory management and the transportation of oil and gas and their derivatives in different physical phases by different transportation modes, and general approaches for distribution of petroleum and gas products.

Content

The first part of the course will cover topics like world oil and gas resources, world production and consumption, and trade of oil and gas. Further topics will be laws and regulation of the petroleum industry, and the history of oil and gas exploration and production in Norway. The second part will mainly deal with oil and gas technologies like chemical and physical properties of oil and gas, the geology of oil and gas (onshore as well as offshore), exploration, drilling and process of refining the raw material. The last part will deal with the infrastructure of the industry including the different transportation modes, the supply logistics of the industry as well as the inventory management of oil and gas and their derivatives.

Literature

Selection of book chapters and scientific articles

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG731 Networks Logistics

Course Code
LOG731

Course Name
Networks Logistics

Credits
7.50

Prerequisites
Equivalent to requirements for the MSc program in logistics, a quantitative background is required

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week.

Mandatory Assignments
It is mandatory to pass four assignments each counting for 10% of the final grade.

Evaluation
4 hours individual written final examination that counts 60% of the final grade.

Support materials for examination
Separate list, see below

Special support materials
One A4 sheet with your own notes

Grades
Letter (A - F)

Content
The course covers the following subject areas:

- Introduction to logistics systems (networks, logistics networks, supply chains, material and information flows in supply chain, main activities in logistics networks, logistics managerial issues)
- Flow planning in networks (transportation problem, assignment problem, transshipment problems, network flow problems - minimum cost flow, maximum flow, shortest path)
- Logistics network design (minimal spanning tree, facility location, network design)
- Routing in networks (arc routing, vehicle routing, inventory routing)

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG733 Exact Optimization Methods in Logistics

Course Code
LOG733

Course Name
Exact Optimization Methods in Logistics

Credits
7.50

Prerequisites

LOG716 Mathematical Modelling in logistics is highly recommended. Some mathematical or quantitative background is needed.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Instruction
3 hours of lectures per week.

Mandatory Assignments
There will be two mandatory assignments, both needs to be passed in order to take the final exam.

Evaluation
4 hours individual written final examination counts 100 % of the final grade

Support materials for examination
Calculator that may contain data + general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

After having completed the course, the candidate is supposed to:

- Be able to solve linear programming problems by using the simplex method
- Be able to solve integer and mixed integer programming problems by using the Branch-and-Bound method
- Understand the connection between the primal and the dual of an LP, and know how to convert problems from one of the formulations to the other
- Be able to use dynamic programming to solve simple problems suited for this method

Content

The course will mainly focus on solving problems from logistics formulated as deterministic optimization models. Examples of problems include production problems, shortest path and knapsack problems. Modeling will be covered only briefly, as this is supposed to be known in advance. Problems treated include Linear Programming (LP) problems and Discrete Optimization problems. Emphasis will be put on the Simplex algorithm for Linear Programming and Branch and Bound search for discrete problems, but dynamic programming and other solution methods will also be treated.

Literature

Wayne L. Winston and Munirpallam Venkataramanan. 2003. *Introduction to Mathematical Programming*. Thomson/Brooks/Cole. 4th edition.

Courses
- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG740 Advanced Petroleum Logistics

Course Code
LOG740

Course Name
Advanced Petroleum Logistics

Credits
7.50

Prerequisites
Equivalent to requirements for the MSc program in logistics

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Five weeks of intensive teaching, 8-9 hours of lectures per week.

Evaluation
Two individual assignments, one counting 75% and other 25% of the final grade.

Support materials for examination

Grades
Letter (A - F)

Learning outcome
After completing the course students will get in-depth knowledge of main world oil and gas sources location (as a starting points in supply chain) and main destination points, world transport system, transport expenses in different regional of oil and gas markets. Students will know specific issues and techniques for transportation of oil, gas and petroleum products using different modes of transport. Students will also know managerial processes in frame of oil and gas supply chain, specific problems and solutions associated with the management of logistics activities like supply management of oil and gas depot, maritime ports depot, supply of refineries, distribution of products in relation to petroleum logistics, basics of calculation of capacities, transportation possibilities. The course will be also familiar with the typical supply chain for offshore oil and gas logistics, its upstream and downstream parts, the main challenges of upstream offshore logistics, and the common, relevant and current supply chain management issues.

Content
The course covers existing approaches of hydrocarbons logistics management onshore and offshore. The physical and chemical properties of hydrocarbons, conditions for transportation, choice of transportation mode, tariffs etc. are studied. The course covers specific issues concerning the international flows of hydrocarbons. The course deals with the world tanker fleet and conditions of transportation (freight, price formation, types of tankers and their use for different routes etc.), both for oil, petroleum products and liquefied natural gas. It considers logistics costs including transportation, storage, cargo transshipment, pumping etc. The course covers as well the management of offshore supply chain including the main actors in supply chain, supply chain integration and current supply chain issues from different cases around the world.

The course covers the following topics:

- Organizational forms of oil and gas companies and the role of logistics: vertically integrated oil and gas companies, independent oil and gas producers, service oil and gas companies;

- Basics of oil and gas cargo properties;

- Supply chain in oil and gas sector: Purchasing;

- Infrastructure for transportation of hydrocarbons. Transportation and storage of oil, gas and petroleum products, and their place in petroleum supply chain;

- Pricing in transport, tariff's policies, transportation cost reduction;

- Inventory management of hydrocarbons. Oil depot as an object of dispatch control, its operations divided into transshipment, distribution, and technological units. Main depot operations: receiving, storage, rental, metering and accounting. Interaction with different modes of transport. Operations management. Maritime terminals, their role as logistics centers;

- Conditions for cargo transportation, choice of transport modes. Control of operating modes of trunk oil and petroleum products pipelines. Task dispatching services at various levels of management and the order of interaction between them;

- Main routes of oil and petroleum products supply. Overview of the major maritime routes, and the largest transport companies. Energy security and transport routes;

- Characteristics of global network of maritime oil and liquefied natural gas transportation. Petroleum product terminals for bunkering trade. Oil and gas transportation in harsh climate and weather conditions;

- Offshore logistics – Supply Chain Management: Land transport - characteristics and common challenges; Supply Bases - characteristics and common challenges; Supply Vessels - characteristics and common challenges;

- Offshore Logistics – Supply Chain Integration: Integrated Logistics Planning; Logistics Hub; Logistics Maturity Levels;

- Offshore Logistics – Supply Chain Cases: Illustration of relevant current supply chain issues collected from different cases around the world.

Literature

Oil and gas production handbook: An introduction to oil and gas production, transport, refining and petrochemical industry, *ABB Oil and Gas*, 2013.

Burns, M.G., Port Management and Operations, *CRC Press*, 2014.

Valois, P. Tankers: An Introduction to the Transportation of Oil by Sea, *Witherby*, 1997.

Crude Oil Tanker Basics, *Witherby, Seamanship International*, 2009.

Miesner, T.O., Leffler, W. L., Oil & Gas Pipelines in Nontechnical Language, *Penwell*, 2006.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG770 Cost Engineering in Projects

Course Code
LOG770

Course Name
Cost Engineering in Projects

Credits
7.50

Prerequisites

LOG765 Project Planning and Control

Semester
Autumn

First time autumn 2015

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lecture per week. Group work.

Evaluation
4 hour written examination, 100 %

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Content

Cost engineering represents the intersection of the fields of project management, business management, and engineering. The course wil focus on the balance between cost, quality and time requirements in projects and will cover the following topics:

- Principles of cost esimation in engineering disciplines
- Cost Control and cost forecasting
- Investment appraisal
- Risk analysis.

Literature

Forest D. Clark and A. B. Lorenzoni, Applied Cost Engineering, 3rd ed., Marcel Dekker, 1996.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG820 Vehicle Routing with Heuristics

Course Code
LOG820

Course Name
Vehicle Routing with Heuristics

Credits
7.50

Prerequisites
Equivalent to requirements for the MSc program in logistics. A quantitative background is recommended.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week

Evaluation
Several home assignments, counting in total 50% of the final grade, and a 4 hours written final examination counting 50% of the final grade.

Support materials for examination

Grades
Letter (A - F)

Learning outcome
By completing the course student will get in-depth knowledge of methods and techniques for routing vehicles serving customers in various logistics settings.

Content
The course covers the following subject areas:

- Arc routing
- Traveling salesman problem
- Vehicle routing problem
- Other variants of vehicle routing problem

For these topics, emphasis will be placed on solving problems with the classical construction heuristics and the two-phase heuristics using mathematical models.

Literature
Gribkovskaia I. and Halskau Ø.: *Compendium in Routing Planning*, 2016
Toth P. and Vigo D.: *SIAM Monographs on Discrete Mathematics and Applications*. Philadelphia, 2014 (optional)

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG904 Seminars in Logistics

Course Code
LOG904

Course Name
Seminars in Logistics

Credits
30.00

Prerequisites

Credits

Each seminar gives 2.5 study points per week with the exception of the proposal. Hence, each student must take seminars during 10 weeks. In addition the proposal gives 5 study points, all together 30 study points.
The head of the study program will, together with staff members, recommend blocks of seminars for different groups of students. Some seminars may also be blocked for some student groups depending on their back ground from the first year program. This information will be given in the beginning of the third semester or as soon as the seminars are decided.

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Each seminar is usually taught Monday to Friday in one week or some seminars run for two weeks in a row or with some weeks in between the two weeks. Usually the instruction will be a mix of lectures, assignments, group work and discussions. Attendance is mandatory to all classes.

Mandatory Assignments
Basically the students can choose any seminars freely with two exceptions. The first exception is a seminar called “Research Design” – LOG904-022. The second one is the so called proposal. The proposal is a draft for the master thesis and there will be no instructions or lectures given for this, but the students should work in close cooperation with their supervisors. The proposal gives 5 study points. "Proposal" includes the preparation and presentation (written and oral) of a proposal for the actual thesis to be done in Semester 4. The seminar "Proposal" will always be at the end of LOG904. However, the students are expected to spend all the time not spent on seminars on the preparation of their proposal and thesis. Hence, from a practical viewpoint, the proposal covers a substantial part of the third semester. These two seminars related to the master theses are only open to ordinary master degree students.

Evaluation
The method of evaluation may vary from seminar to seminar, but a letter grade or pass/fail will be given for each seminar. The method used within a given seminar will be announced at the start of the week.

Support materials for examination
Egen liste. Se under

Special support materials
Various on the different seminars.

Grades

Varying from seminar to seminar.

Learning outcome

After finishing the seminar series, the students will have gained a broader and deeper level of skills and understanding in several subject areas relevant to logistics and supply chain management. On top of the background established through the completion of the first year of the MSc program in logistics, the seminar series will provide additional theoretical and technical capabilities that will help the students in the research process for the master thesis.

Content

There are two types of seminars. Some cover themes that are important to logistics, but that for some reason have not been covered in other courses. Other seminars are very specialized, covering theoretical or practical aspects of themes already well covered in other courses. This way the seminar series brings both depth and width to the student's knowledge.

Examples of possible topics in this seminar:

- Green logistics
- Optimization models
- Business games
- Cross cultural management
- Port logistics
- Product variety
- Productivity analysis
- Distribution mangement
- Scheduling models and algorithms

The series includes two seminars related to the master thesis, and both are compulsory for ordinary master degree students. The first one, called "Research Design" is about how to write and organize a thesis, the second,

Note: No other courses can usually be taken during autumns when following LOG904 to a full extent.

For exchange students it will be possible to follow individual seminars covering part of the semester with less than 30 ECTS or the whole semester with 30 ECTS.
Students at the Master program in Master in Change and Management may take individual seminars.
The exact program for the seminar series will normally be available before semester start at the MSc Logistics home page

Literature

There will be hand-outs and special material for each seminar. This will be decided by the lecturer responsible for each seminar.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG904-PET Seminars in Petroleum Logistics

Course Code
LOG904-PET

Course Name
Seminars in Petroleum Logistics

Credits
30.00

Prerequisites

Completion of the first year of the Master's degree program.

Semester
Autumn

10 one-week seminars, each 2.5 credits, including seminar LOG904-101 Research Design and seminar LOG904-100 Proposal (5 credits). The proposal is a plan for the master's thesis. The students should work out the proposal in close colloboration with their supervisor. The proposal includes the preparation and presentation (written and oral) of the actual thesis in the fourth semester. The seminar "Proposal" will always be presented at the end of the other LOG904 seminars.

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
Each seminar is usually taught Monday to Friday in one week. Usually, the instruction will consist of lectures, assignments, group work and discussions. Attendance is mandatory to all classes.

Evaluation
The method of evaluation may vary from seminar to seminar, but a letter grade or pass/fail will be given for each seminar. The method used within a given seminar will be announced at the start of the week. For the proposal the evaluation willl be individual oral exam.

Support materials for examination

Grades

Learning outcome

After finishing the seminar series, the students will obtain a broader and deeper level of skills and understanding in several subject areas relevant to logistics and supply chain management. Beyond the background established through the completion of the first year of the MSc program in logistics, the seminar series will provide additional theoretical and applied knowledge that will help the students in the research part for the master's thesis.

Content

There are three blocks of three seminars. The first block of three seminars, LOG904-PTA"Research Methods in Logistics" covers theoretical topics that have not been covered in other courses, namely:

- Integer Optimization Models in Logistics
- Basic Game Theory
- Simulation with Arena

In the second block called LOG904-PTB "Basic problems of Petroleum Logistics", the seminars are very specialized, covering basic topics related to different parts of the petroleum supply chain such as:

- Logistics in petroleum production
- Oil, gas and petroleum products flows
- Gas transportation infrastructure planning

The third block, LOG904-PTC "Offshore Oil and Gas Logistics", covers theoretical or practical aspects of topics that are important to offshore oil and gas logistics:

- Offshore upstream logistics
- Health, safety and environment for the offshore oil and gas industry
- Supply base management

The seminars in these blocks are compulsory for master's degree students. The seminar LOG904-101 "Research Design" dealing with how to write and organize a thesis, is compulsory as well.

Literature

There will be hand-outs and special material for each seminar. This will be decided by the lecturer responsible for each seminar.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG950 Master's Degree Thesis

Course Code
LOG950

Course Name
Master's Degree Thesis

Credits
30.00

Prerequisites

Only those students who are enrolled in the MSc program in Logistics can write a thesis under the LOG950 course code. In addition, each candidate must have an approved proposal that has been prepared as part of LOG904. LOG950 must be the last course taken within the MSc program.

Semester
Spring

Limitations:
The master thesis should usually be completed during the fourth semester, that is, the semester after that the proposal is accepted. However, if the student(s) are not able to finish the work during in this semester, a second oral exam will be arranged in December the same year. A master thesis must be finished no later than 4 years after the acceptation of the proposal.

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
The master's thesis is an independent work done by a single student or two students together and supervised by a faculty advisor. It is the duty of each student to obtain a supervisor at the latest in the start of Semester 3. The supervisor will usually also supervise the proposal. Taken together with the master thesis, the student(s) are entitled to have at least 20 hours supervision, but can not expect to have more than 40 hours supervision. The supervision includes all aspects of this process like giving advice, reading drafts and so on.

Evaluation
Submission of the written thesis and an oral thesis defence are required. The final grade is a combination of grades received on the thesis and the oral presentation. Only one final grade will be presented to the student.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

After completing the thesis the student will be able to

- work independently in projects work with a strong professional basis,
- combine methods and knowledge from courses and other sources within the logistics profession, and
- analyse and solve complex logistic problems based on scientific methods.

Content

A thesis is an independent, extensive work that is done under the guidance of an advisor/professor in the discipline. Not more than two students can work on the same thesis. Candidates are relatively free to choose topics. A thesis can be either applied, related to a company or an agency/governmental body, or it can be a theoretical investigation.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG952 Masters`s Degree Thesis

Course Code
LOG952

Course Name
Masters`s Degree Thesis

Credits
30.00

Prerequisites

The course ADM711 Research methods incl. proposal has to be approved before the student can register for the thesis. Only those students who are enrolled in the MSc program in Engineering Logistics can write a thesis under the LOG952 course code. LOG952 must be the last course taken within the MSc program. This means that all courses need to be completed before the thesis can be handed in for assessment.

Semester
Spring

Location
Molde

Language Instruction
Englsih

Language Assignments and Evaluation
English

Instruction
The master's thesis is an independent work done by a single student or two students together and supervised by a faculty advisor. It is the duty of each student to obtain a supervisor at the latest in the start of Semester 3.

Evaluation
Submission of the written thesis and an oral thesis defense are required. The final grade is a combination of grades received on the thesis and the oral presentation. Only one final grade will be presented to the student.

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Grades
Letter (A - F)

Learning outcome

After completing the thesis the student will be able to

- work independently in projects work with a strong professional basis,
- combine methods and knowledge from courses and other sources within the logistics profession, and
- analyse and solve complex logistic problems based on scientific methods.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

LOG953 Master's Degree Thesis

Course Code
LOG953

Course Name
Master's Degree Thesis

Credits
30.00

Prerequisites

Only those students who are enrolled in the MSc program in Petroleum Logistics can write a thesis. In addition, each candidate must have an approved proposal that has been prepared as part of LOG904. LOG953 must be the last course taken within the MSc program.

Semester
Spring

Limitations:
The master thesis should usually be completed during the fourth semester, that is, the semester after that the proposal is accepted. However, if the student(s) are not able to finish the work during in this semester, a second oral exam will be arranged in December the same year. A master thesis must be finished no later than 4 years after the acceptation of the proposal.

Location
Molde or Moscow

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
The master's thesis is an independent work done by a single student or two students together and supervised by a faculty advisor. It is the duty of each student to obtain a supervisor at the latest in the start of Semester 3. The supervisor will usually also supervise the proposal. Taken together with the master thesis, the student(s) are entitled to have at least 20 hours supervision, but cannot expect to have more than 40 hours supervision. The supervision includes all aspects of this process like giving advice, reading drafts and so on.

Evaluation
Submission of the written thesis and an oral thesis defense are required. The final grade is a combination of grades received on the thesis and the oral presentation. Only one final grade will be presented to the student.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

After completing the thesis the student will be able to work independently in projects work with a strong professional basis, combine methods and knowledge from courses and other sources within the logistics profession, and analyze and solve complex logistic problems based on scientific methods.

Content

A thesis is an independent, extensive work that is done under the guidance of an advisor/professor in the discipline. Not more than two students can work on the same thesis. Candidates are relatively free to choose topics. A thesis can be either applied, related to a company or an agency/governmental body, or it can be a theoretical investigation.

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- **Administration and Organization**
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

ORG700 Global change and organizations

Course Code
ORG700

Course Name
Global change and organizations

Credits
15.00

Semester
Autumn

Location
Molde

Language Instruction
The course will be taught in English.

Language Assignments and Evaluation
Students in the Master of Science in logistics programme must do their examinations in English, others can also use Norwegian.

Instruction
Two days of intensive lectures and group work, 6-7 times during the semester.

Evaluation
6-hour written examination

Support materials for examination

Grades
Letter (A - F)

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

SCM300 Survey Design

Course Code
SCM300

Course Name
Survey Design

Credits
7.50

Prerequisites

Equivalent to MAT110 Statistikk I

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
2-3 hours per week for the first six weeks of the semester

Evaluation
100% of the overall grade for the course is based on a project report (75% written and 25% oral)

Support materials for examination

Grades
Letter (A - F)

Learning outcome

This course provides education and practical training in the design and delivery of surveys and the reporting and presentation of survey results.

Content

Students will work, in groups, on a research project of their choice. The research project should be on a subject that is relevant to their chosen degree discipline and must involve the design, delivery and analysis of a survey instrument. At the start of the semester, students will attend a lecture programme that introduces them to survey research and design, sampling techniques, summarising data, statistical analysis and the written and oral presentation of a research project. During the semester, students will work on their research project under the guidance and supervision of the course leader. Their work will culminate in the submission of a written report and the delivery of an oral presentation.

Literature

Fink, A. (2003). **The survey handbook**. 2nd edition. Sage Publications Limited, London. ISBN: 0-7619-2510-4
Gaur, A.S. and Gaur, S.S. (2006). **Statistical methods for practice and research: a guide to data analysis using SPSS**. Sage Publications Limited, London. ISBN: 0-7619-3502-9

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

SCM500 International Transportation and Distribution

Course Code
SCM500

Course Name
International Transportation and Distribution

Credits
7.50

Prerequisites

The students should have passed introductory courses in business and economics. Some knowledge of basic logistics is an advantage

Semester
Autumn

Location
Molde

Language Instruction
English if foreign students attend

Language Assignments and Evaluation
English or Norwegian

Language Literature
English or Norwegian

Instruction
3 hours of lecture and mandatory assignment

Mandatory Assignments
See Evaluation

Evaluation
4 hour written examination counts 70 %. The mandatory assignment counts 30 %. The final grade is calculated as a weighted sum of the grades given, and both the assignment and the written examination have to be passed to complete the course.

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Grades
Letter (A - F)

Learning outcome

At the end of the course, you should have an insight into topics of importance to management of international transport, with focus on international trade, and how the transportation network is designed to meet the demand from this trade. An introduction to documentation and insurance in international transport is also given. The course serves as a background for both strategic work and design of freight transport operations.

Content

The course covers the following topics: International flow of goods, sales and payment terms, documentation and insurance in international transport, international air freight and liability for damage and loss of goods in seaborne transport.

Literature

David P and R Stewart. 2007. *International Logistics*. 2nd edition
Articles/Handouts

Literature:

Tittel	Forfatter	Forlag	Årsstall	ISBN	Type
International logistics. The management of international trade operations	David, Pierre and Richard Stewart	Thomson	2008	978-0-7592-9143-7	Bok

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

SCM702 Purchasing and Supply Theory

Course Code
SCM702

Course Name
Purchasing and Supply Theory

Credits
7.50

Prerequisites
Same as acceptance to the MSc program in logistics.

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week.

Evaluation
4-hour written school examination

Support materials for examination
Calculator that may contain data + general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

The course aims at providing knowledge about purchasing and inter-organizational theory and the organization of business-to-business relationships upstream.
The course will give the students insight and knowledge about current theory and literature within the purchasing and supply field and how purchasing firms are to perform economic transactions with their suppliers and will elaborate the conditions for efficient organization of supplier-buyer relationships.
The relationship between relevant purchasing and supply theories and the analysis of purchasing and supply problems is an important issue and the course aims at improving the students' ability to apply relevant theory in their master theses.

Content

The course presents a broad scope of issues within purchasing and inter-organizational theory:

- industrial buying behaviour
- supply chain management
- transaction costs theory
- principal-agent theory
- resource-dependence theory
- relational contracting theory

Participation of students through questions and comments in the classroom is important and recommended for enforced learning and making a good atmosphere of learning in the classroom.

Literature

Douma, S. and Schreuder, H.: *Economic Approaches To Organizations*, Prentice Hall International, (UK) LTD., Fifth Edition.
Arnt Buvik (Compendium): *Collection of Articles in Purchasing and Supply Theories for Master Students*. Molde University College , Spring, 2010.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

SCM705 Cost Management in SC

Course Code
SCM705

Course Name
Cost Management in SC

Credits
7.50

Prerequisites

Same as the requirements for the MSc Logistics program.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week.

Mandatory Assignments
There are 2. Participation on lectures 8 and 9 (or alternatively, written assignment(s)).

Evaluation
Written school exam (60%), and course paper (40). The course paper is written by 1 or 2 students, max. 6000 (8000) words.

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

The successful candidate should achieve advanced knowledge about key concepts and methods for analysing supply chain costs.

Content

Many supply chains have increased in size and complexity, and developments in legislation, sustainability concerns, environmental impacts, workers rights etc. add to the challenge of crafting a profitable supply chain.

This course addresses concepts and methods for analysing supply chain costs. Supply chain costs include costs associated with material-, information-, and financial flows, as well as costs associated with collaboration in the supply chain. Traditionally, supply chain managers have focused on cost reductions, but if the supply chain should be an instrument for business advantage and profits, it must be flexible so that opportunities for value creation can be explored and exploited. In addition, in order to cope with supply chain risks, it must be resilient.

Literature

Anklesaria, J. (2008), *Supply chain cost management.* The AIM & Drive process for achieving extraordinary results, AMACOM: New York.

Kompendium: Slack, N., Brandon-Jones, A., and Johnston, R. (2013), *Operations management*, 7th ed., Pearson: Harlow, England, chapters 1-3.

Hand-outs are posted at FRONTER /SCM705

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- Administration and Organization
- **Languages**

Study program

Study Programme conducted in English at Molde University College 2015/2016

SPR315 Norwegian I Language and Culture

Course Code
SPR315

Course Name
Norwegian I Language and Culture

Credits
7.50

Prerequisites

None. The target group for this course is foreign students with some knowledge of English.

Semester
Spring
Autumn

Location
Molde

Instruction
3 hours of lectures per week with group activities, oral and writing exercises.

Evaluation
4-hour written final examination including oral evaluation. The examinations are given both in the autumn and spring.

Support materials for examination

Grades
Letter (A - F)

Learning outcome

To teach students Norwegian, both the grammar and vocabulary. Students should be able to understand everyday conversations and be able to communicate orally and in writing, so that they can read simple Norwegian text. Emphasis will be placed on intercultural training where students will receive an introduction to Norwegian society, particularly the local and county business settings, geography and nature, political system, health and welfare policies and social and cultural conditions.

Content

A textbook and exercise book will be used to give elementary training in basic Norwegian grammar and vocabulary. In addition, a compendium with text and topics taken from local businesses, culture and history, along with practice exercises in communication in and outside of the classroom. Through group discussions of selected topics the student will learn about Norwegian society, starting with school and local surroundings. Both the textbook and selected texts will be the basis for written and oral training.

Literature:

Tittel	Forfatter	Forlag	Årsstall	ISBN	Type
Engelsk-norsk blå ordbok					Bok
Norsk på en to tre	Ellingsen, Elisabeth og Kirsti Mac Donald	Cappelen	2003	82-02-22572-8	Bok
Norsk-engelsk blå (dictionary)					Book

Courses

- Doctoral Courses in logistics
- Logistics
- Business Administration
- Informatics
- Sport
- Administration and Organization
- **Languages**

Study program

Study Programme conducted in English at Molde University College 2015/2016

STD001 Studieteknikk

Emnekode
STD001

Emnenavn
Studieteknikk

Studiepoeng
0.00

Forkunnskaper
Ingen spesielle.

Undervisningssemester
Høst

Semesterstart (august) og semesterslutt (november).

Undervisningssted
Molde

Språk undervisning
Norsk

Læringsaktiviteter
4 timer forelesning semesterstart (august) og 4 timer forelesning semesterslutt (november).

Hjelpemidler til skoleeksamen
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Karaktertype

Det gis ikke karakter i dette emnet

Læringsmål

Video
Foreleseningene blir tatt opp på video og ligger åpent tilgjengelig på himoldeX.no.

Læringsutbytte
Kandidaten skal ved fullført kurs:

- ha en ide om forskjellen mellom elev og student
- reflektere over sin egen motivasjon for å studere
- vite litt om studieteknikk
- være forberedt på eksamensdagen

Innhold

- fra elev til student
- informasjon fra studentrådgiver
- motivasjon, mål og planlegging
- læringstrategier og lesestrategierr
- selvdisiplin
- effektiv læring
- genrelle studetips
- eksamensmestring

Litteratur
Ingen. Men PDF-versjoner av foredragene kan gratis lastes ned via himoldeX.no.

Courses

- Doctoral Courses in logistics
- Logistics
- **Business Administration**
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

SØK640 International trade

Course Code
SØK640

Course Name
International trade

Credits
7.50

Prerequisites
Elementary knowledge in economics.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
Norwegian or English

Language Literature
English

Instruction
An average of 3 hours per lecture or approximately 12 x 3 hours lectures

Mandatory Assignments
See evaluation

Evaluation
4 hour written examination (100%)

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

Having completed the course the student should be able to:

- Explain why countries trade with each other
- Define what we mean by comparative advantage
- Present different trade models
- Use models to explain what trade patterns would be generated and developed
- Identify variables that can explain trade pattern developments
- Show how exchange relations and trade patterns are connected and influence each other
- Discuss how trade policies influence exchange and trade patterns
- Discuss how different trade policy instruments influence trade
- Show winners and losers if a government decides to introduce trade policy instruments

Literature

Paul R. Krugman et al: "*International Economics - Theory and Policy*", Pearson, latest edition.

Courses

- Doctoral Courses in logistics
- Logistics
- **Business Administration**
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

SØK710 Industrial Organization

Course Code
SØK710

Course Name
Industrial Organization

Credits
7.50

Prerequisites

Basic micro economics.

Semester
Autumn

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week.

Evaluation
One compulsory assignment that counts 40% of the final grade. 4-hour written final examination that counts 60%. The final grade is a calculated a weighted sum of the grades given, regardless of a pass / non pass in the individual grades given.

Support materials for examination
Calculator with empty memory + general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

To provide insight into modern idustrial organization theory in order to enable the students to analyse strategic interactions among firms operating in makets with less than perfect competition.

Content

The course provides an introduction to basic (non-cooperative) game theory, which is applied to the study of strategic interaction among firms operating in imperfectly competitive markets. Topics:

- Basic non-cooperative game theory
- Tactical decisions regardin what and how much to supply
- Tactical decisions regarding what price to charge, including tacit collusion
- Strategic decisions in order to avoid or limit competition

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

TRA320 Transport and Tourism

Course Code
TRA320

Course Name
Transport and Tourism

Credits
7.50

Prerequisites
None

Semester
Autumn

Not available autumn 2015.

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
2-3 hours of lecture per week

Evaluation
A 4 hour written exam worth 100% of the overall grade for the course.

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Special support materials
None.

Grades
Letter (A - F)

Learning outcome
This course provides a study of the tourist transport system and the way in which it is organised and managed.

Content
Introduction to the tourist transport system

- Tourist transport concepts and methods of analysis
- Demand for tourist transport products, services and information

Organising the tourist transport system

- Supply of tourist transport products, services and information
- Macro-environmental factors affecting tourist transport

Managing the tourist transport system

- Business strategies relating to the management of tourist transport
- Future challenges and opportunities for tourist transport

Literature

Holloway, J.C., Davidson, R. and Humphreys, C. (2009). **The business of tourism**. 8th edition. Pearson Education Limited, Essex. ISBN: 0-273-71710-3
Page, S. (2009). **Transport and tourism: global perspectives**. 3rd edition. Pearson Education Limited, Essex. ISBN: 0-273-71970-X

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

TRA410 Transport and Economic Development

Course Code
TRA410

Course Name
Transport and Economic Development

Credits
7.50

Prerequisites

Knowledge of basic microeconomics and transport economics

Semester
Spring

Location
Molde

Language Instruction
English or Norwegian

Language Assignments and Evaluation
English or Norwegian

Language Literature
English or Norwegian

Instruction
2 -3 hours of lectures per week and practice sessions

Mandatory Assignments
See Evaluation

Evaluation
4 hour written examination counts 60 %. The mandatory assignment counts 40 %. The final grade is calculated as a weighted sum of the grades given, and both the assignment and the written examination have to be passed to complete the course.

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Grades
Letter (A - F)

Learning outcome

You should get an understanding of how economic forces determine the localization of economic activities: businesses, trade, cities, etc. Special attention will be payed to the importance of transport and transport infrastructure as means for regional economic development, and how the economic development effects are measured. At the end of the course, you should be able to advise companies and public authorities about how transportation systems can affect economic development and localisation behaviour. The outcome can roughly be seen as twofold:

1. The student should become able to demand and utilize relevant R&D information about this topic as input for strategic planning purposes (e.g. when designing land use and transport plans, or location planning of specific companies).
2. The course should give a basis for further studies within this field

Content

The first part of the course will be an introduction to the major economic theories governing the localization of economic activity. The second part of the course presents economic theories and models that focus more specifically on the importance of transport and transport infrastructure. Theories and models are supported by results from field studies.

Literature

Bråthen S., ed. Paper collection
Handouts

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

TRA500 European Transport Policies

Course Code
TRA500

Course Name
European Transport Policies

Credits
7.50

Prerequisites

A basic course in transport economics is advantageous.

Semester
Autumn

Location
Molde

Language Instruction
Norwegian. If foreign students register for the course, lectures will be taught in English.

Instruction
3 hours of lectures per week.

Mandatory Assignments
Assignment to be submitted and approved before final examinations.

Evaluation
A 4-hour written final examination counts 70 % of the final grade. The rest is evaluated as a group presentation on free chosen transport subjects (30%).

Support materials for examination

Grades
Letter (A - F)

Learning outcome

The course gives an insight into European transport policies with emphasis on EU transport policies. The student will be able to solve transport policy problems and give advices on transport policy issues.

Content

Focus will be on European transport policies in particular, the trans-European network (TEN) and EU transport policy documents. The course covers the transport of both passengers and goods by different modes of transportation. Questions about infrastructure, environment, fees and pricing policies and their impact on Norway will be discussed.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

TRA700 Transportation Infrastructure Assessment

Course Code
TRA700

Course Name
Transportation Infrastructure Assessment

Credits
7.50

Prerequisites

Same as the requirements for the MSc Logistics program. A background in Microeconomics and Transport Economics is recommended.

Semester
Spring

Not both TRA700 Transportation Infrastructure Assesment and TRA705 Urban Freight Logistics can be offered every year

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week.

Mandatory Assignments
An assignment on a selected topic related to the course counts 40% of the final grade. The assignment is normally to be written by two or three students together, and only one common grade is given to the group assignment.

Evaluation
A 4-hour written final individual examination counts 60% of the grade. The final grade is a weighted sum of the grades given, regardless of a pass / non pass in the part-exams.

Support materials for examination
All printed and written supporting material + calculator with empty memory

Grades
Letter (A - F)

Learning outcome

The successful candidate should have achieved advanced knowledge about theory and methods for EIA of transport infrastructure, with main emphasis on cost-benefit analysis. The candidate also should have:

- Obtained a good overview of the theoretical foundation for cost-benefit analysis.
- Obtained knowledge about the regulatory and planning framework within which these analyses are made, with focus on current international practice.
- Obtained knowledge to use analytical models and calculations to carry out case studies.
- Obtained knowledge about the strengths and weaknesses of this analytical framework.
- Obtained in-depth knowledge about one selected aspect from the course as a topic for the essay
- Improved his/her analytical and writing abilities through the process of assignment writing

Content

The need for an analytical approach to project selection of infrastructure projects. The use of EIA for different parts of the transport sector. The role of EIA in the planning process, with focus on international practice. Presentation and analysis of different cases. Key issues will comprise the measurement of consumer and produces surplus, discounting and interest rates, market imperfections, external economic effects, common goods, the efficiency and equity problem, qualitative elements and critique of the EIA concept.

Literature

Book to be announced.
Articles, other handouts.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

TRA705 Urban Freight Logistics

Course Code
TRA705

Course Name
Urban Freight Logistics

Credits
7.50

Prerequisites

Same as the requirements for the MSc Logistics program. A background in Microeconomics and Transport Economics is recommended.

Semester
Spring

Not both TRA700 Transportation Infrastructure Assesment and TRA705 Urban Freight Logistics may be offered every year

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
One lecture per week in the beginning of the course. Seminars every two weeks during the rest of the course.

Mandatory Assignments
Active participation in seminars is mandatory. For each seminar, a written summary and short analysis of the literature discussed at that seminar should be submitted. The submissions will be graded pass / non-pass.

Evaluation
Written final individual examination (60%) and assignment on a selected topic (40 %)

Support materials for examination
Kun generell ordbok morsmål/norsk/engelsk i papirformat

Grades
Letter (A - F)

Learning outcome

To achieve advanced knowledge about urban freight logistics, with main emphasis on the urban freight market characteristics, planning and regulatory issues.

The successful candidate should have

- Obtained a good overview of urban freight markets, including the role and functions of terminals.
- Obtained knowledge about the regulatory and planning framework within which the urban freight players are operating.
- Obtained knowledge to compare more environmentally-friendly alternatives (alternative fuel vehicles, better information systems for information sharing and route planning) with current urban freight transport systems.
- Improved his/her analytical and writing abilities through the process of assignment writing

Content

The urban freight markets. The role of different players, including terminals. Different market requirements and technical and organizational solutions. The connections to urban planning and urban structure. Organisation and governance of urban freight logistics, including regulatory frameworks, land use aspects and environmental issues. The role of urban freight logistics in modern supply Chains. Current trends and developments will also be addressed.

Literature

Book to be announced.
Articles, other handouts.

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

TRA816 Maritime Transportation

Course Code
TRA816

Course Name
Maritime Transportation

Credits
7.50

Prerequisites

Same as the requirements for the MSc Logistics programme. A background in microeconomics and transport economics is recommended.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
On average 3 hours of lectures and seminars per week.

Evaluation
An essay on a selected topic related to international shipping counts 40% of the final grade. The essay is normally to be written by two or three students together, and only one common grade is given to the group. A 4-hour written final individual examination counts 60% of the grade.. The final grade is a weighted sum of the grades given, regardless of a pass / non pass in the part-exams.

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

The successful candidate will have

- Obtained a good overview of international shipping markets, including broad patterns of seaborne trade, and the markets for new and second-hand tonnage, including the market for demolition
- Obtained a good command of applying basic trade theory models for analyzing the potential benefits from international trade
- Obtained a thorough knowledge about the international regulatory regime of international shipping, including elements of global agreements, and the processes leading up to such agreements
- Obtained in-depth knowledge about one selected aspect of international shipping chosen as a topic for the essay
- Improved his/her analytical and writing abilities through the guided process of essay-writing

Content

Introduction to the main shipping markets, with main focus on dry and wet bulk deep sea trades, container short and deep sea markets and short sea markets for general cargo. The hub-and-spoke type of cargo networks and the integration of shipping markets into international supply chain. Contract types, spot and time charter markets. Different market requirements and technical and organizational solutions. The role of different players in international shipping. International shipping policies. Efficiency and profitability of shipping markets and market organization. Shipping and the environment. Short sea shipping vs. competing land-based transport modes.

Literature

Stopford, Martin. 2009. *Maritime Economics*. 3rd edition. Routledge
Handouts, articles

Courses

- Doctoral Courses in logistics
- **Logistics**
- Business Administration
- Informatics
- Sport
- Administration and Organization
- Languages

Study program

Study Programme conducted in English at Molde University College 2015/2016

TRA820 Air Transport Economics

Course Code
TRA820

Course Name
Air Transport Economics

Credits
7.50

Prerequisites

Basic knowledge in microeconomics and transport economics (similar to SØK200 Microeconomics and TRA310 Transport Economics) is recommended.

Semester
Spring

Location
Molde

Language Instruction
English

Language Assignments and Evaluation
English

Language Literature
English

Instruction
3 hours of lectures per week

Evaluation
A semester paper (50 %) and a 4 hour written exam (50 %).

Support materials for examination
Only general dictionary in mother tongue/Norwegian/English in paper version

Grades
Letter (A - F)

Learning outcome

This course provides an analysis of the key economic issues facing the air transport industry.

Content

The course focuses on three main areas:

1. Air transport supply and demand
2. Air transport policy and regulation
3. The economics of airlines and airports

Literature

Doganis, R. (2002). **Flying off course: the economics of international airlines**. 3rd edition. Routledge, London. ISBN: 0-415-21323-1
Graham, A. (2003). **Managing airports: an international perspective**. 2nd edition. Butterworth-Heinemann, Oxford. ISBN: 0-7506-5917-3
Additional reading from recently published books, journals and magazines will be recommended during the course