

## Elective programme elements 2016-2018

Bachelor in Agricultural and Environmental Management

Professionsbachelor i Jordbrugsvirksomhed

## Learning objectives and subject descriptions

-First semester for study programme biology and economy

## Content

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1.1 Subjects/learning	objectives	for	biology	(Study	line/speciality:
Environmental and Natur	e Managemer	nt)			3
1.1.1 Ecology	-				3

## 1. General

The following learning objectives and subject descriptions for the elective programme elements are a supplement to the joint national curriculum and the institutional curriculum. The elective elements' catalogue/Part III. There is not a free choice between all the subjects, the choice is made implicitly through the student's choice of study line/speciality on the programme.

1.1	Subjects/learning	objectives for	biology	(Study	line/speciality:
	Environmental and	d Nature Mana	gement)		

1.1.1 Ecology	
Timing	1st semester
Scope	56 lessons / 5 ECTS
	(approximately 110 study hours)
Examination	The subject is examined according to the institutional part of the cur-
	riculum
Content	Definition of ecology, evolution, physical conditions and resources, life cycles, distribution and migration, competition, predation and disease, mutualism, populations and communities, species' richness, energy and matter, sustainability and habitat degradation, conservation of spe- cies and habitats.
Portfolio	One to several smaller tasks during the course.
Curriculum list	Essentials of Ecology, Michael Begon, Robert W. Howarth & Colin R. Townsend Wiley, 4th edition, 2014. (ISBN: 9780470909133)
Learning objectives	Knowledge and understanding
	The student will gain knowledge about:
	<ul> <li>populations, communities and ecosystems</li> </ul>
	<ul> <li>and understand the theory regarding the physical and biological regulation of ecosystems, energy flows and nutrient cycles as well as species' richness and habitat degradation</li> <li>and understand the practical and applied theory and method as well as reflect on the application of theory and method within ecology.</li> </ul>
	Skills
	The student will get the skills to:
	<ul> <li>be able to apply knowledge about the species and communi- ties' conservation status</li> </ul>
	<ul> <li>analyse problems and apply relevant management tools in the planning and administration of the environment</li> </ul>
	<ul> <li>assess and analyse the consequences of nutrient cycles and energy flows in relation to the environment and nature.</li> </ul>
	Competencies
	The student will learn to:
	<ul> <li>develop, individually and together with others, practical and theoretically well-founded solution models for the utilisation of biological resources</li> </ul>

<ul> <li>independently and developmentally carry out analyses of the environmental consequences of land use and production and provide qualified solutions</li> <li>identify their own learning needs and develop their own knowledge, skills and competencies in relation to ecology.</li> </ul>		<ul><li>environmental consequences of land use and production and provide qualified solutions</li><li>identify their own learning needs and develop their own</li></ul>
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