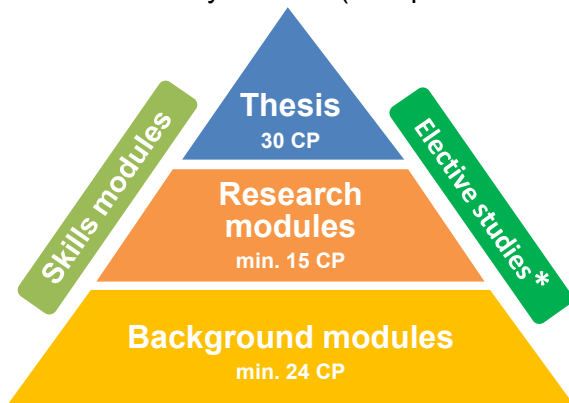


Curriculum

Why study Biology in Oldenburg?

- Design your own curriculum
- Choose from the wide range of biology modules
- Choose from related M.Sc. Programs in Landscape Ecology, Marine Environmental Sciences, Neuroscience or Molecular Biomedicine (elective studies *)
- No mandatory courses (except Master thesis)



Application

Application requirements:

B.Sc. in Biology or closely related field,
Language proficiency: English (level B2). Refer to admissions regulations for details.

Application date:

winter term: 15.05. -15.06.

Application via:

<https://uol.de/studium/bewerben/master>

<https://uol.de/en/application/international-students/master>

Contact:

Prof. Dr. Arne Nolte, arne.nolte@uol.de

Student body: fachschaft.biologie@uol.de

Study Atmosphere:

- Flexible: Individual study plans, wide choice of courses
- Intensive: Block courses focus on one topic at a time
- Hands-on: Most modules include lab time or field trips
- Science-orientated: Individual student research projects
- Personal: Small groups, close contact to teachers and scientists
- International: Most courses in English, optional semester abroad



M.Sc. Biology



<https://uol.de/en/biology/studies/master-of-science-biology/>

Environment:

- Collaborations: Alfred Wegener Institute, Senckenberg Institute, Institut für Vogelforschung, Helmholtz Institute for Functional Marine Biodiversity, botanical garden, cluster of excellence Hearing4all
- Future perspectives in Oldenburg: Graduate schools, collaborative science projects



The M.Sc. Biology in Oldenburg offers teaching from leading scientists to train the next generation of researchers. The aim of this program is to provide students theoretical backgrounds and practical skills to study complex ecosystems down to the function of individual genes.

It prepares students to work independently in industry, business, research or at other private or public institutions and lays the groundwork for PhD work.

Specialization profiles:

From genes to ecosystems: Marine, aquatic and terrestrial biodiversity, ecology and evolution (BEE)

From genes to behaviour: Sensory systems, ornithology, migration and navigation

Modules M.Sc. Biology

NR	Module	Teaching staff	Winter Semester		Semester break	Summer Semester		Semester break	
			1. Half	2. Half		1. Half	2. Half		
bio703	Basic Concepts in Plant Sciences	Zotz, Albach, von Hagen	12 CP						
bio655	Ornithology in theoretical Concepts	Liedvogel, Bouwhuis, Köppl, Langemann, Mouritsen, Schmaljohann, Feenders	12 CP						
bio733	Evolutionary Population Genetics	Gerlach, Albach, Khan	6 CP						
bio736	Evolutionary Transcriptomics	Nolte, Dennenmoser		6 CP					
bio845	Development & Evolution	Sienknecht, Claußen	6 CP						
bio846	Lab Exercises in Development & Evolution	Sienknecht, Claußen, Ebbes		6 CP					
bio605	Molecular Genetics & Cell Biology	Neidhardt, Koch	12 CP						
bio765	Current Methods in Plant Sciences - Ecology, Phylogeny and Molecular Biology	Albach, Zotz, Will, Khan, von Hagen		12 CP					
bio720	Marine Biodiversity	Martinez Arbizu		15 CP					
bio695	Biochem. Conc. in Signal Transduct.	Koch, Scholten		12 CP					
neu210	Neurosensory Science & Behaviour	Langemann, Mouritsen		9 CP					
neu220	Neurocognition & Psychopharmacology	Thiel, Gießing		6 CP					
bio675	Molecular Ecology	Nolte, Gerlach				12 CP			
neu141	Visual Neuroscience: Physiology & Anatomy	Greschner, Dedek, Janssen-Bienhold, Puller				12 CP			
neu150	Visual Neuroscience: Anatomy	Janssen-Bienhold, Puller				6 CP			
bio663	Ornithology in Practice	Liedvogel, Bouwhuis, Langemann, Vedder, Moiron, Schmaljohann				12 CP			
psy270	Functional MRI Data Analysis	Gießing, Thiel				9 CP			
bio773	Sequence based Biomonitoring	Nolte, Dennenmoser, Martinez, Albach					12 CP		
neu360	Auditory Neuroscience	Köppl					6 CP		
neu340	Invertebrate Neuroscience	Kretzberg					6 CP		
neu310	Psychophysics of Hearing	Beutelmann					12 CP		
bio860	Comparative Developmental Biology	Sienknecht					6 CP		
bio770	Field Methods in Organismal Biology	Zotz, Gerlach, Albach, Nolte, Mouritsen, von Hagen						15 CP	
bio780	Biodiversity of Littoral Communities	Martinez-Arbizu						15 CP	
bio870	Communicating Biology	Zotz, Albach, Schmaljohann	6 CP						
bio880	Plant Diversity	Albach, von Hagen	6 CP						
bio777	Objekte in wissenschaftl. Sammlungen: Konserv., Management & Forschungsfragen	Will, NN	6 CP						
neu790	Communicating Neuroscience	Kretzberg, Köppl	3 CP						
bio890	Current Topics in Biology*	Gerlach, teaching staff	3 CP (option 1)			3 CP (option 2)			
neu730	Biosciences in the Public Eye and in our Laws	Köppl, Sienknecht				6 CP			
neu751	Laboratory Animal Science	Köppl, Langemann			3 CP opt. 1		3 CP opt. 2	3 CP opt. 3	
neu760	Scientific English	Manley, Köppl			6 CP				
neu780	Introduction Data Analysis with Python	Winkhofer			6 CP				
neu800	Introduction to Matlab	Gießing			3 CP				
bio783	Object-based research projects in biological collections	Will, Albach	6 CP flexible timing						
neu810	International Meeting Contribution	Kretzberg, Köppl	3 CP flexible timing						
neu820	Neuroscience Journal Club	Mertsch	3 CP weekly course						
bio810	External Research Project*	Zotz, teaching staff	15 CP flexible timing						
bio900	Biology Research Module*	Zotz, teaching staff	15 CP flexible timing						
mam	Master Thesis Module	teaching staff	30 CP flexible timing						

Background Modules

Skills Modules

Research

Program requirements:

- 30 CP Master Thesis Module
- 24 CP Background Modules
- 15 CP Research Modules
- 21 CP any further module(s) from Biology curriculum
- 30 CP free choice: any further Biology Module(s) or (subject to approval) Course(s) from other M.Sc. programs, from other universities, or from abroad.


Modules bio900 and bio810

- 30 CP Master Thesis Module
- 30 CP Master Thesis Module with external master thesis.


offer several project options; bio900 is mandatory in combina-

Modules with shared course components, similar content or previous versions (see list) cannot be credited twice.

block courses



weekly courses / irregular meetings



*multiple registration possible

For official regulations see <https://uol.de/studium/pruefungen> and www.uol.de/amtliche-mitteilungen