



## HÖGSKOLAN I GÄVLE

### Methods for Environmental Assessment 9 cr

*Metoder för miljöbedömning 9 hp*

Set by Faculty of Engineering and Sustainable Development

**Version**

**Set at**

**Valid from**

4/22/20

**HT2021**

<b>Level</b>	A1F
<b>Education level</b>	Second cycle
<b>Course identifier</b>	MIA301
<b>Credits</b>	9 cr
<b>Main field of study</b>	Sustainability Science
<b>Subject group</b>	Environmental Science
<b>Disciplinary domain</b>	Technology 100.0 %

**Learning outcomes**

After completion of the course, the student shall be able to

1. describe and select methods for environmental assessment
2. analyse advantages and disadvantages of various methods for environmental assessment
3. describe and explain contemporary development within environmental assessment regarding methods, tools and concepts
4. critically examine how a specific tool for environmental assessment, or a combination of such tools, can improve decision making for a given decision situation
5. demonstrate the ability to write, present and defend a written assignment.

**Course content**

Environmental systems analysis includes knowledge of how to collect, analyse, integrate and evaluate information on how technical systems are causing or contributing to environmental problems. Environmental systems analysis is being used at many different levels in society as part of the information gathering, analysis and decision making about the design or use of technical systems. There are a variety of environmental systems analysis methods and tools, such as life cycle assessment, life cycle costing, material flow analysis, environmental impact assessment, strategic environmental assessment, cost-benefit analysis and multi-criteria analysis. The course aims to give an overview of those tools and basic knowledge to select one or more appropriate tools for different applications.

<b>Teaching</b>	Lectures and seminars		
<b>Prerequisites</b>	Sustainability Science and Systems Theory 7.5 credits, or equivalent		
<b>Examination</b>	Written examination, seminars and project assignment		
	Module 0010 Written Examination 4 cr, examines learning outcomes 1-4, grades A-F		
	Module 0020 Seminars 2 cr, examines learning outcomes 2-4, grades Pass, Fail		
	Module 0030 Project assignment 3 cr, examines learning outcomes 2-5, grades Pass, Fail		
<b>Grade</b>	A, B, C, D, E, Fx, F		
<b>Other regulations</b>	Degree Criteria for the final grade will be handed out by the course responsible or examiner latest at the beginning of the course.		
<b>Sustainable environment</b>	The majority of the course content deals with sustainable development..		
<b>Module</b>			
	0010	Written examination	4 cr      Grade: AF
	0020	Seminars	2 cr      Grade: UG
	0030	Project assignment	3 cr      Grade: UG