Faculty of Science

MVES01, Environmental Science: Environmental Management, Sustainability and Business Value Creation, 15 credits

Miljövetenskap: Miljöstyrning i näringslivet, 15 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2019-02-06 to be valid from 2019-02-06, autumn semester 2019.

General Information

The course is an elective second-cycle course for a degree of Master of Science in Environmental Science.

Language of instruction: English

Main field of studies	*Depth of study relative to the degree requirements*
Environmental Science	A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

The course provides students with a broad introduction to theoretical and practical aspects of environmental management and sustainability strategies in companies. The business world has a key role in society by influencing environmental, social and economic conditions in society, and thus of vital importance for the major changes required for a transition to a sustainable world. The student should acquire knowledge and skills to be able to critically analyse the approaches, tools and strategies for sustainability used by companies and to formulate and suggest improvements. The course focuses on operational as well as strategic environmental management, and integrates technology and management perspectives with the environmental aspects, based on a broad sustainability perspective.

Knowledge and understanding

On completion of the course the student shall be able to:

- explain the importance of, and links between, key elements in the environmental management of organisations, including environmental aspects, goals, indicators, change programmes, audits, reports, and communication
- describe key strategies for clean technology and argue for preventive environmental work to limit the impact on the environment
- explain the principles of, and background to, different assessment models for the environmental impact of products and services from a life-cycle perspective, and interpret the results of environmental impact assessments while reflecting critically on when and how they can be applied to support decision making
- compare different key principles of environmentally friendly design and discuss how and when they can be applied in the product development process
- compare different approaches to the management of environmental and societal aspects in the supply chain, and evaluate the suitability of different measures in a specific context
- explain key elements and principles of the most common guidelines for sustainability reports, and evaluate the sustainability report of a specific company
- compare key elements of the strategic sustainability work of companies and critically analyse and evaluate specific examples of environmentally friendly business strategies on the market
- analyse new business models based on the requirement of triple bottom line reporting

Competence and skills

On completion of the course the student shall be able to:

- plan and complete assignments within given time frames using relevant methods
- develop a plan for mainstreaming sustainability in a company for a group of business representatives
- apply correct tools to develop or assess business models for a specific case, and propose new routes to value-creating measures, orally and in writing
- collect and analyse information in connection with a business consultation, and present the findings in a written consultation report as well as orally to a group of business representatives

Judgement and approach

On completion of the course the student shall be able to:

- identify controversial issues in the field of environmental governance in business, and critically assess information used for environmental related organisational decision-making
- critically reflect on ethical aspects of strategic decision-making in companies and how societal values may affect sustainability strategies
- assess strengths and weaknesses in a company's system for environmental governance

Course content

- Preventive environmental governance - an organisational perspective: environmental management systems, change management and clean technology
- Environmental management - a product perspective: life-cycle analysis, eco-design and sustainable supply chains
- Sustainability, strategy and value creation - company strategy, business models, corporate social responsibility, communication and value creation

Course design

The teaching consists of lectures, case-based seminars, assignments, workshops and study visits. Participation in seminars, assignments, workshops, study visits and associated parts is mandatory.

Assessment

The assessment is based on a written take-home examination and written quizzes during the course, as well as a written group assignment.

For students who have not passed the regular examination, an additional examination in close connection to this is offered.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass, Pass with distinction.
To pass the entire course, approved quizzes, approved take-home examination, and approved group assignment are required.

The grades awarded for the take-home examination are Fail, Pass, and Pass with distinction. The grades awarded for the quizzes and group assignment are Fail and Pass

The final grade is determined by the combined assessment of these parts.

Entry requirements

To be admitted to the course, 90 credits in science courses are required, including knowledge equivalent to:

- MVEA01 Environmental Science: Basic Course, 15 credits
- MVEC14 Industrial Environmental Economics, 15 credits
- MVEC11 Law in Environmental Studies, 15 credits

and

- Bachelor's Degree Project, 15 credits

Further information

The course may not be included in a degree together with MVET11 Environmental Science: Strategic Environmental Development, 15 credits.

Subcourses in MVES01, Environmental Science: Environmental Management, Sustainability and Business Value Creation

Applies from H19

1901 Home exam, 7,5 hp
Grading scale: Fail, Pass, Pass with distinction
1902 Application – group course assignment, 4,5 hp
Grading scale: Fail, Pass
1903 Quizz, 3,0 hp
Grading scale: Fail, Pass