
Exchange Programme Master's level

Study Facts

Credits: 60

Duration: 2 semesters

Study mode: Full-time

Campus: Molde

Level of study: Master

Year: 2016

English title: Exchange Programme Master's level

Program of study: Exchange Programme Master's level

Faculty: Logistics

Person in charge: Arnt Buvik

Introduction

The international Master's level programme is aiming at offering international students an opportunity to integrate one or two semesters, i.e. 30 or 60 ECTS credits, into their own studies at home. The courses offered are part of our Master's programmes in Logistics and Sport Management.

Students are free to combine the courses offered under this programme, but it is the responsibility of each exchange student to make sure the combination is approved by their sending institution through a signed learning agreement (if applicable). A full term/semester should comprise courses totaling at least 30 credits, and equivalently a full academic year must comprise at least 60 credits.

Target audience

International students at the Master's level.

This programme is only open for exchange students. If you as an exchange student have any questions about admission, prerequisites etc, please contact the International Coordinator: post@himolde.no

Admission and rating

Master's courses are available to students having completed a minimum of three years of relevant university studies (equivalent to a bachelor's degree).

Some of the courses are fairly specialized and have specific background requirements, whereas other may be taken with any background. **It is the responsibility of the student to check the prerequisites listed in the course description, and to find a suitable course combination.** The program managers for the master programs in logistics and sport management can be consulted regarding course selection.

Content structure

Most classes are taught over a full semester/term. A typical course will have between 2 and 6 lecture hours per week, and may have additional group work and assignments/course work. The assessment will partly be based on compulsory coursework and exams. All grades are either passed/not passed or ECTS letter grades (A through F).

Exchange Programme Master's level

COURSE	2016 AUTUMN	2017 SPRING
Available courses Autumn semester		
ADM900 Forms of organization and management	15	
IDR705 Team Sport History	7.5	
IDR710 Philosophy of Science and Research Methods	7.5	
LOG708 Applied Statistics	7.5	
LOG711 Supply Chain Management 1	7.5	
LOG713 Models for Production Management	7.5	
LOG716 Mathematical Modelling in Logistics	7.5	
LOG722 Inventory Management	7.5	
LOG904 Seminars in Logistics	30	
SCM702 Purchasing and Supply Theory	7.5	
SØK710 Industrial Organization	7.5	
Available courses in the Spring semester		7.5
EVM720 Event Organization		7.5
IDA710 Business processes and information modelling		7.5
IDR720 Introduction to Sport and Event Economics		7.5
IDA715 Discrete Event Simulation		7.5
IDR805 Sport and Event Marketing		7.5
JUR710 Contract Law		7.5
IDR725 Team Sport Economics		7.5
LOG715 Business cases in SCM		7.5
LOG733 Exact Optimization Methods in Logistics		7.5
LOG765 Project Planning and Control		7.5
LOG820 Vehicle Routing with Heuristics		7.5
SCM705 Cost Management in SC		7.5
TRA700 Transportation Infrastructure Assessment		7.5
TRA705 Urban Freight Logistics		7.5
TRA816 Maritime Transportation		7.5
TRA820 Air Transport Economics		7.5

COURSE	2016 AUTUMN	2017 SPRING
Sum (7.5 total)	0	7.5

Exchange Study Programme Bachelor's level

Study Facts

Credits: 30

Duration: 1 semester

Study mode: Full-time

Campus: Molde

Level of study: Bachelor

Year: 2016

Program of study: Exchange Programme Bachelor's level

Faculty: Logistics

Person in charge: Olav Hauge, Anette Kristin Myrstad

Introduction

The international Bachelor's level programme is aiming at offering international students an opportunity to integrate one or two semesters, i.e. 30 or 60 ECTS credits, into their own studies at home. The courses are selected from the 2nd or 3rd year level of our Bachelor's programmes in Business Administration, Logistics and Supply Chain Management, and Sport Managements. Instead of offering very basic and general courses, we have chosen to focus most on our specialities by offering courses that you will not find everywhere.

Students are free to combine the courses offered under this programme, but it is the responsibility of each exchange student to make sure the combination is approved by their sending institution through a signed learning agreement. A full semester should comprise courses totalling at least 30 credits, and equivalently a full academic year must comprise at least 60 credits.

Target audience

International students at the Bachelor's level.

This programme is only open for exchange students. If you as an exchange student have any questions about admission, prerequisites etc, please contact the International Coordinator: post@himolde.no

Admission and rating

Most of the courses will be available to all students having completed basic courses in business administration, economics and mathematics. **It is the responsibility of the student to check the prerequisites listed in the course description, and to find a suitable course combination.**

Content structure

Most classes are taught over a full semester. A typical course will have between 2 and 6 lecture hours per week, and may have additional group work and assignments/course work. The assessment will partly be based on compulsory coursework and examinations. All grades are either passed/not passed or ECTS letter grades (A through F).

Exchange Study Programme Bachelor's level

COURSE	2016 AUTUMN	2017 SPRING
TRA500 European Transport Policies	7.5	
TRA410 Transport and Economic Development		7.5
Sum (0 total)	0	0

TRA500 European Transport Policies

Course name in Norwegian Bokmål: Europeisk transportpolitikk

Course Facts

Credits: 7.5

Fagområde: Logistics

Level of study: Bachelor

Program of study: Bachelor i logistikk og SCM

Campus: Molde

Course name in Norwegian Nynorsk: Europeisk transportpolitikk

Language of examination: Norwegian, English

Language of instruction: Norwegian, English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Recommended previous knowledge

A basic course in transport economics is advantageous.

Course 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.

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 advice on transport policy issues.

Working and learning activities

3 timer forelesning pr. uke

MANDATORY COURSEWORK	COURSEWORKS GIVEN	COURSEWORKS REQUIRED	COMMENT
Assignment(s)			

FORM OF ASSESSMENT	GROUPING	DURATION	TYPE OF DURATION	GRADING SCALE	PROPORTION	COMMENT	SUPPORT MATERIAL	SUPPORTED MATERIAL
School assessment	Individual	4	hours	Letter (A - F)	70		Only general dictionary in mother tongue/Norwegian/English in paper version	
Home assessment	Group		-	Letter (A - F)	30		All printed and written supporting material	

Course Facts

Credits: 7.5
Fagområde: Logistics
Level of study: Bachelor
Program of study: Bachelor i logistikk og SCM
Campus: Molde
Course name in Norwegian Nynorsk: Transport og økonomisk utvikling
Language of examination: Norwegian, English
Language of instruction: English
Startup: 2017 Spring
Assessment semester: 2017 Spring

Recommended previous knowledge

Knowledge of basic microeconomics and transport economics

Course 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.

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 paid 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

Working and learning activities

3 timer forelesning pr. uke samt øvinger

FORM OF ASSESSMENT	GROUPING	DURATION	TYPE OF DURATION	GRADING SCALE	PROPORTION	COMMENT	SUPPORT MATERIAL	SUPPORTED MATERIAL
School assessment	Individual	4	hours	Letter (A - F)	60	Karakteren beregnes som et veiet gjennomsnitt av de to delkarakterene, og både oppgaven og eksamenen skal være bestått	All printed and written supporting material + calculator with empty memory	
Home assessment	Individual	-		Letter (A - F)	40	Obligatorisk oppgave	All printed and written supporting material + calculator with empty memory	

Exchange Study Programme Bachelor's level

Fakta om programmet

Studiepoeng: 30

Varighet: 1 semester

Studiemodus: Heltid

Stuedsted: Molde

Studienivå: 1. syklus (bachelor)

Kull: 2016

Studieprogram: Exchange Programme Bachelor's level

Fakultet: Logistikk

Studieplanansvarlig: Olav Hauge, Anette Kristin Myrstad

Informasjon om studiet

The international Bachelor's level programme is aiming at offering international students an opportunity to integrate one or two semesters, i.e. 30 or 60 ECTS credits, into their own studies at home. The courses are selected from the 2nd or 3rd year level of our Bachelor's programmes in Business Administration, Logistics and Supply Chain Management, and Sport Managements. Instead of offering very basic and general courses, we have chosen to focus most on our specialities by offering courses that you will not find everywhere.

Students are free to combine the courses offered under this programme, but it is the responsibility of each exchange student to make sure the combination is approved by their sending institution through a signed learning agreement. A full semester should comprise courses totalling at least 30 credits, and equivalently a full academic year must comprise at least 60 credits.

Målgruppe

International students at the Bachelor's level.

This programme is only open for exchange students. If you as an exchange student have any questions about admission, prerequisites etc, please contact the International Coordinator: post@himolde.no

Opptakskrav og rangering

Most of the courses will be available to all students having completed basic courses in business administration, economics and mathematics. **It is the responsibility of the student to check the prerequisites listed in the course description, and to find a suitable course combination.**

Oppbygning og sammensetning

Most classes are taught over a full semester. A typical course will have between 2 and 6 lecture hours per week, and may have additional group work and assignments/course work. The assessment will partly be based on compulsory coursework and examinations. All grades are either passed/not passed or ECTS letter grades (A through F).

Exchange Study Programme Bachelor's level

EMNE	2016 HØST	2017 VÅR
IDR207 Idrettens samfunnsansvar	7.5	
IDR210 Adventure Management	7.5	
IDR302 Leadership in Performance Organizations	7.5	
IDR303 International Business of Sport	7.5	
IDR306 Spillteori og sportsøkonomi	7.5	
LOG500 Styringsmodeller og operasjonsanalyse	7.5	
SCM300 Survey Design	7.5	
SCM500 Internasjonale transporter og forsyningskjeder	7.5	
SPR315 Norsk I - språk og kultur	7.5	
TRA500 Europeisk transportpolitikk	7.5	
IDR100 Idrettens organisering og ledelse I		7.5
IDR105 Sport, media og journalistikk		7.5
IDR501 Idrettens organisering og ledelse II		7.5
LOG206 Elektronisk handel		7.5
SPR315 Norsk I - språk og kultur		7.5
SØK640 Internasjonal handel		7.5
TRA410 Transport og økonomisk utvikling		7.5
Sum (0 total)	0	0

IDR207 Managing Sport for Development

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Idrett

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i Sport Management (idrettsledelse)

Stuedsted: Molde

Kursnavn på engelsk: Managing Sport for Development

Språk for eksamen: Engelsk

Undervisningsspråk: Engelsk

Startsemester: 2016 Høst

Eksamenssemester: 2016 Høst

Anbefalte forkunnskaper

None in particular

Emneinnhold

- Sport development vs. Sport for Development
- Sport for Development theory
- Sport for Development policy
- Sport for Development practice
- Managing Sport for Development organizations
- Monitoring and evaluating Sport for Development

Forventet læringsutbytte

Completing this course the candidate should be able to:

- Demonstrate knowledge of central principles and concepts in the Sport for Development literature
- Critically assess different Sport for Development projects and initiatives
- Demonstrate Sport for Development activities in practice
- Demonstrate knowledge of how different leadership strategies applies in different cultural contexts
- Demonstrate different leadership strategies' relevancy in Sport for development organizations
- Work with/in a Sport for Development organization

Arbeids- og læringsaktiviteter

3-6 hours of lectures weekly. Combination of regular lectures, group work, group assignments and presentations, which requires the students to actively contribute to own learning.

OBLIGATORISK ARBEIDSKRAV	ANTALL ARBEIDSKRAV	PÅKREVDE ARBEIDSKRAV	KOMMENTAR
Oppgave(r)	4	4	Four individual assignments (max 1000 words). The assignments will form the basis of group work, discussions and presentations.

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Hjemmeeksamen	Gruppe	1	uker	Bokstavkarakter (A - F)	100	Groups of two students. Essay with given topic.	Alle trykte og skrevne hjelpemidler	

IDR210 Adventure Management

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Idrett

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i Sport Management (idrettsledelse)

Stuedsted: Molde

Kursnavn på engelsk: Adventure Tourism Management

Språk for eksamen: Engelsk

Undervisningsspråk: Engelsk

Startsemester: 2016 Høst

Eksamenssemester: 2016 Høst

Emneinnhold

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

Forventet læringsutbytte

Students should...:

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

Arbeids- og læringsaktiviteter

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

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Hjemmeeksamen	Gruppe	-		Bokstavkarakter (A - F)	75		Alle trykte og skrevne hjelpemidler	
Muntlig skoleeksamen	Gruppe	-		Bokstavkarakter (A - F)	25		Alle trykte og skrevne hjelpemidler	

IDR302 Leadership in Performance Organizations

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Idrett

Emneansvarlig: Kjell Marius Herskedal

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i Sport Management (idrettsledelse)

Studiested: Molde

Kursnavn på engelsk: Leadership in Performance Organizations

Kursnavn på nynorsk: Leadership in Performance Organizations

Språk for eksamen: Engelsk

Undervisningsspråk: Engelsk

Startsemester: 2016 Høst

Eksamenssemester: 2016 Høst

forkunnskapskrav, emneliste: ADM100 Organisasjonsteori og -psykologi
IDR310 Prestasjonspsykologi

Emneinnhold

- Performance leadership
- Performance management
- Organizational consistency
- Teamwork

Forventet læringsutbytte

After the completion of the course, the students will acquire in-depth understandings related to:

- Performance Cultures
- Leading in performance organizations
- Self and collective development
- Teamwork

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

- Explaining terminology and theoretical approaches within leadership
- Work with real cases and presenting them
- Working in groups

Arbeids- og læringsaktiviteter

Five seminars during the semester consisting of lectures, interviews of information-rich persons (experts), group work, group assignments, and group presentations.

Evaluering

The candidates are individually evaluated on the basis of four equally counting group assignments/presentations. Peer evaluations might be employed.

Godkjent av: Kjell Marius Herskedal

OBLIGATORISK ARBEIDSKRAV	ANTALL ARBEIDSKRAV	PÅKREVDE ARBEIDSKRAV	KOMMENTAR
Oppgave(r)	1	Yes	4-5 group assignments

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Hjemmeeksamen	Gruppe	-		Bokstavkarakter (A - F)			Alle trykte og skrevne hjelpemidler	

IDR303 International Business of Sport

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Idrett

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i Sport Management (idrettsledelse)

Stuedsted: Molde

Kursnavn på engelsk: International Business of Sport

Kursnavn på nynorsk: International Business of Sport

Språk for eksamen: Engelsk

Undervisningsspråk: Engelsk

Startsemester: 2016 Høst

Eksamenssemester: 2016 Høst

Emneinnhold

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.

Forventet læringsutbytte

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.

Arbeids- og læringsaktiviteter

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

OBLIGATORISK ARBEIDSKRAV	ANTALL ARBEIDSKRAV	PÅKREVDE ARBEIDSKRAV	KOMMENTAR
Oppgave(r)		Ja	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.

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Hjemmeeksamen	Individuell		-	Bokstavkarakter (A - F)	60		Alle trykte og skrevne hjelpemidler	
Hjemmeeksamen	Gruppe		-	Bokstavkarakter (A - F)	40		Alle trykte og skrevne hjelpemidler	

IDR306 Spillteori og sportsøkonomi

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Idrett

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i Sport Management (idrettsledelse)

Stuedsted: Molde

Kursnavn på engelsk: Game Theory and Sports Economics

Kursnavn på nynorsk: Spillteori og sportsøkonomi

Språk for eksamen: Norsk, Engelsk

Undervisningsspråk: Norsk, Engelsk

Startsemester: 2016 Høst

Eksamenssemester: 2016 Høst

Anbefalte forkunnskaper

Ingen spesielle, men grunnlag i økonomiske fag vil være en fordel

Emneinnhold

Følgende tema omhandles:

- Nash likevekt
- Spillteori og informasjon
- Simultane/Sekvensielle spill
- Dominante Strategier
- Dominerte Strategier

Forventet læringsutbytte

Gi en introduksjon til spillteori med hovedvekt på anvendelser innen fotballøkonomi, fotballstrategi og fotballmanagement. Hensikten med kurset er altså å belyse hvordan moderne spillteori kan anvendes på fotballøkonomiske problemstillinger i bred forstand.

Etter endt kurs skal studenten:

- Ha grunnleggende kunnskap i (enkel) spillteori
- Kunne anvende og forstå anvendelser av spillteori innenfor idrettsstrategiske problemstillinger
- Være i stand til å reflektere over, (og i noen grad) forstå og diskutere sentrale strategisk-økonomiske problemstillinger innen norsk og internasjonal idrett

Arbeids- og læringsaktiviteter

Se egen forelesningsplan

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Skoleeksamen	Individuell	4	timer	Bokstavkarakter (A - F)	100		Kalkulator med tomt minne+generell ordbok morsmål/norsk/engelsk i papirformat	

LOG500 Styringsmodeller og operasjonsanalyse

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Logistikk

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i logistikk og SCM

Studiested: Molde, Kristiansund

Kursnavn på engelsk: Management Models and Operations Research

Kursnavn på nynorsk: Styringsmodeller og operasjonsanalyse

Språk for eksamen: Norsk, Engelsk

Undervisningsspråk: Norsk, Engelsk

Startsemester: 2016 Høst

Eksamenssemester: 2016 Høst

Anbefalte forkunnskaper

2-årig økonomisk-administrativt studium eller tilsvarende og SCM200 - Lager- og produksjonsplanlegging - eller tilsvarende. Det vil være hensiktsmessig å kunne bruke regneark for å løse øvelser og oppgaver.

Emneinnhold

Emnet er en videreføring av temaer behandlet i SCM200. Modeller for styring av de enkelte leddene i verdikjedene vil stå sentralt. Det vil bli lagt særlig vekt på problemer innenfor prognoser, distribusjon, lager og produksjon. Innenfor produksjon vil produksjonshovedplanlegging samt styringprinsippene i MRP I (nettobehovsberegning) bli behandlet. Innenfor aggregert produksjonsstyring behandles de enkleste situasjonene. I denne sammenheng brukes enkle operasjonsanalytiske metoder og eget verktøy. Innenfor lagerstyring behandles deterministiske modeller for familier av varer, begrensinger av ressurser, rabatter og noen stokastiske lagermodeller. Videre behandles lot sizing som eget tema, prognoser med enkle prognosemodeller og enkle tilfeller av tidsplanlegging. En rekke kvantitative modeller for de nevnte områdene vil bli presentert og brukt eksplisitt i formulering og løsning av aktuelle problemstillinger.

Forventet læringsutbytte

Emnet tar sikte på å beskrive enkle modeller for ulike deler i verdikjeden til en bedrift.

Studenten skal ved fullført emne ha kjennskap til og kunne benytte modeller for:

- prognoser
- aggregert planlegging
- lager og produksjonsstyring ved deterministisk og usikker etterspørsel
- lot sizing
- tidsplanlegging av operasjoner

Arbeids- og læringsaktiviteter

3 timer forelesning per uke.

OBLIGATORISK ARBEIDSKRAV	ANTALL ARBEIDSKRAV	PÅKREVDE ARBEIDSKRAV	KOMMENTAR
Oppgave(r)	1	1	

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Skoleeksamen	Individuell	5	timer	Bokstavkarakter (A - F)	80		Alle trykte og skrevne hjelpemidler + kalkulator som kan inneholde data	
Hjemmeeksamen	Gruppe	-		Bokstavkarakter (A - F)	10		Alle trykte og skrevne hjelpemidler + kalkulator som kan inneholde data	
Hjemmeeksamen	Gruppe	-		Bokstavkarakter (A - F)	10		Alle trykte og skrevne hjelpemidler + kalkulator som kan inneholde data	

EMNE	VEKTINGSREDUKSJON
LOG502	7,5
BØK350	3,5

SCM300 Survey Design

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Logistikk

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i logistikk og SCM

Stuedsted: Molde

Kursnavn på engelsk: Survey Design

Språk for eksamen: Engelsk

Undervisningsspråk: Engelsk

Startsemester: 2016 Høst

Eksamenssemester: 2016 Høst

Anbefalte forkunnskaper

Equivalent to MAT110 Statistikk I.

Emneinnhold

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.

Forventet læringsutbytte

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

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Hjemmeeksamen	-	-	-	Bokstavkarakter (A - F)	100		Alle trykte og skrevne hjelpemidler	

SCM500 Internasjonale transporter og forsyningskjeder

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Logistikk

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i logistikk og SCM

Studiested: Molde

Kursnavn på engelsk: International Transportation and Distribution

Kursnavn på nynorsk: Internasjonale transporter og forsyningskjeder

Språk for eksamen: Norsk, Engelsk

Undervisningsspråk: Norsk, Engelsk

Startsemester: 2016 Høst

Eksamenssemester: 2016 Høst

Anbefalte forkunnskaper

Det anbefales at man har gjennomført grunnleggende kurs i økonomi, og grunnleggende kjennskap til logistikk er en fordel.

Emneinnhold

Kurset dekker følgende emner: Internasjonale varestrømmer. Innføring i teori rundt internasjonal handel. Introduksjon til internasjonal logistikk og Supply Chain Management. Leverings- og betalingsbetingelser. Internasjonale transporter med ulike transportmodi, eksempelvis flyfrakt og sjøtransport. Dokumentasjon og forsikring i internasjonal transport.

Forventet læringsutbytte

Etter fullført emne skal studenten:

- ha kjennskap til tema som har betydning for styring/koordinering av internasjonal transport med vekt på internasjonal handel og hvordan transportnettverkene er laget for å kunne møte den etterspørsel slik handel skaper.
- ha kjennskap til dokumentasjon og forsikring.

Arbeids- og læringsaktiviteter

3 timer forelesninger per uke.

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Skoleeksamen	Individuell	4	timer	Bokstavkarakter (A - F)	60	Karakteren beregnes som et veiet gjennomsnitt av de to delkarakterene, og både semesteroppgaven og eksamenen skal være bestått	Alle trykte og skrevne hjelpemidler	
Hjemmeeksamen	-	-	-	Bokstavkarakter (A - F)	40	Semesteroppgave	Alle trykte og skrevne hjelpemidler	

SPR315 Norsk I - språk og kultur

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Språk

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i logistikk og SCM

Stuedsted: Molde

Kursnavn på engelsk: Norwegian I Language and Culture

Kursnavn på nynorsk: Norsk I - språk og kultur

Språk for eksamen: Norsk

Undervisningsspråk: Norsk, Engelsk

Startsemester: 2016 Høst

Eksamenssemester: 2016 Høst, 2017 Vår

Anbefalte forkunnskaper

Ingen spesielle

Emneinnhold

Begynneropplæring i grunnleggende norsk grammatikk og ordforråd, med utgangspunkt i egen lærebok og arbeidsbok. I tillegg vil det bli benyttet kompendier med tekster og temaer hentet fra lokalt næringsliv, kultur og historie, samt praktiske øvelser i kommunikasjon i timene. Gjennom gruppediskusjoner over utvalgte aktuelle emner vil studenten bli kjent med viktige sider ved det norske samfunnet, med utgangspunkt i studie- og lokalmiljøet. Både lærebok og de utvalgte tekstene vil danne grunnlag for skriftlige og muntlige øvinger.

Forventet læringsutbytte

Studenten skal etter fullført emne:

- være kjent med norsk språk, både grammatikk og ordforråd.
- kunne forstå norsk dagligtale, og kunne kommunisere både muntlig og skriftlig på norsk, såvel som å lese enkle norske tekster.

Det legges vekt på interkulturell læring, der studenten skal få kjennskap til grunnleggende trekk ved det norske samfunn, med utgangspunkt i egen kommune og fylkets næringsliv, geografi og natur, det norske politiske system, helse- og velferdspolitik, og kjente sosiale og kulturelle forhold.

Arbeids- og læringsaktiviteter

3 hours per week.

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.

Please note that available places for this course are limited. The first 25 students that get their Learning Agreement signed by all parties will be prioritized.

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Skoleeksamen	Individuell	4	timer	Bokstavkarakter (A - F)	100		-	

AKTIVITET	VARIGHET	VARIGHETSTYPE	KOMMENTAR
Forelesninger	3	timer	

TRA500 Europeisk transportpolitikk

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Logistikk

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i logistikk og SCM

Studiested: Molde

Kursnavn på engelsk: European Transport Policies

Kursnavn på nynorsk: Europeisk transportpolitikk

Språk for eksamen: Norsk, Engelsk

Undervisningsspråk: Norsk, Engelsk

Startsemester: 2016 Høst

Eksamenssemester: 2016 Høst

Anbefalte forkunnskaper

Det er en fordel med forkunnskaper tilsvarende TRA310 Transportøkonomi

Emneinnhold

Hovedlinjer i europeisk transportpolitikk med vekt på transeuropeiske nettverk (TEN) og EUs transportpolitiske dokumenter. Kurset dekker både passasjer og godstransport innenfor de ulike transportformer. Infrastrukturspørsmål, miljøspørsmål, avgifts- og prispolitikk og virkninger for Norge diskuteres.

Forventet læringsutbytte

Studenten skal etter fullført emne:

- kjenne til ulike forhold om europeisk transportpolitikk både innen og utenfor EU.
- være i stand til en kritisk gjennomgang av transportpolitikk og peke på andre løsninger som kan gi en bedre eller mer effektiv politikk for å løse transportutfordringer i ulike europeiske land.
- kjenne til nyere forskningsresultater på feltet som peker på alternative løsninger og andre måter å organisere transport på som kan takle nærings- og miljøutfordringer.
- være i stand til på egenhånd å skaffe informasjon og forskningsbaserte utfordringer som europeiske transportselskaper og –organisasjoner må finne løsninger på.

Arbeids- og læringsaktiviteter

3 timer forelesning pr. uke

OBLIGATORISK ARBEIDSKRAV		ANTALL ARBEIDSKRAV		PÅKREVDE ARBEIDSKRAV		KOMMENTAR		
Oppgave(r)								
VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDL
Skoleeksamen	Individuell	4	timer	Bokstavkarakter (A - F)	70		Kun generell ordbok morsmål/norsk/engelsk i papirformat	
Hjemmeeksamen	Gruppe	-		Bokstavkarakter (A - F)	30		Alle trykte og skrevne hjelpemidler	

IDR100 Idrettens organisering og ledelse I

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Idrett

Emneansvarlig: Solveig Straume

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i Sport Management (idrettsledelse)

Studiested: Molde

Kursnavn på engelsk: Idrettens organisering og ledelse I

Kursnavn på nynorsk: Idrettens organisering og ledelse I

Språk for eksamen: Norsk, Engelsk

Undervisningsspråk: Norsk, Engelsk

Startsemester: 2017 Vår

Eksamenssemester: 2017 Vår

Anbefalte forkunnskaper

Ingen spesielle

Emneinnhold

- Idrettshistorie
- Idrettssosiologi
- Idrettens organisering i Norge
- Idrettspolitikk
- Idrett og media
- Idrett, globalisering og kommersialisering

Forventet læringsutbytte

Kandidaten skal ved fullført kurs:

- Kunne redegjøre for og vise forståelse for idrettens plass i ulike kulturer som den greske antikken, Storbritannia på 1800-tallet og Norge fra 1850 og til i dag
- Kjenne til noen sentrale teoretiske perspektiv for å forstå og forklare idretten sosiologisk
- Kunne gjøre rede for idrettens rolle som frivillig organisasjon i Norge og historiske endringer i forhold til andre samfunnsinstitusjoner som stat og marked
- Kjenne til og forstå hvordan idrettens ulike nasjonale organisasjoner og institusjoner er organisert og ledet og hvordan disse organisasjonene forholder seg til hverandre
- Kunne redegjøre for statlig og organisasjoners idrettspolitikk og utforming av denne, samt kjenne til noen sentrale teorier for politikkdannelse
- Kjenne noen sentrale perspektiver for å forstå og forklare hvilken rolle media og kommersielle aktører spiller ovenfor (norsk) idrett
- Ha kjennskap til og kunne diskutere idrettens skyggesider

Arbeids- og læringsaktiviteter

3 timer lærerstyrt forelesning pr. uke med fokus på studentaktiv læring. i tillegg vil det arrangeres gjesteforelesninger og besøk til ulike idrettsorganisasjoner i lokalsamfunnet i og rundt Molde.

OBLIGATORISK ARBEIDSKRAV	ANTALL ARBEIDSKRAV	PÅKREVDE ARBEIDSKRAV	KOMMENTAR
Oppgave(r)	2	2	

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Hjemmeeksamen	Gruppe	1	semester	Bokstavkarakter (A - F)	60		Alle trykte og skrevne hjelpemidler	
Digital skoleeksamen - Inspera	Individuell	2	timer	Bokstavkarakter (A - F)	40		-	

IDR105 Sport, media og journalistikk

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Idrett

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i Sport Management (idrettsledelse)

Stuedsted: Molde

Kursnavn på engelsk: Sport, media and journalism

Kursnavn på nynorsk: Sport, media og journalistikk

Språk for eksamen: Norsk

Undervisningsspråk: Norsk

Startsemester: 2017 Vår

Eksamenssemester: 2017 Vår

Emneinnhold

- Sport og media komplekset
- Sportsjournalistikk
- Mediekunnskap

Forventet læringsutbytte

Studentene skal:

- ha kunnskap om det gjensidige avhengighetsforhold som eksisterer mellom idrett og media.
- ha kunnskap om hvordan medierte fortellinger om idrett og idrettsutøvere blir skapt.
- kritisk kunne analysere de medierte fortellinger om idrett og idrettsutøvere.
- ha kunnskap om hvordan journalister tenker og planlegger sine reportasjer i både avis og tv.
- ha kunnskap om hvordan idrett og sport blir formidlet via nye medier
- kunne planlegge, produsere og publisere en sak som blogginnlegg eller som nyhetssak på en hjemmeside

Arbeids- og læringsaktiviteter

3 timer forelesning pr uke. I tillegg kommer både individuelle og gruppebaserte arbeidsoppgaver.

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Mappevurdering	Individuell	1	semester	Bokstavkarakter (A - F)	100	Individuell mappeevaluering bestående av flere mindre innleveringer i løpet av semesteret, både selvvalgte og oppgitte temaer.	Alle trykte og skrevne hjelpemidler	

IDR501 Idrettens organisering og ledelse II

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Idrett

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i Sport Management (idrettsledelse)

Stuedsted: Molde

Kursnavn på engelsk: The Organisation of Sport II

Kursnavn på nynorsk: Idrettens organisering og ledelse II

Språk for eksamen: Norsk

Undervisningsspråk: Norsk

Startsemester: 2017 Vår

Eksamenssemester: 2017 Vår

Anbefalte forkunnskaper

IDR100 Idrettens organisering og ledelse I, ADM100 Organisasjon I og enten ADM201 Innføring i samfunnsvitenskapelig metode eller ADM205 Organisasjon II

Emneinnhold

- Idretten som en institusjon i samfunnet
- Idrettens forhold til markedets og statens institusjoner
- Endringsprosesser i idrettens organisasjoner
- Ledelse i idretten
- Modernisering og transnasjonalisering i internasjonal idrett

Forventet læringsutbytte

Studenten skal ved fullført kurs:

- Redegjøre for sosiologiske og organisasjonsteoretiske perspektiver på idrettens egenart og samspill med andre organisasjoner i samfunnet
- Kunne analysere idrettens organisasjoner ut fra sosiologiske og organisasjonsteoretiske perspektiver

Arbeids- og læringsaktiviteter

Se egen forelesningsplan

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Hjemmeeksamen	-	-	-	Bokstavkarakter (A - F)	60		Kun generell ordbok morsmål/norsk/engelsk i papirformat	
Hjemmeeksamen	-	-	-	Bokstavkarakter (A - F)	40	Obligatorisk innlevering	-	

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Logistikk

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i logistikk og SCM

Stuedsted: Molde

Kursnavn på engelsk: e-Business

Undervisningsspråk: Engelsk

Startsemester: 2017 Vår

Eksamenssemester: 2017 Vår

Anbefalte forkunnskaper

None

Emneinnhold

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.

Forventet læringsutbytte

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

Arbeids- og læringsaktiviteter

4 hours (2 + 2) of lecture per week.

OBLIGATORISK ARBEIDSKRAV	ANTALL ARBEIDSKRAV	PÅKREVDE ARBEIDSKRAV	KOMMENTAR
Oppgave(r)			Compulsory exercises within given deadlines.

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDI
Skoleeksamen	Individuell	4	timer	Bokstavkarakter (A - F)	100		Kun generell ordbok morsmål/norsk/engelsk i papirformat	

SPR315 Norwegian I Language and Culture

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Språk

Emneansvarlig: Anette Kristin Myrstad

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i logistikk og SCM

Stuedsted: Molde

Kursnavn på engelsk: Norwegian I Language and Culture

Kursnavn på nynorsk: Norsk I - språk og kultur

Språk for eksamen: Norsk

Undervisningsspråk: Norsk, Engelsk

Startsemester: 2024 Vår

Eksamenssemester: 2024 Vår

Anbefalte forkunnskaper

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

Emneinnhold

To teach students Norwegian, both the grammar and vocabulary.

Forventet læringsutbytte

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.

Arbeids- og læringsaktiviteter

3 hours per week.

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.

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Skoleeksamen	Individuell	4	timer	Bokstavkarakter (A - F)	100	-		

AKTIVITET	VARIGHET	VARIGHETSTYPE	KOMMENTAR
Forelesninger	3	timer	

SØK640 Internasjonal handel

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Logistikk

Emneansvarlig: Olav Hauge

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i logistikk og SCM

Studiested: Molde

Kursnavn på engelsk: International trade

Kursnavn på nynorsk: Internasjonal handel

Språk for eksamen: Norsk, Engelsk

Undervisningsspråk: Engelsk

Startsemester: 2017 Vår

Eksamenssemester: 2017 Vår

Anbefalte forkunnskaper

Grunnleggjande innsikt i samfunnsøkonomi

Forventet læringsutbytte

Studenten skal etter fullført emne:

- kunne forklare hvorfor land handler med hverandre
- kunne definere hva som forstås med komparative fortrinn
- kunne presentere ulike handelsmodeller
- ved hjelp av analytiske modeller å forklare hvordan handelsmønster skapes og utvikles
- kunne identifisere faktorer som forklarer utviklingen i handelsmønster
- kunne påvise sammenhenger mellom bytteforhold og handelsmønster
- kunne drøfte effekter av ulike typer handelspolitikk
- kunne drøfte hvordan ulike handelspolitiske påvirker handelen
- kunne påvise vinnere og tapere når en stat velger å sette inn handelspolitiske tiltak

Arbeids- og læringsaktiviteter

3 timer forelesning per uke.

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Skoleeksamen	Individuell	4	timer	Bokstavkarakter (A - F)	100		Kun generell ordbok morsmål/norsk/engelsk i papirformat	

TRA410 Transport og økonomisk utvikling

Fakta om emnet

Studiepoeng: 7.5

Fakultet: Logistikk

Studienivå: 1. syklus (bachelor)

Studieprogram: Bachelor i logistikk og SCM

Stuedsted: Molde

Kursnavn på engelsk: Transport and Economic Development

Kursnavn på nynorsk: Transport og økonomisk utvikling

Språk for eksamen: Norsk, Engelsk

Undervisningsspråk: Engelsk

Startsemester: 2017 Vår

Eksamenssemester: 2017 Vår

Anbefalte forkunnskaper

Grunnleggende mikroøkonomi tilsvarende SØK200 og transportøkonomi tilsvarende TRA310 er en fordel.

Emneinnhold

I første del av kurset gis en innføring i sentrale økonomiske teorier og modeller for sammenhengen mellom transport og økonomisk aktivitet, med en viss vekt på lokalisering av virksomheter. I andre del av kurset presenteres økonomiske teorier og modeller som mer spesifikt fokuserer på betydningen av transport og transportinfrastruktur. Teoriene og modellene suppleres med erfaringer fra gjennomførte studier på feltet.

Forventet læringsutbytte

Å gi studenten en forståelse for hvilke økonomiske krefter som er bestemmende for lokalisering av økonomisk aktivitet; bedrifter, næringer, byer etc. Det vil særlig bli fokusert på betydningen av transport og transportinfrastruktur som regionaløkonomisk virkemiddel.

Studenten skal etter fullført emne:

- kunne både etterspørre informasjon og være i stand til å forstå informasjon gitt i FoU-arbeid innen dette temaet
- anvende informasjon i strategisk rettet arbeid innen offentlig og privat sektor (f eks. utforming av areal- og transportplaner, arbeid med lokalisering av bedrifter).
- ha kunnskap som gir en plattform for videre studier innen feltet.

Arbeids- og læringsaktiviteter

3 timer forelesning pr. uke samt øvinger

VURDERINGSFORM	GRUPPERING	VARIGHET	VARIGHETSTYPE	KARAKTERSKALA	ANDEL	KOMMENTAR	HJELPEMIDLER	HJELPEMIDLER
Skoleeksamen	Individuell	4	timer	Bokstavkarakter (A - F)	60	Karakteren beregnes som et veiet gjennomsnitt av de to delkarakterene, og både oppgaven og eksamenen skal være bestått	Alle trykte og skrevne hjelpemidler + kalkulator med tomt minne	
Hjemmeeksamen	Individuell	-		Bokstavkarakter (A - F)	40	Obligatorisk oppgave	Alle trykte og skrevne hjelpemidler + kalkulator med tomt minne	

MSc in Logistics / master i logistikk

Study Facts

Credits: 120

Duration: 4 semesters

Study mode: Full-time

Campus: Molde

Level of study: Master

Year: 2016

Program of study: Master of Science in Logistics

Faculty: Logistics

Person in charge: Arnt Buvik

Introduction

Logistics entails organizing the flow of products, services and information from raw materials to the end user. For a large number of industrial and business companies, achieving high quality logistics operations will be the key competitive factor for future success. There is therefore a considerable focus on logistics in the business world. Accordingly, the job market for students with a master's degree in logistics is generally good.

The program aims to give a thorough analysis and understanding of problems, challenges and solutions associated with all parts of the value chains: purchasing and supply, production planning, inventory management and distribution planning, including the management of transport services. Understanding the relations between different value chains, (Supply Chain Management) is also a major focus in the program.

The approaches to problem solving in logistics requires a broad understanding of the subject matter in order to arrive at satisfactory solutions on the basis of an analysis of alternatives. Logistics as a scientific discipline thus rests on a broad spectrum of disciplines, such as economics, information/communication technology, business administration, organization and management, as well as quantitative methods based on mathematics, operations research and statistics. The involvement of all these topics in logistics makes it exciting and challenging to study logistics at this level.

Students in the program will choose one of the two main specializations, called *Operation Management (OM)* and *Supply Chain Management (SCM)*. Students choosing the SCM-variant must – before the second semester starts – choose between three different sub- variants: Advanced Supply chain management, Information systems, and Transportation In SCM.

Operation Management is meant for students interested in quantitative methods for planning and management of activities involved in procurement, production, inventory and distribution within and across companies. Ideal backgrounds are logistics, business administration, engineering, mathematics and computer science, but most important is an interest and ability in the use of quantitative methods and models.

Supply Chain Management is suited for students with an interest in organization, business and to some extent social science. Although mathematics and statistics is used, the focus is more on the qualitative aspects involved in the

management of the value chain. Suitable backgrounds include supply chain management, economics, business administration, among others.

The program is taught entirely in English and currently includes students from more than 10 different countries, many outside Europe. This means that those participating in the program will have the benefit of belonging to a truly international group of students and to enhance their language skills, making them ready for logistics careers in an ever more globalized economy

Learning outcome

After completing the program, the successful candidate is expected to:

General Competence

- be able to communicate about professional issues relevant to SCM and logistics, on an expert- as well as a common level
- be able to apply acquired knowledge and skills within new areas of research and applications
- be able to read scientific papers and other academic work with a critical view

Knowledge

- have advanced knowledge about supply chains and logistics in general
- have specialized knowledge about selected topics when dealing with different types of supply chains
- have extensive knowledge of scientific theories and methods relevant to managing supply chains and operations within such chains
- have advanced knowledge of the relations between supply chains and relevant theories within economics and business administration
- have advanced knowledge about logistics, operations research and operations management in general

Skills

- be able to use advanced theory and methods to identify inefficiencies in supply chains
- be able to propose improving organizational/structural changes and suggest ways of implementing such changes in a supply chain.
- be capable of performing a limited supervised research project within a supply chain in line with ruling academic standards of the field
- be able to identify operational challenges/problems in supply chains and logistics systems and to assert the relevance of models and methods to resolve these
- be able to select relevant models and methods for approaching a given logistical problem.
- be able to chose and use relevant software and technology in implementing computer-assisted solution methods

Target audience

The program targets a wide variety of highly motivated students with an interest for studying logistics in an international environment.

Required prerequisite knowledge

A bachelor's degree equivalent to 180 ECTS credits is required. At least 80 ECTS of the bachelor's degree should be related to a specialization relevant to logistics or applicants should have a strong background in one or more of the main methodologies used in the study program like mathematics, statistics, organization or marketing.

Applicants from some countries will be required to document a recognized test in English language. See "Information for international applicants" at the English home page - www.himolde.no/english

Work- and learn methods

The program courses use a wide range of teaching and study methods. Standard courses run over one semester with classes once or twice per week. Students have homework in terms of exercises, computer lab work, case studies and essays, both individually and in groups. The one- or two-weeks seminars in the third semester are intensive courses with a mix of lectures, homework, discussions and student presentations. Students finalize the degree by carrying out a supervised research project and write their thesis on basis of this. Students enrolled in the program are expected to do at least 40 hours of study work per week. The program is not suited for distance learning.

Examination and assessment methods

Student assessment is made on basis of monitored exams, essays, written case study reports and oral presentations.

Required progression

An achievement of at least 75% of nominal study progression during an academic year is required in order to maintain the place in the study programme.

Internationalisation

The program offers students the possibility to go on exchange in the second semester. They can also write the master thesis at a university abroad. This gives international students the opportunity to work on master projects related to their home country. Students interested in doing so should contact the program coordinator early in their studies.

Further studies

The Master`s degree will qualify the candidate for admission to the PhD program in logistics at Molde University College, as well as other PhD programs in Norway or abroad. Admission to the PhD programs via the MSc program is dependent on excellent academic performance.

Content structure

In the first semester there will only be mandatory courses. There will be one common course for the two main varieties. In the second semester the SCM-students have to choose between 3 different sub-variants. There will be a mix of mandatory courses and elective courses. The latter can be chosen from a list of courses. The third and fourth semesters are structurally the same for all specializations. The series of one- or two weeks seminars in the third semester requires that each student follows at least ten seminars (10 weeks) selected from a set of more than 20 available topics. In addition all students have to write a proposal which is the starting point for the master thesis which is written in the fourth semester.

Some additional information about the MSc program can be found on [the MSc logistics program homepage](#).

MSc in Logistics - Supply Chain Management

COURSE	2016 AUTUMN	2017 SPRING	2017 AUTUMN	2018 SPRING
Supply Chain Management - Mandatory courses				
LOG708 Applied Statistics	7.5			
LOG711 Supply Chain Management 1	7.5			
SCM702 Purchasing and Supply Theory	7.5			
SØK710 Industrial Organization	7.5			
Three subvariants (see table below)		30		
LOG904 Seminars in Logistics			30	
LOG950 Master's Degree Thesis				30
Advanced Supply Chain Management - Subvariant nr.1				
LOG715 Business cases in SCM		7.5		
SCM703 Applied Supply Chain Management		7.5		
SCM705 Cost Management in SC		7.5		
Transportation in Supply Chain Management - Subvariant nr.2				
LOG715 Business cases in SCM		7.5		
TRA816 Maritime Transportation		7.5		
TRA820 Air Transport Economics		7.5		
Information systems in supply Chain Management - Subvariant nr.3				
IBE700 Enterprise Resource Planning (ERP) with SAP		7.5		
IDA710 Business processes and information modelling		7.5		
IDA715 Discrete Event Simulation		7.5		
Elective courses second semester (spring):				
JUR710 Contract Law		7.5		
LOG765 Project Planning and Control		7.5		
TRA700 Transportation Infrastructure Assessment		7.5		
TRA705 Urban Freight Logistics		7.5		

Courses from any of the other varieties in the master programs in logistics can also be chosen as an elective

COURSE	2016 AUTUMN	2017 SPRING	2017 AUTUMN	2018 SPRING
course				
Sum (120 total)	30	30	30	30

MSc in Logistics - Operation Management

COURSE	2016 AUTUMN	2017 SPRING	2017 AUTUMN	2018 SPRING
Operation Management - Mandatory courses				
LOG711 Supply Chain Management 1	7.5			
LOG713 Models for Production Management	7.5			
LOG716 Mathematical Modelling in Logistics	7.5			
LOG722 Inventory Management	7.5			
LOG733 Exact Optimization Methods in Logistics		7.5		
LOG820 Vehicle Routing with Heuristics		7.5		
Elective courses (see table below)		15		
LOG904 Seminars in Logistics			30	
LOG950 Master's Degree Thesis				30
Elective courses second semester (spring)				
IDA710 Business processes and information modelling		7.5		
IDA715 Discrete Event Simulation		7.5		
LOG765 Project Planning and Control		7.5		
Courses from any of the other varieties in the master programs in logistics can also be chosen as an elective course				
Sum (120 total)	30	30	30	30

MSc in Logistics - Seminars

Study Facts

Credits: 30

Duration: 1 semester

Study mode: Full-time

Campus: Molde

Level of study: Master

Year: 2016

English title: MSc in Logistics - Seminars

Program of study: MSc in Logistics - Seminars

Faculty: Logistics

Introduction

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. Basically the students can choose any seminars freely with two exceptions. The first exception is a seminar called "Research Design" – LOG904-101. 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. *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.

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 background 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.

Work- and learn methods

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

Content structure

General information on the seminars in logistics

Here is some practical information about the seminars in LOG904. This information accompanies the program overview for the series. The program includes the numbering of the seminars that you can use to find the right one in Studentweb. Also, the location of each seminar is given. Changes to the program will always be announced via email to all students of the seminar series.

1. You sign up through Studentweb for each of the seminars you want to participate in. Registration will give you access to the room called LOG904 in Fronter. (May take a day after your first registration.) You can in general register as late as 12.00 on the Thursday before the seminar starts.
2. You sign up for ONE AND ONLY ONE SEMINAR PER WEEK. Remember to delete your registration if you find that you do not want a seminar that you first registered for. Do not sign up for all seminars 'in case' you would like to take them. This makes troubles both for the administration and the seminar holders as they have to plan with an incorrect number of students.
3. Some of the seminars are mandatory for some groups of student. You should also sign up for your mandatory seminars. The proposal presentation in week 49 is not like a seminar, but is treated as such in our administrative system. Make sure to register for this also.
4. In addition to the Research design seminar and the proposal, MSc logistics students need to choose 9 seminars or more. That is 9 or more seminars at your will. Remember, some of the seminars are quantitative, others more qualitative. The program labels the more quantitative ones under Operation Management, the more qualitative are under Supply Chain Management. Choose seminars that suit your background, your interests, and the topic for your master thesis if you have got one.
5. The seminars can be demanding in terms of work, so do not plan for other activities in the weeks you choose. (Monday to Friday afternoon usually.)
6. All seminars start Monday morning at 0915 unless something else is decided. Most of the lecturers will give lectures until 1200, and then give you some assignments for the next day, but there may be exception to this main rule. You must be prepared to use the afternoon and evening (even late) to prepare these assignments. 100% class participation is mandatory in all seminars.

7. Evaluation can be "passed / not passed" or ordinary grades A, B etc. This is decided by the lecturer. However, in most cases the evaluation will consist of a mix of the following three elements: Class participation, assignments (either in groups or individually) and a short final individual written exam during Friday.
8. In the Fronter room for Log 904 there will be a set of document folders, one for each seminar. Here documents for the individual seminars will be located. Most of the information you need will be given in this way, so keep an eye on the files.

Logistics seminars series - program fall 2016

COURSE	2016 AUTUMN
Mandatory for MSc Logistics	
LOG904-100 Proposal	5.0
LOG904-101 Research Design	2.5
Operation Management	
LOG904-110 Integrated Logistics and Operations: Learning Through Games	2.5
LOG904-115 Integer Optimization Models in Logistics	2.5
LOG904-116 Offshore Upstream Logistics	2.5
LOG904-119 Scheduling Models and Algorithms	2.5
LOG904-126 Decision Modeling and Metaheuristics	2.5
LOG904-127 Last Mile Delivery: Data Analytics And Models	2.5
LOG904-128 Distribution Management	2.5
LOG904-131 Applied Dynamic and Stochastic Programming for Logistics	2.5
LOG904-137 Health, Safety and Environment for the Offshore Oil and Gas Industry	2.5
LOG904-139 Energy Logistics	2.5
Supply Chain Management	
LOG904-109 Measuring and Managing Performance in Shipping, Logistics and Supply Chains	2.5
LOG904-113 Oil, Gas and Petroleum Products Flow	2.5
LOG904-117 Business Intelligence	2.5
LOG904-120 Effects on Logistic Performance from RFID and EPCIS	2.5
LOG904-122 Managing Channel Relationships	2.5
LOG904-124 Productivity Analysis	2.5
LOG904-125 Transportation Infrastructure and Economic Development.	2.5
LOG904-130 Port Logistics	2.5
LOG904-132 Visual Analytics	2.5
LOG904-133 Cross Cultural Management	2.5
LOG904-136 Business Model Innovation and Transformation	2.5
LOG904-140 Supply Chain Management in the Service Industry	2.5
LOG904-142 Inter Modal Freight Transport	2.5
LOG904-143 Cost Engineering	2.5
LOG904-146 Supply Base Logistics in the Oil and Gas industry	2.5
Petroleum Logistics	
LOG904-114 Game Theory	2.5
LOG904-141 Simulation Models in Logistics	2.5
LOG904-144 Gas Transport Infrastructure Planning	2.5
LOG904-145 Logistics in Petroleum Production	2.5
Sum (0 total)	0

LOG904-100 Proposal Presentations

Course Facts

Credits: 5.0

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Mandatory for MSc logistics.

Presentation of proposal for master thesis.

Each proposal will be given 15 minutes for an oral presentation and up to 30 minutes for answering questions from the supervisor and grader.

Exact time and room for each presentation will be published later.

LOG904-101 Research design

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Mandatory for MSc Logistics

Framework or appropriate plan for a study (research) used for formulating research problems, administration of data and analysis.

Learning objectives:

- Improve your ability to formulate and structure a research problem for your master thesis
- To ensure that your study is relevant to the research problem
- To ensure that the study use relevant and economical procedures
- To learn more about research methods and data collection methods

Professor Buvik gives introduction lectures to the course based on long experiences in advising Master students and PHD students.

Professor Thorstenson goes more specifically into research opportunities and research methods in quantitative logistics.

The library will instruct students about literature search, and several research projects will be presented by the college staff.

LOG904-110 Integrated logistics and operations: Learning through games

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

You will play several interactive internet-based games to further develop and refine your intuition and knowledge of operations and supply chain management, as applied to both services and manufacturing. As a prerequisite, students are expected to have basic knowledge of operations and logistics management, however, operations principles will be further reviewed and games can be played quite competently using qualitative analysis (good quantitative analysis generally further enhances performance). Topics may include product design, forecasting, pooling, the impact of variability, capacity management, managing bottlenecks, inventory management, managing lead times, customer responsiveness, and the bullwhip effect.

Lecturer: Glen Schmidt, University of Utah, USA. (glen.schmidt@business.utah.edu)

LOG904-115 Integer Optimization Models in Logistics.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The course focuses on training in developing and solving integer programming optimization models for logistics problems taken from distribution planning such as facility location, vehicle routing, combined location-routing, and network design. The purpose of the seminar is to give students a considerable hands-on AMPL modeling experience with analysis of results. The course deals with logic relations and the use of binary variables in modelling. The evaluation will be based on a set of assignments on selected topics. Prerequisite is completed LOG716 – Mathematical Modelling in Logistics course or practical experience in AMPL/CPLEX software.

Lecturer: Yauheni Kisialiou, Molde University College.

LOG904-116 Offshore upstream logistics.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

This seminar gives a historical outline of the production of oil and gas at the Norwegian Continental Shelf, elaborates on the importance of offshore upstream logistics and provides the open available web-resources. It gives an introduction to supply base logistics, analyses logistics problems related to supply base development and supply base operations and focuses on the importance of safeguarding health, safety and environment in supply base logistics operations. It presents upstream logistics activities of the Norwegian oil company Statoil including their planning, operation and analysis, as well as challenges and future development. Seminar gives an overview of existing scientific publications and research activities at Molde University College on fleet sizing and scheduling of vessels and helicopters servicing offshore installations. The evaluation will be based on a written assignment and the assignment's presentation.

Lecturer: Yauheni Kisialiou, Molde University College.

LOG904-119 Scheduling models and algorithms

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The course is aimed at providing a “guided tour” of the variety of models and systems of Deterministic Scheduling that arise in various areas of human activity including production, transport, school time-tabling etc. The range of different models allows us to demonstrate a considerable number of optimization and approximation techniques. We will discuss fast polynomial-time algorithms, touch the issues of computational complexity, present methods of directed enumeration, approximation algorithms with known performance guarantees, constructive and local search heuristics.

Lecturer: Vitaly Strusevich, University of Greenwich, UK (V.Strusevich@greenwich.ac.uk)

LOG904-126 Decision Modeling and Metaheuristics.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The seminar provides an introduction to the most effective Operations Research and Management Science techniques in the context of Optimization. This is an applied course in which students will be exposed to a variety of decision modeling applications from business to supply chain management. The course will show how to use Excel spreadsheet to solve them effectively. In particular, we apply the Linear Programming (LP), Integer LP and Non-LP methods in the Excel Solver to target logistic problems. We follow a modeling approach, from developing a mathematical model to the problem at hand, selecting the appropriate solving method, to analyzing the results.

Special emphasis is given to the families of solving methods, including exact and heuristic approaches, and the mono and multi-objective optimization models. In particular, we target the metaheuristic methodologies, the class of modern heuristic procedures, which are able to handle large difficult problems. We will cover some of the most promising methodologies, such as GRASP, tabu search, and genetic algorithms, which have recently shown their ability to find high-quality solutions in short computational times. We will show how to apply them, when the classic optimization methods fail to solve a problem.

Lecturer : Rafa Marti

LOG904-127 City logistics.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Logistics, as defined by the Council of Logistics Management, is the part of the supply chain process that plans, implements, and controls the efficient, effective flow and storage of goods, services, and related information, from the point of origin to the point of consumption, in order to meet customers' requirements. However, when logistics activities take place in urban areas they show unique characteristics making them different from the general logistics activities, which is the reason why freight transport in urban areas, and specifically the freight flows associated to the supply of city centres with goods, is usually referred to as "city logistics", "urban freight distribution" or "last mile logistics", to highlight that it is a phenomenon with differentiating characteristics.

Although urban freight represents a small fraction of the total transportation length for the companies, many studies estimate that the last mile cost accounts for about 28% of the total transportation cost. On the other hand logistic fleets are a net contributor to traffic congestion in urban and metropolitan areas. It is estimated that between the 15% and the 20% of the average flows in cities during rush hours correspond to logistics fleets. Therefore, the peculiarities of urban freight distribution, its share of transportation costs, its relevant impacts on congestion, energy consumption and emissions, and thus in the quality of life in cities, makes city logistic a differentiated qualified object of study.

The objectives of this seminar are to propose a systemic approach to City Logistics, looking at the system as a whole, identify its stakeholders and account for their mutual interactions. Analyze the organizational aspects, consequence of the different objectives, interests and roles that the stakeholders can play in the City Logistics scenarios. Discuss the decision levels in City Logistics, strategic, tactical, operational and real-time, the associated decision making processes and the models supporting them. The seminar will also address the problem of consensus formation, in cases when conflicts of interest rise as a consequence of costs incurred by stakeholders, to show how cooperative cost allocation can help in finding win to win solutions.

LOG904-128 Distribution management.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

This seminar will cover the following topics in distribution management:

1. Distribution management – overview
2. Vehicle routing – metaheuristics
3. Work schedules
4. Location
5. Applications

LOG904-131 Applied dynamic and stochastic programming for logistics

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The course focuses on building of optimization models and on key ideas of selected solution methods that are suitable for applied problems in logistics. Most real-world applications must involve quantitative techniques. Therefore, the course may help students with computational parts of their master theses and with quantitative challenges in their jobs in the future.

Step-by-step, we will follow and develop principal techniques for the cases where uncertainty (e.g. in demand) and time (e.g. planning horizon) must be considered. General outline –

Day 1: separability,

Day 2: decomposability,

Day 3: more decision stages,

Day 4: uncertainty by scenarios.

We will study fundamental concepts by using explanatory educational examples to get insight.

Motivating real-world industrial applications will be discussed, which have recently been solved with participation of the lecturer and his colleagues (also from Molde University College).

The lecturer utilizes (and reviews, if necessary) basic concepts from introductory optimization and mathematical courses.

Course participants will work in groups and they will defend submitted results of solved exercises on Day 5 during an oral exam

Lecturer: Pavel Popela, Brno University of Technology, Czech Rep. (popela@fme.vutbr.cz)

LOG904-137 Health, safety and environment for the offshore oil and gas industry

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The management of risk in the offshore and oil gas industry has been an important issue for at least the last two decades. On top of the health and safety considerations there are now stricter regulations regarding environmental protection. This short seminar shall provide the students with knowledge and understanding of the hazards that apply to offshore installations and ways to manage them. Basic topics in risk analysis and risk management will be presented. The main emphasis is on applications from the offshore oil and gas industry. The industry is involved in a global supply-chain that includes for example transportation, inventory control, handling of materials and parts, import/export facilitation and information technology. Thus, risks to both offshore installations and the whole supply chain will be investigated by using risk-based approaches. Relevant regulations and guidelines will be discussed focusing on national (Norwegian) and international (UK and US) legislation. Environmental regulations will be presented in more depth, focusing on topics e.g. emissions that have not been studied much in the literature.

Software to perform quantitative risk analysis and risk management will also be presented.

Lecturer: Christos A. Kontovas, Technical University of Denmark, (kontova@transport.dtu.dk)

LOG904-139 Energy Logistics

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The seminar gives basic understanding and concepts of undergoing process of global energy transition to a low-carbon economy and changes in energy strategies of energy dependent as well as oil exporting countries. Among the main topics are: The key drivers of future energy demand, supply and prices. Availability of resources and investments. The environmental constraints on energy resources. Advantages and disadvantages of each type of energy sources – hydrocarbon, nuclear, hydro, renewables. Inter-fuel competition in power generation. Innovative technologies and energy efficiency in industry, commerce and built environment. The renewable energy sources and technologies (solar energy, wind power, hydropower and geothermal energy) applicable to electricity generation (solar, wind, geothermal, biomass) and transportation applications (biofuels) - market potential, costs, financing and regulation. Production, storability and transport of renewables. Electricity transmission and infrastructure. Integration of renewable sources of energy into electricity supply schemes (smart grids). Short, medium, and long-term scenarios for global energy demand growth and future energy mix. Logistical challenges in offshore wind production, with a particular focus on maintenance.

The seminar provides practical understanding of modern energy environment and main drivers and competition on the world energy market especially in power generation.

Students gain up-to-date information and will be able to analyze trends and challenges on the global energy market, overview various renewable energy technologies and their applications and advantages, as well as understand international energy policies and state support mechanisms for innovative renewable technologies and their use in power generation and industry.

Various learning techniques (lecture, discussion, cases, group work, materials for self-study) are used to develop core skills (communication, negotiation and decision making abilities) and practice what is learnt in class.

Lecturer: Liudmila Studenikina, Gubkin Russian University of Oil and Gas

LOG904-109 Measuring and Managing Performance in Shipping, Logistics and Supply Chains

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The aim of this seminar is to provide a practical and comprehensive approach to the measurement and management of performance in shipping, logistics and supply chains.

Students will be exposed to key concepts that will be instrumental in developing a comprehensive system of measuring all aspects of an organization's performance in the shipping, logistics and supply chain contexts.

Based on the Balanced Scorecard method, the course will analyze in-depth how effective systems of organizational performance may be developed that encompass shareholder/financial, customer, operational/internal processes and resources/technological/human capabilities.

The students will also be provided with in-depth understanding of how to choose key performance indicators and how to use them effectively in a holistic approach that will enable accurate, comprehensive and dynamic management of performance at corporate and departmental level.

The course applies diverse learning techniques (lecture, cases, desk research, discussion, group work) and makes use of real, contemporary and updated case materials, providing the opportunity to develop core skills (communication, negotiation and decision making abilities). A blend of theory and practice maintains interest and maximizes the possibility of application of what is learnt in class.

Lecturer: Photis Panayides, Cyprus University of Technology (photis.panayides@cut.ac.cy)

LOG904-113 Oil, Gas and Petroleum Products Flow

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

According to the program of lectures and practical course, we have to study some special items concerning the international flow of hydrocarbon raw materials and petroleum products. In this context, the program covers the following items: specifics of logistics in oil and gas sphere, world and regional market prices of oil, gas and oil products and product cost – an assessment of expenses in supply chain. The short characteristic of supply chain from drilling to oil and gas consumers is presented: drilling, production, regional and main transportation, delivery to export terminals. Assessment of logistic expenses. Pipeline transportation of crude oil, petroleum products and natural gas - expenses. Specific items of crude oil and petroleum products delivery and storage on maritime port terminals, tanker loadings – an assessment of expenses. Tanker fleet, gas carriers. The world's largest oil refineries.

LOG904-117 Business intelligence

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Information systems capture, generate and store a vast amount of data. With the help of Business intelligence this vast data may be used for analysis and provide valuable input for managers in decision-making process. Business intelligence involves data preparation for analysis: data modeling, loading, cleaning and storage; data analysis and reporting. The main focus of this seminar is on managerial or end user perspective of Business Data Warehouse use for data storage, analysis and reporting. The course includes practical cases in SAP ERP Logistic IS and SAP BI. NOTE: Number of participants is limited to 25 students. Prerequisite is successfully completed IBE700 – Enterprise Resource Planning Systems (ERP-systems) course.

LOG904-120 Effects on Logistic Performance from RFID and EPCIS.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: Norwegian

Startup: 2016 Autumn

Course content

RFID in the supply chain is considered a disruptive technology with the potential to improve supply chain performance. It has evolved from a basic bar code replacement used at the pallet and case level to count things, to performance improvements in other areas such as inventory accuracy, shelf replenishment, loss prevention, price change management, prevention of theft, improvement of food safety and trace and track applications. RFID improvements can be at three levels:

- 1) Basic bar code replacement
- 2) Enhanced Business Process and
- 3) Designing new Business Processes.

This master seminar will be based on an RFID-demonstrator developed for the SMARTRACK-project to test and implement RFID in an intermodal transportation chains. The project involved 4 business partners Jernbaneverket, Cargo Net, Tollpost Globe and COOP in addition to Molde University College and SITMA.

LOG904-122 Managing channel relationships.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: Norwegian

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Designing Marketing Channels – Structural & Behavioral Considerations

The focus of this seminar is to examine key elements that influence the design of marketing channels from both a structural and behavioral viewpoint and takes into consideration the perspectives of suppliers, channel members and organizational buyers. This seminar will address important conceptual frameworks from the channels and organizational buying literatures as well as their application in real life settings. Topics will include:

- Rationale for Marketing Channels
- A Framework for Channel Analysis: Design & Implementation
- Channel Power, Dependency & Locus of Control; Conflict Management
- Theoretical Perspectives on Channel Governance
- Opportunism and Behavioral Norms in Channel Relationships
- Control Mechanisms & Structures
- Sourcing Strategies

Lecturer: Rodney Stump

LOG904-124 Productivity analysis

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

This course is designed to provide an introduction to the fundamentals of efficiency and productivity measurements.

At the end of course, students should be in a position to apply critically basic efficiency and productivity assessment methods.

The main objective is to familiarise students with applications of different methods for efficiency and productivity measurements.

During the course, students will participate in case discussions and will be given compulsory assignments.

LOG904-125 Transportation Infrastructure and Economic Development.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The influence that transport has on the economy has always been of interest to policymakers. It has once again emerged centre stage in governments' decision-making with respect to large infrastructure projects and in efforts to stimulate growth in the economy. The aim of this seminar is therefore to give students a solid grasp of the fundamentals of how, when, why and to what extent transport infrastructure affects businesses and the economy. The course will also give students practical knowledge regarding how to evaluate transport infrastructure's impact on the economy in a cost benefit analysis paradigm.

The seminar is divided into three parts.

- The first part an overview will be given of how transport affects firms, and transport's place in regional growth theories including neo-classical, endogenous growth and new economic geography. This will include the size and nature of the impacts that transport infrastructure has on the economy.
- The second part gives an introduction to regional economy modelling methods including reduced form models, input-output models, land use transport interaction models and computable general equilibrium.
- The third part brings together the two earlier parts and examines how economy impacts can be incorporated into appraisal both within a cost benefit analysis paradigm and in a multi-criteria appraisal.

The seminar will be assessed through a 2 part coursework.

LOG904-130 Port logistics

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Aims to familiarize student with basic concepts in port logistics. Topics include: Role of ports within the intermodal supply chain. Port logistics services and governance models. Related policy developments (mainly in Europe). Port performance criteria. The role of port hinterland and land connections. Generalized costs and modal split. Berth allocation, quay crane scheduling, yard management and stowage problems. The role of pricing in port competitiveness. The EU green paper and the port package fiasco. Hub ports and port transshipment. The impact of security and environmental regulations. Slow steaming and virtual arrival.

In addition to theory and models, the course will also focus on practical consideration in port logistics and the instructor will also highlight his experience as CEO of the port of Piraeus (1996-2002) and how Piraeus became a hub port in the Med.

Students are expected to have a minimum background in maritime transportation and operations research. They will be asked to critically review some papers in the port logistics literature and actively participate in class discussion.

Lecturer: Harilaos Psaraftis, Technical University of Denmark (hnpсар@gmail.com)

LOG904-132 Visual Analytics

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Visual Analytics is the visual extension of Business Intelligence. Visual Analytics has proven to be a valuable technique in handling the vast amount of data available. In this seminar, we focus on practical use of Visual analytics in Supply Chain Management. Real business data will be visualized using tools from Google. Prerequisites are a basic working knowledge of spreadsheet software. The goals of this seminar are two-folded, first to develop an understanding of the use of visual analytics in supply chain management, and, second, to apply methods and tools both to visual- and analytical- challenges using real world data.

Evaluation: oral examination on Friday.

Lecturer: Kristoffer Singstad, ksingstad@maritech.no

FORM OF ASSESSMENT	GROUPING	DURATION	TYPE OF DURATION	GRADING SCALE	PROPORTION	COMMENT	SUPPORT MATERIAL	SUPPORTED MATERIAL
Oral school assessment	Individual	1	days	Letter (A - F)	100	Oral examination on Friday.	-	

Course Facts

Credits: 2.5

Fagområde: Logistics

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Intercultural Competence

Course Content:

- Cultural awareness
- Culture theory and models
- Culture differences and comparisons
- Own cultural background
- Cross-cultural communication (misunderstandings and problems)
- Culture shock and dealing with it

While the seminar covers many theoretical aspects of culture many interactive games will be part of our schedule. Students will write short papers reflecting their own culture and cultures they have experienced already.

Lecturer:

Bernadette Hartl, University of Applied Sciences, Upper Austria. (bernanderl@hotmail.com)

LOG904-136 Business model innovation and transformation

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The most powerful disruptions in the marketplace occurs when organizations harness technology innovation to drive business model innovation. Today we are experiencing digital disruption through new business models on a massive scale as analog business struggle to survive despite their efforts to add digital capabilities to existing business models. The purpose of this class is for you to learn how to be a digital disruptor through experiential learning. Over the course of the week you will learn and apply several new models to:

- 1) identify and quantify the failure, pain and tensions driving disruption among customers;
- 2) apply design thinking to innovate the current value proposition;
- 3) incorporate gamification principles and mechanics as new capabilities to change customer behaviors;
- 4) transform the economic model for capturing new sources of value.

The final day of class is a Pitch Day where each team presents:

- 1) an infographic outlining the problem, new value proposition and its benefits to customers, your organization and society;
- 2) a wireframe of an app that supports the new value proposition by delivering new value; and
- 3) an economic model of how this will enable you to capture the economic benefits of the new sources of value.

Lecturer: Christopher Wasden, University of Utah, USA. (chris.wasden@eccles.utah.edu)

LOG904-140 Supply Chain Management in the Service Industry

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Although the services area was neglected for many years in terms of research and services were seen as a poor and additional feature of products, in the last years the service area has gained relevance. It is well documented that supply chain management practices provides competitive advantage. In the services industry similar phenomena exists. The adoption of lean and/or agile strategies in the service supply chains can lead to least expensive, faster and more flexible provision of services. The nature of the transition between these strategies in the service supply chains and the actions required to become leaner or more agile in specific processes and areas of the supply chain are key challenges service operations managers face.

During this seminar students will become familiar with key concepts that will be fundamental to improve supply chain performance in the service context with special focus on the public sector

Lecturer: Ana Lúcia Martins, ISCTE – Instituto Universitário de Lisboa (almartins@iscte.pt)

Working and learning activities

Group assignment

Having read the article from Rahimnia and Moghadasian (2010) and the lecture materials, select a company of your choice that provides a professional service.

In that company of your choice you should:

- Identify the nature of the business of that company;
- Describe the structure of the supply chain, including the main physical and informational flows;
- Identify and locate the decoupling points and describe the nature of the “inventory” help at those decoupling points;
- Identify the different supply chain strategies in place through the supply chain;
- Suggest adjustments to the structure of the supply chain and its processes in order to stress lean and/or agile options;
- Justify all your options and assumptions;
- Present the assignment in class.

Group assignment will be graded based on:

- Comprehensiveness;
- Relevance of the references used;
- Ability to be concise, to interpret, and to argument;
- Accuracy of concepts;
- Ability to apply concepts to a specific situation;
- Ability to accurately answer to questions after the presentation.

FORM OF ASSESSMENT	GROUPING	DURATION	TYPE OF DURATION	GRADING SCALE	PROPORTION	COMMENT	SUPPORT MATERIAL	SUPPORTED MATERIAL
Home assessment	Group	-		Pass/fail	40	Recommended group size is 3-4 students. Group assignment is due on Thursday at 9:15. Hand in a hard copy of the report and a hard copy of	All printed and written supporting material	

FORM OF ASSESSMENT	GROUPING	DURATION	TYPE OF DURATION	GRADING SCALE	PROPORTION	COMMENT	SUPPORT MATERIAL	SUPPORTED MATERIAL
						<p>the presentation. The report should have 4-5 pages (including front page). All members of the group should equally contribute to the assignment and the presentation. The presentation should take about 15 minutes, with additional 5-10 minutes for Q&A.</p>		
School assessment	Individual		-	Letter (A - F)	60	One individual final exam (60%)	Only general dictionary in mother tongue/Norwegian/English in paper version	

LOG904-142 Inter modal freight Transport

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

This course, deals with intermodal door to door transport where the modal combination involves sea transport as one of the modes. Most attention will be paid to the sea-land intermodal combination, but other combinations will be covered as well. The course focuses on strategic and operational aspects of intermodal transports in a cross disciplinary approach. The course covers:

- Introduction to intermodal transport
- Intermodal transport technologies
- Intermodal system management and economics
- Analytical frameworks for strategic intermodal system design

Upon completion of the course, the student will understand the economic, social and environmental significance of intermodal freight transport, and be able to describe the main kind of actors and means of transport in an intermodal transport system and understand technical and managerial issues related to intermodal transport.

1. Finally, the students should be able to critically analyze and access the market potential of different sub-segments of the intermodal transport market.
2. The students should choose a sub-segment to analyze further by means of: market analysis (including competitive analysis of different actors and transport modes) and system setup (suitable routes, timetables, technologies, and infrastructure).

Lecturer: Rickard Bergqvist

LOG904-143 Cost Engineering

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Cost engineering represents the intersection of the fields of project management, business management, and engineering.

The seminar will start from a fundamental perspective on the balance between cost, quality and time requirements in projects and will hence cover the following topics:

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

Main focus

The seminar's main concern is with upgrading the historical data that any organization has access to from previous projects, to be able to serve as input to future project planning and control. It will present existing tools and techniques for evidence-based and data-driven cost engineering, and continue to elicit an updated requirements' specification for the next generation toolkit for project managers and cost engineers. Some prototyping and testing will be included, in order to highlight the academic and practical challenges that we are going to face working as cost engineers.

Lecturer: Steinar Kristoffersen, Molde University College. (steinar.kristoffersen@himolde.no)

LOG904-146 Supply Base Logistics

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The seminar concentrates on Supply Base Management in the Oil and Gas industry. More precisely, the seminar focuses on logistics challenges on strategic, tactical and operational levels related to supply bases used for supplying offshore oil and gas installations. The seminar gives an introduction to supply base logistics and reviews and analyses logistics problems related to supply base development and supply base operations. The importance of safeguarding health, safety and environment in such operations is emphasized. The seminar also highlights the supply base's role in the paramount offshore upstream logistics supply chain with particular focus on the value of integrated planning and operations. Supply base practices from all over the world will be used as references and cases, and the seminar gives an overview of existing relevant scientific publications. The evaluation will be based on a written assignment and the assignment's presentation with the following case discussion. The main goal of the course is that students should learn to recognize typical Supply Base logistics challenges, and how these can be approached in a workable way.

Lecturer: Bjørnar Aas

LOG904-114 Game Theory

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The aim of the course is to give insight into Game Theory as a powerful analytical tool for a wide set of real-world business problems. This course will provide basics of Game Theory: representation of games and strategies in normal and extensive form, main solution concepts (Nash equilibrium, Pareto-optimality), repeated games, coalitional games. Course material is based on a variety of examples including classic games and their applications in economics and SCM.

LOG904-141 Simulation in petroleum logistics

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Simulation is a widely used computer technique for system's analysis used in many fields of science and technology. Discrete event simulation is one of the simulation approaches often applied in petroleum logistics. The purpose of the seminar is to introduce the student to Arena discrete-event simulation software and selected simulation applications within petroleum logistics. The student will learn how to build a simulation model and implement it in Arena simulator, design and conduct computational experiments, and to analyze the results to answer the what if questions on the system that raised the need of the simulation study. The evaluation in this seminar will be based on a modelling assignment to be performed in a group of 2-3 persons and an oral presentation of a distributed paper. Grading is A-E.

Lecturer: Yauhen Maisiuk

LOG904-144 Gas Transport Infrastructure Planning.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The course will cover the following topics: -Overview of the Norwegian gas transport sector: main players, gas transport modes (pipelines and LNG), physical characteristics of the pipeline network (capacity, export routes, system of hubs).

- Regulation in the Norwegian gas sector: the license system, investment planning process, the role of authorities, tariff system.
- Social Cost-Benefit Analysis of the gas infrastructure development: the European practice and applications in the Norwegian gas sector. Environmental impacts of gas processing and transportation.
- Valuing the flexibility in gas infrastructure investments using the Real Option valuation techniques.

The evaluation form will be based on a grading from A to F.

LOG904-145 Logistics in petroleum production

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The aim of production logistics is to ensure a smooth course of the process within a value-adding system. The focus of this seminar is on the problems inherent in oil and gas industry. One of the key problems in the petroleum production is designing the infrastructure for the production site. We address the problem of field infrastructure design as a multiperiod mixed integer nonlinear model. Another issue, covered in this course, is optimizing the operating modes of the tools and machinery from technological, economic and ecological perspectives. Candidates will apply numerical algorithms for continuous non-linear optimization problems, and Branch-and-Bound algorithm for combinatorial problems. A selection of mathematical models, applied for technology of petroleum production and preliminary treatment will be introduced to the students.

As a prerequisite for taking the course, students are expected to have basic knowledge of mathematical modelling: linear and non-linear programming, as well as exact algorithms: Simplex and Branch-and-Bound.

A series of articles on process optimization for oil and gas production will be presented to the candidates.

Lecturer: Yuri Redutskiy

MSc in Logistics - Seminars

Fakta om programmet

Studiepoeng: 30

Varighet: 1 semester

Studiemodus: Heltid

Stuedsted: Molde

Studienivå: 2. syklus (master)

Kull: 2016

Engelsk navn: MSc in Logistics - Seminars

Studieprogram: MSc in Logistics - Seminars

Fakultet: Logistikk

Informasjon om studiet

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. Basically the students can choose any seminars freely with two exceptions. The first exception is a seminar called "Research Design" – LOG904-101. 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. *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.

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.

Arbeidsformer

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

Oppbygning og sammensetning

General information on the seminars in logistics

Here is some practical information about the seminars in LOG904. This information accompanies the program overview for the series. The program includes the numbering of the seminars that you can use to find the right one in Studentweb. Also, the location of each seminar is given. Changes to the program will always be announced via email to all students of the seminar series.

1. You sign up through Studentweb for each of the seminars you want to participate in. Registration will give you access to the room called LOG904 in Fronter. (May take a day after your first registration.) You can in general register as late as 12.00 on the Thursday before the seminar starts.
2. You sign up for ONE AND ONLY ONE SEMINAR PER WEEK. Remember to delete your registration if you find that you do not want a seminar that you first registered for. Do not sign up for all seminars 'in case' you would like to take them. This makes troubles both for the administration and the seminar holders as they have to plan with an incorrect number of students.
3. Some of the seminars are mandatory for some groups of student. You should also sign up for your mandatory seminars. The proposal presentation in week 49 is not like a seminar, but is treated as such in our administrative system. Make sure to register for this also.
4. In addition to the Research design seminar and the proposal, MSc logistics students need to choose 9 seminars or more. That is 9 or more seminars at your will. Remember, some of the seminars are quantitative, others more qualitative. The program labels the more quantitative ones under Operation Management, the more qualitative are under Supply Chain Management. Choose seminars that suit your background, your interests, and the topic for your master thesis if you have got one.
5. The seminars can be demanding in terms of work, so do not plan for other activities in the weeks you choose. (Monday to Friday afternoon usually.)
6. All seminars start Monday morning at 0915 unless something else is decided. Most of the lecturers will give lectures until 1200, and then give you some assignments for the next day, but there may be exception to this main rule. You must be prepared to use the afternoon and evening (even late) to prepare these assignments. 100% class participation is mandatory in all seminars.
7. Evaluation can be "passed / not passed" or ordinary grades A, B etc. This is decided by the lecturer. However, in most cases the evaluation will consist of a mix of the following three elements: Class participation, assignments (either in groups or individually) and a short final individual written exam during Friday.
8. In the Fronter room for Log 904 there will be a set of document folders, one for each seminar. Here documents for the individual seminars will be located. Most of the information you need will be given in this way, so keep an eye on the files.

Logistics seminars series - program fall 2016

EMNE	2016 HØST
Mandatory for MSc Logistics	
LOG904-100 Proposal	5.0
LOG904-101 Research Design	2.5
Operation Management	
LOG904-110 Integrated Logistics and Operations: Learning Through Games	2.5
LOG904-115 Integer Optimization Models in Logistics	2.5
LOG904-116 Offshore Upstream Logistics	2.5
LOG904-119 Scheduling Models and Algorithms	2.5
LOG904-126 Decision Modeling and Metaheuristics	2.5
LOG904-127 Last Mile Delivery: Data Analytics And Models	2.5
LOG904-128 Distribution Management	2.5
LOG904-131 Applied Dynamic and Stochastic Programming for Logistics	2.5
LOG904-137 Health, Safety and Environment for the Offshore Oil and Gas Industry	2.5
LOG904-139 Energy Logistics	2.5
Supply Chain Management	
LOG904-109 Measuring and Managing Performance in Shipping, Logistics and Supply Chains	2.5
LOG904-113 Oil, Gas and Petroleum Products Flow	2.5
LOG904-117 Business Intelligence	2.5
LOG904-120 Effects on Logistic Performance from RFID and EPCIS	2.5
LOG904-122 Managing Channel Relationships	2.5
LOG904-124 Productivity Analysis	2.5
LOG904-125 Transportation Infrastructure and Economic Development.	2.5
LOG904-130 Port Logistics	2.5
LOG904-132 Visual Analytics	2.5
LOG904-133 Cross Cultural Management	2.5
LOG904-136 Business Model Innovation and Transformation	2.5
LOG904-140 Supply Chain Management in the Service Industry	2.5
LOG904-142 Inter Modal Freight Transport	2.5
LOG904-143 Cost Engineering	2.5

EMNE	2016 HØST
LOG904-146 Supply Base Logistics in the Oil and Gas industry	2.5
Petroleum Logistics	
LOG904-114 Game Theory	2.5
LOG904-141 Simulation Models in Logistics	2.5
LOG904-144 Gas Transport Infrastructure Planning	2.5
LOG904-145 Logistics in Petroleum Production	2.5
Sum (0 total)	0

MSc in Petroleum Logistics

Study Facts

Credits: 120

Duration: 4 semesters

Study mode: Full-time

Campus: Molde, Moscow

Level of study: Master

Year: 2016

Program of study: Master of Science in Sustainable Energy Logistics

Faculty: Logistics

Person in charge: Irina Gribkovskaia

Introduction

Logistics entails the organization of the flow of products, services and information from raw materials to the end user. For a large number of industrial and business companies, achieving high quality logistics operations will be the key competitive factor for future success. There is therefore a considerable focus on logistics in the business world. Oil and gas companies are no exception from this. The programme aims to give a thorough analysis and understanding of problems, challenges and solutions associated with all parts of the supply chains dealing with the oil and gas industry; on-shore as well as off-shore: exploration, purchasing, production planning, inventory management and downstream distribution planning. In addition the programme will give an understanding of the energy situation in the world, comparing existing renewable energy sources as well as non-renewable sources both in terms of costs, qualities and availability.

Logistics as a scientific area rests on a broad spectrum of disciplines such as economics, information/communication technology, business administration, organization and management, as well as quantitative methods based on mathematics, operations research and statistics. All these topics in logistics makes it a challenging area to study.

The programme is taught entirely in English, and is open to students from all countries. This means that students at the programme will have the benefit of belonging to a truly international group of students, and to enhance their language skills, making them ready for logistical careers in a more globalized economy.

Possibility of double degree

HiMolde can in addition offer the MSc in Petroleum Logistics as a double degree in collaboration with the main oil and gas university in Russia: Gubkin Russian State University of Oil and Gas, Moscow . Students following the double degree option of the MSc programme, must undertake study periods at both institutions. Lectures in the first and third semester will then take place in Molde, and the second semester in Moscow.

Learning outcome

After completing the programme, the successful candidate is expected to:

Knowledge

- have good and general knowledge about logistics and supply chain management (SCM) in general.
- have specialized knowledge about SCM in the petroleum industry.
- have specialized knowledge about different types of energy sources and the relationship between these.
- have extensive knowledge of scientific theories and methods relevant to SCM and operational logistics.
- have advanced knowledge of scientific theories and methods relevant to SCM of the petroleum industry, including a broad knowledge about models and methods in general, and their use in petroleum logistics in particular.

Skills

- be able to use advanced theory and methods to identify inefficiencies in supply chains.
- be able to propose improvements of organizational/structural changes, and suggest ways of implementing such changes in a supply chain.
- be able to understand the specific challenges connected to the different supply chains in the petroleum industry.
- be capable of performing a limited supervised research project within operational logistics, in line with ruling academic standards in the field.

General Competence

- be able to present and communicate professional issues relevant to logistics.
- be able to apply acquired knowledge and skills within new areas of research and education.
- be able to read scientific papers and other scientific work with a critical view.

Target audience

The programme targets a wide variety of highly motivated students with an interest to study petroleum logistics in an international environment.

Required prerequisite knowledge

A recognized bachelor's degree (180 ECTS credits) within Logistics, Economics, Business Administration, Engineering, Mathematics, Informatics or other relevant academic areas is required. Applicants need to fulfill the English language requirements, see "Information for International applicants" at the English home page - www.himolde.no/english.

Work- and learn methods

A wide range of lecturing and study methods are used within the courses. Courses usually run over one semester with lectures once or twice per week. In some cases courses consist of intensive lecturing in one or two weeks during a semester, and more regular lectures once a week in other parts of the semester. Students have homework in terms of exercises, computer lab work, case studies and assignments, both individually and in groups. The seminars in the third semester are intensive courses lasting for one week consisting of lectures, homework, discussions and student presentations. Students enrolled in the programme are expected to have at least a work load of 40 hours per week. The programme is not offered for distance learning.

Further studies

The MSc programme in Petroleum Logistics will qualify to apply for admission to the PhD program in Logistics at Molde University College, as well as other PhD programs.

Content structure

Study in Molde

The study programme includes only compulsory courses. All lectures and exams will take place in Molde. The third semester consists of seminars, all lasting for one week. During this semester, the students should also find a topic for their master's thesis, and write a proposal for this. Here the students should indicate the topic, research methods and methodologies that can be relevant, some preliminary overview of previous research, and literature within the chosen topic. The proposal will be presented orally. In the fourth semester the students are working on their master's thesis. Presentation and examination/ defense of the thesis will take place in June.

Study in Molde and Moscow (Double degree)

The study programme consists of only compulsory courses. In the first semester, all lectures and exams will take place in Molde. In the second semester, the lectures and exams will take place in Gubkin Russian State University of Oil and Gas. The third semester will take place at Molde University College - Specialized University in Logistics. During this semester the students should also find a topic for their master's thesis, and write a proposal for this. The proposal will be presented orally. In the fourth semester students are writing their master's thesis. Presentation and examination/ defense of the master's thesis will take place in June.

MSc in Petroleum Logistics

COURSE	2016 AUTUMN	2017 SPRING	2017 AUTUMN	2018 SPRING
LOG716 Mathematical Modelling in Logistics	7.5			
LOG730 Basics of Petroleum Logistics	7.5			
LOG731 Networks Logistics	7.5			
SØK710 Industrial Organization	7.5			
IDA715 Discrete Event Simulation		7.5		
LOG740 Advanced Petroleum Logistics		7.5		
LOG820 Vehicle Routing with Heuristics		7.5		
TRA816 Maritime Transportation		7.5		
LOG904-PET Seminars in Petroleum Logistics			30	
LOG953 Master's Degree Thesis				30
Study in Molde and Moscow				
LOG716 Mathematical Modelling in Logistics	7.5			
LOG730 Basics of Petroleum Logistics	7.5			
LOG731 Networks Logistics	7.5			
SØK710 Industrial Organization	7.5			
GSU1 Global Energy		3		
GSU2 Transportation and Forwarding of Hydrocarbons in a Supply Chain		5		
GSU3 International Oil and Gas Logistics		5		
GSU4 Energy Resources Trading on World Market		2		
GSU5 Basics of Oil and Gas Technology		2		
GSU6 Basic Principles of Shelf Field Development		3		
GSU7 Research Practice		10		
LOG904-PET Seminars in Petroleum Logistics			30	
LOG953 Master's Degree Thesis				30
Sum (120 total)	30	30	30	30

MSc in Petroleum Logistics - Seminars

Study Facts

Credits: 30

Duration: 1 semester

Study mode: Full-time

Campus: Molde

Level of study: Master

Year: 2016

English title: MSc in Petroleum Logistics - Seminars

Program of study: MSc Petroleum Logistics - Seminars

Faculty: Logistics

Introduction

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

- Integer Optimization Models in Logistics
- Game Theory
- Research Design

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 and energy supply chain such as:

- Energy Logistics
- Logistics in Petroleum Production
- Gas Transportation Infrastructure Planning
- Simulation in Petroleum Logistics

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:

- Upstream Offshore Oil and Gas Logistics
- Supply Base Management
- Health, Safety and Environment for the Offshore Oil and Gas Industry

The seminars in these blocks are compulsory for master's degree students.

The seminar LOG904-100 Proposal (5 credits) is a plan for the master's thesis. The students should work out the proposal in close collaboration 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-PET seminars.

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 petroleum logistics planning and 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.

Required prerequisite knowledge

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

Work- and learn methods

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.

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

Seminars in Petroleum Logistics - fall 2016

COURSE	2016 AUTUMN
LOG904-100 Proposal	5.0
LOG904-101 Research Design	2.5
LOG904-114 Game Theory	2.5
LOG904-115 Integer Optimization Models in Logistics	2.5
LOG904-116 Offshore Upstream Logistics	2.5
LOG904-137 Health, Safety and Environment for the Offshore Oil and Gas Industry	2.5
LOG904-139 Energy Logistics	2.5
LOG904-141 Simulation Models in Logistics	2.5
LOG904-144 Gas Transport Infrastructure Planning	2.5
LOG904-146 Supply Base Logistics in the Oil and Gas industry	2.5
Sum (0 total)	0

LOG904-100 Proposal Presentations

Course Facts

Credits: 5.0

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Mandatory for MSc logistics.

Presentation of proposal for master thesis.

Each proposal will be given 15 minutes for an oral presentation and up to 30 minutes for answering questions from the supervisor and grader.

Exact time and room for each presentation will be published later.

LOG904-101 Research design

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Mandatory for MSc Logistics

Framework or appropriate plan for a study (research) used for formulating research problems, administration of data and analysis.

Learning objectives:

- Improve your ability to formulate and structure a research problem for your master thesis
- To ensure that your study is relevant to the research problem
- To ensure that the study use relevant and economical procedures
- To learn more about research methods and data collection methods

Professor Buvik gives introduction lectures to the course based on long experiences in advising Master students and PHD students.

Professor Thorstenson goes more specifically into research opportunities and research methods in quantitative logistics.

The library will instruct students about literature search, and several research projects will be presented by the college staff.

LOG904-114 Game Theory

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The aim of the course is to give insight into Game Theory as a powerful analytical tool for a wide set of real-world business problems. This course will provide basics of Game Theory: representation of games and strategies in normal and extensive form, main solution concepts (Nash equilibrium, Pareto-optimality), repeated games, coalitional games. Course material is based on a variety of examples including classic games and their applications in economics and SCM.

LOG904-115 Integer Optimization Models in Logistics.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The course focuses on training in developing and solving integer programming optimization models for logistics problems taken from distribution planning such as facility location, vehicle routing, combined location-routing, and network design. The purpose of the seminar is to give students a considerable hands-on AMPL modeling experience with analysis of results. The course deals with logic relations and the use of binary variables in modelling. The evaluation will be based on a set of assignments on selected topics. Prerequisite is completed LOG716 – Mathematical Modelling in Logistics course or practical experience in AMPL/CPLEX software.

Lecturer: Yauheni Kisialiou, Molde University College.

LOG904-116 Offshore upstream logistics.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

This seminar gives a historical outline of the production of oil and gas at the Norwegian Continental Shelf, elaborates on the importance of offshore upstream logistics and provides the open available web-resources. It gives an introduction to supply base logistics, analyses logistics problems related to supply base development and supply base operations and focuses on the importance of safeguarding health, safety and environment in supply base logistics operations. It presents upstream logistics activities of the Norwegian oil company Statoil including their planning, operation and analysis, as well as challenges and future development. Seminar gives an overview of existing scientific publications and research activities at Molde University College on fleet sizing and scheduling of vessels and helicopters servicing offshore installations. The evaluation will be based on a written assignment and the assignment's presentation.

Lecturer: Yauheni Kisialiou, Molde University College.

LOG904-137 Health, safety and environment for the offshore oil and gas industry

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The management of risk in the offshore and oil gas industry has been an important issue for at least the last two decades. On top of the health and safety considerations there are now stricter regulations regarding environmental protection. This short seminar shall provide the students with knowledge and understanding of the hazards that apply to offshore installations and ways to manage them. Basic topics in risk analysis and risk management will be presented. The main emphasis is on applications from the offshore oil and gas industry. The industry is involved in a global supply-chain that includes for example transportation, inventory control, handling of materials and parts, import/export facilitation and information technology. Thus, risks to both offshore installations and the whole supply chain will be investigated by using risk-based approaches. Relevant regulations and guidelines will be discussed focusing on national (Norwegian) and international (UK and US) legislation. Environmental regulations will be presented in more depth, focusing on topics e.g. emissions that have not been studied much in the literature.

Software to perform quantitative risk analysis and risk management will also be presented.

Lecturer: Christos A. Kontovas, Technical University of Denmark, (kontova@transport.dtu.dk)

LOG904-139 Energy Logistics

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The seminar gives basic understanding and concepts of undergoing process of global energy transition to a low-carbon economy and changes in energy strategies of energy dependent as well as oil exporting countries. Among the main topics are: The key drivers of future energy demand, supply and prices. Availability of resources and investments. The environmental constraints on energy resources. Advantages and disadvantages of each type of energy sources – hydrocarbon, nuclear, hydro, renewables. Inter-fuel competition in power generation. Innovative technologies and energy efficiency in industry, commerce and built environment. The renewable energy sources and technologies (solar energy, wind power, hydropower and geothermal energy) applicable to electricity generation (solar, wind, geothermal, biomass) and transportation applications (biofuels) - market potential, costs, financing and regulation. Production, storability and transport of renewables. Electricity transmission and infrastructure. Integration of renewable sources of energy into electricity supply schemes (smart grids). Short, medium, and long-term scenarios for global energy demand growth and future energy mix. Logistical challenges in offshore wind production, with a particular focus on maintenance.

The seminar provides practical understanding of modern energy environment and main drivers and competition on the world energy market especially in power generation.

Students gain up-to-date information and will be able to analyze trends and challenges on the global energy market, overview various renewable energy technologies and their applications and advantages, as well as understand international energy policies and state support mechanisms for innovative renewable technologies and their use in power generation and industry.

Various learning techniques (lecture, discussion, cases, group work, materials for self-study) are used to develop core skills (communication, negotiation and decision making abilities) and practice what is learnt in class.

Lecturer: Liudmila Studenikina, Gubkin Russian University of Oil and Gas

LOG904-141 Simulation in petroleum logistics

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

Simulation is a widely used computer technique for system's analysis used in many fields of science and technology. Discrete event simulation is one of the simulation approaches often applied in petroleum logistics. The purpose of the seminar is to introduce the student to Arena discrete-event simulation software and selected simulation applications within petroleum logistics. The student will learn how to build a simulation model and implement it in Arena simulator, design and conduct computational experiments, and to analyze the results to answer the what if questions on the system that raised the need of the simulation study. The evaluation in this seminar will be based on a modelling assignment to be performed in a group of 2-3 persons and an oral presentation of a distributed paper. Grading is A-E.

Lecturer: Yauhen Maisiuk

LOG904-144 Gas Transport Infrastructure Planning.

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The course will cover the following topics: -Overview of the Norwegian gas transport sector: main players, gas transport modes (pipelines and LNG), physical characteristics of the pipeline network (capacity, export routes, system of hubs).

- Regulation in the Norwegian gas sector: the license system, investment planning process, the role of authorities, tariff system.
- Social Cost-Benefit Analysis of the gas infrastructure development: the European practice and applications in the Norwegian gas sector. Environmental impacts of gas processing and transportation.
- Valuing the flexibility in gas infrastructure investments using the Real Option valuation techniques.

The evaluation form will be based on a grading from A to F.

LOG904-146 Supply Base Logistics

Course Facts

Credits: 2.5

Fagområde: Logistics

Level of study: Master

Program of study: MSc in Logistics - Seminars

Campus: Molde

Language of examination: English

Language of instruction: English

Startup: 2016 Autumn

Assessment semester: 2016 Autumn

Course content

The seminar concentrates on Supply Base Management in the Oil and Gas industry. More precisely, the seminar focuses on logistics challenges on strategic, tactical and operational levels related to supply bases used for supplying offshore oil and gas installations. The seminar gives an introduction to supply base logistics and reviews and analyses logistics problems related to supply base development and supply base operations. The importance of safeguarding health, safety and environment in such operations is emphasized. The seminar also highlights the supply base's role in the paramount offshore upstream logistics supply chain with particular focus on the value of integrated planning and operations. Supply base practices from all over the world will be used as references and cases, and the seminar gives an overview of existing relevant scientific publications. The evaluation will be based on a written assignment and the assignment's presentation with the following case discussion. The main goal of the course is that students should learn to recognize typical Supply Base logistics challenges, and how these can be approached in a workable way.

Lecturer: Bjørnar Aas

MSc in Petroleum Logistics - Seminars

Fakta om programmet

Studiepoeng: 30

Varighet: 1 semester

Studiemodus: Heltid

Stuedsted: Molde

Studienivå: 2. syklus (master)

Kull: 2016

Engelsk navn: MSc in Petroleum Logistics - Seminars

Studieprogram: MSc Petroleum Logistics - Seminars

Fakultet: Logistikk

Informasjon om studiet

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

- Integer Optimization Models in Logistics
- Game Theory
- Research Design

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 and energy supply chain such as:

- Energy Logistics
- Logistics in Petroleum Production
- Gas Transportation Infrastructure Planning
- Simulation in Petroleum Logistics

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:

- Upstream Offshore Oil and Gas Logistics
- Supply Base Management
- Health, Safety and Environment for the Offshore Oil and Gas Industry

The seminars in these blocks are compulsory for master's degree students.

The seminar LOG904-100 Proposal (5 credits) is a plan for the master's thesis. The students should work out the proposal in close collaboration 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-PET seminars.

Forventet læringsutbytte

After finishing the seminar series, the students will obtain a broader and deeper level of skills and understanding in several subject areas relevant to petroleum logistics planning and 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.

Anbefalte forkunnskaper

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

Arbeidsformer

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.

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

Seminars in Petroleum Logistics - fall 2016

EMNE	2016 HØST
LOG904-100 Proposal	5.0
LOG904-101 Research Design	2.5
LOG904-114 Game Theory	2.5
LOG904-115 Integer Optimization Models in Logistics	2.5
LOG904-116 Offshore Upstream Logistics	2.5
LOG904-137 Health, Safety and Environment for the Offshore Oil and Gas Industry	2.5
LOG904-139 Energy Logistics	2.5
LOG904-141 Simulation Models in Logistics	2.5
LOG904-144 Gas Transport Infrastructure Planning	2.5
LOG904-146 Supply Base Logistics in the Oil and Gas industry	2.5
Sum (0 total)	0

MSc in Sport Management

Study Facts

Credits: 120

Duration: 4 semesters

Study mode: Full-time

Campus: Molde

Level of study: Master

Year: 2016

Program of study: Master of Science in Sport Management

Faculty: Sports

Person in charge: Geir Oterhals

Introduction

The MSc in Sport Management is designed to prepare students to work in management positions in the sport and sport-related industry. The programme intends to convey a solid understanding and knowledge about sport management as it is practised in the European context, and introduce the students to legal, ethical, economical, organisational, historical, political, and psychological topics necessary to meet the demands of this growing industry. This means 1) that the main aim of the programme is the open format of team sports more than the closed leagues, which are frequent in some other parts of the world, and 2) that the aim of study is neither sport or business administration, but in fact a combination, which makes the understanding of Sport Management complex. The programme will expose students both to practitioners and scholars. Moreover, they will be challenged on up-to-date problems and conventional understandings or sport myths as they are conveyed by the actors of sport. In the third term students concentrate either in Football Management or in Marketing, Media and Sponsorship based on their chosen seminars and internship.

As prospective councillors or decision-makers, the students should be able to face complex situations in organisations in an analytic and reflective manner. The study programme enables students to find good solutions and to create cooperative environments. By equipping the students with diverse perspectives and knowledge through lectures, assignments, discussions, teamwork and internship, the students should develop an understanding of the complexity, heterogeneity and uncertainty in sport, and the need to listen and be responsive to others. This should enable them to constructively take part in change projects. By working in a sport context and completing their master's thesis, students should develop their capacity as problem-solvers by defining problems and research questions, and by examining, analysing, concluding and defending their conclusions.

Learning outcome

After completing the program, the successful candidate is expected to:

Knowledge

- have advanced knowledge in economical and organizational theories concerning sport management
- have specialized knowledge about selected topics within the field of sport management
- have extensive knowledge in scientific methods and philosophy of science relevant to the field

Skills

- be able to contribute in finding solutions to organizational problems in sport organizations.
- be able to do independent analytical work and to write scientific texts in an theoretically informed and methodologically sound manner
- be able to acquire new scientific literature in an independent and critical way
- be capable to present work orally and in writing in an academic as well as popular form

General qualifications

- be able to work independently
- have skills and experience in cross cultural and inter-professional team work
- be able to communicate about professional issues relevant to Sport management, on an expert- as well as a common level

Target audience

Students who work or plan to work in sport clubs, sport associations or other types of organisations (agencies, media, event organisers etc.)

Required prerequisite knowledge

Applicants should preferably hold a recognised first degree (BBA, BA, BSc), equivalent to a minimum of 180 ECTS credits, in Sport Management/ Sciences, Business Administration, Social Sciences (Economy, Sociology, Political Science or History) or other relevant academic disciplines to apply for the MSc programme in Sport Management.

Admission to the international MSc programmes at Molde University College, Specialized University in Logistics is highly competitive, and applicants should preferably have completed their bachelor's degree with an average grade of Excellent or Very Good, or at least a minimum average grade of Good/ grade C or equivalent (Like First Class or Second Class Upper Division or equivalent grades). For English language requirements for admission, see more detailed information on our home page: www.himolde.no.

Work- and learn methods

The program courses use a wide range of teaching and study methods. Some courses run over one semester with classes once or twice per week, and in some cases courses are organized as seminars with one-week intensive teaching. Students are expected to work individually between lectures, and especially during the seminars the work load could be intense. During the third term students does an internship.

In many of the courses case studies and writing essays, both individually and in groups, is part of the teaching methods. Students finalize the degree by carrying out a supervised research project and write their thesis on basis of this.

Students enrolled in the program are expected to do at least 40 hours of study work per week. Of these around 10-15 hours are contact hours (teaching, seminars and supervision). During the second year a substantial part of the work is connected to writing the master thesis.

The program is not suited for distance learning

Examination and assessment methods

Student assessment is made on basis of monitored exams, essays, written case study reports, internship and oral presentations.

Required progression

An achievement of at least 75 % of nominal study progression during an academic year is required in order to maintain the place in the study program.

Internationalisation

Students might take their third term abroad at one of our recommended European partner universities.

Further studies

Candidates with an MSc in Sport Management should qualify for a PhD in Sport Management. In most cases this is dependent on excellent academic performances.

MSc in Sport Management

COURSE	2016 AUTUMN	2017 SPRING	2017 AUTUMN	2018 SPRING
IDR710 Philosophy of Science and Research Methods	7.5			
IDR720 Introduction to Sport and Event Economics	7.5			
ADM900 Forms of organization and management	15			
IDR705 Team Sport History		7.5		
EVM720 Event Organization		7.5		
IDR725 Team Sport Economics		7.5		
IDR805 Sport and Event Marketing		7.5		
IDR910 Internship			15	
Elective courses (see table below)			15	
IDR803 Seminars in Football Management			15	
IDR804 Seminars in Marketing, media and sponsorship			15	
IDR950 Master`s Degree Thesis				30
Sum (120 total)	30	30	30	30

PhD in Logistics

Study Facts

Credits: 180

Duration: 6 semesters

Study mode: Full-time

Campus: Molde

Level of study: PhD

Year: 2016

Program of study: Philosophiae doctor in Logistics (ph.d)

Faculty: Logistics

Person in charge: Svein Bråthen

Introduction

The doctoral programme at Molde University College is a three-year full-time programme leading to a doctoral degree (PhD) in Logistics. The conferral of the doctoral degree in Logistics signifies that the candidate has attained expert competence in a major field of study. You will normally have one supervisor at Molde University College plus one or more co-supervisors from elsewhere. Suggesting co-supervisors is the duty of your main supervisor, and the Doctoral Degree Committee must approve them.

About one year before you plan to complete your degree, an evaluation committee will be appointed. The committee has three members, including one member from Molde University College and at least one international member. The committee has two major duties: To approve your thesis for its final defence, and to evaluate your defence.

Admission and rating

In order to be eligible for admittance, you must have an excellent academic record with at least a 120 ECTS at master's degree level in a relevant field, or equivalent educational qualifications. For applicants with a Norwegian background, an average grade of B or better from master's-level study is needed. Please read [the detailed regulations](#) governing the programme. Applicants with a non-Norwegian education are assessed based on certificates and other documentation of educational background, provided in English or a Scandinavian language. Individual considerations based on publication records, research proposals, relevant work experience etc. are used if it is impossible to rank applicants (to scholarships or the like) based on degrees.

There are no tuition fees at Molde University College. However, you need to be able to support yourself financially for full-time study. For Norwegians this means a scholarship from Molde University College (which is advertised when available), a scholarship from a Research Council, or direct financing which is legally guaranteed from a private or public source. The Research Council of Norway has special scholarships for citizens of some countries. In addition, non-Norwegians may of course have support from their own countries. In order to be given a student visa by the Norwegian Immigration Authorities, you need to have NOK 112 000 available in a bank account at the beginning of each academic year. This requirement is automatically satisfied if you are financed by Molde University College or the Research Council of Norway.

If financing is in order, you must determine the research topic for your PhD thesis and write a short description of the topic. At this stage it can be more than one topic. Then you must locate a member of the academic staff at Molde University College who is interested in your topic, qualified as a supervisor and willing to supervise you. You can do this in several ways. One possibility is to contact the head of the Doctoral Degree Committee, who will try to help you. If you already know who you would like as a supervisor, you should get in touch with that person. All this can be done before all the financing details are sorted out, but you will not be admitted to the PhD programme before legally guaranteed financing is in place. When you have found a potential supervisor, you should write an application that emphasizes the research topic and methodology, plus the course requirements and a plan for your PhD studies. This is the major part of your application for admittance. The Doctoral Degree Committee at Molde University College will make the final decision about accepting you as a doctoral candidate. (If you are employed at the University College as scholarship holder, much of this will already be taken care of.)

Read more about the [application process](#).

Work- and learn methods

Expected learning outcome:

A candidate who has completed the PhD programme should obtain the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

- is at the forefront of logistics, mastering scientific theories and methods of logistics research;
- can evaluate and assess various theories, methods and processes in Logistics research and in applied research and development (R&D) projects in an international perspective;
- can contribute to the development of new knowledge, new theories, and methods in Logistics.

Skills

- can formulate research questions for academic research and applied research and development at a recognized international level in Logistics;
- can contribute to new knowledge in Logistics through scientific research that can be published in peer-reviewed national and international scientific journals;
- can handle complexity, create an overview and synthesize established scientific knowledge and practice;
- can critically evaluate and constructively criticize scientific research in Logistics.

General competencies

- can identify relevant ethical issues and conduct research with academic integrity;
- can disseminate research and development through highly ranked national and international channels and participate in debates;
- can identify their own research in Logistics within a wider research area and social context;
- can evaluate the need for renewal, and can initiate and be engaged in innovation.

Content structure

The general structure is as follows: The programme takes three years and includes 45 ECTS with courses and similar activities. There are two obligatory courses: History of Logistics and a course in Philosophy of Science (of minimum 5 ECTS each). The rest of the time is for the thesis. Holders of Norwegian scholarships will in addition normally have one year of required duties for Molde University College. Doctoral students may take one or two semesters abroad, for both course work and thesis work.

Courses are mainly taken from three areas:

1. The MSc program in Logistics at Molde University College
2. Doctoral courses at Molde University College
3. Courses at master's or preferably doctoral level at other (foreign or Norwegian) universities

You must take some courses from areas 2 and 3, but may drop area 1. Courses at PhD level must be a minimum of 25 ECTS.

PhD Courses

- [DRL001 History of Logistics](#) (5 ECTS)
- [DRL007 Cost Benefit Analysis](#) (5 ECTS)

These courses are given from time to time and Molde University College will also offer other PhD courses at irregular intervals. Please find more information about scheduled PhD courses here:

<http://www.himolde.no/english/studier/Sider/PhD-Courses.aspx>

- [Philosophy of Science](#) (min. 5 ECTS) This course is given in Norwegian by Volda University College. You can choose a similar course from other institutions.

Planned courses:

DRL025 Supply Chain Management Performance

DRL026 Grunnleggende økonometri med Stata

The following PhD courses are arranged from time to time, depending on demand (with ECTS in final column):

DRL003 Transaction Cost Analysis - 5 ECTS

DRL004 Game Theory - 10 ECTS

[DRL007 Cost-Benefit Analysis](#) -5 ECTS

DRL008 Interorganizational Issues in Supply Chain Management- 5 ECTS

DRL012 Freight Transportation - 5 ECTS

DRL013 Model Solving in Mathematical Programming - 10 ECTS

DRL015 Service System Design under Uncertainty - 2 ECTS

DRL016 Production Planning and Scheduling -7.5 ECTS

DRL017 Industrial Organization- 7.5 ECTS

DRL018 Local Distribution Planning - 5 ECTS

[DRL019 Advanced Discrete-Event Simulation Modeling](#) - 7.5 ECTS

DRL020 Risk Management - 5 ECTS

DRL021 Academic Writing -2 ECTS

[DRL022 Partial Least Squares Structural Equations Modeling \(PLS-SEM\) Using SmartPLS](#) - 4 ECTS

[DRL023 How to Prepare and Write PhD thesis](#) - 1 ECTS

[DRL024 URBE – Urban Freight and Behavior Change](#) - 5 ECTS