

## Module variant to: Foundations of Genetics and Genomics

<b>Module:</b> Plant Sciences - Recent research topics in plant epigenetics				
<b>University/Department/Teaching Unit:</b> Freie Universität Berlin/Department of Biology, Chemistry, Pharmacy/Biology				
<b>Module coordinator:</b> Daniel Schubert				
<b>Prerequisites:</b> none				
<b>Learning objectives:</b> Students have a basic and broad spectrum of theoretical and methodological knowledge in the field of genetics and genomics, with a focus on plant and algal epigenetics. They are able to plan and implement scientific projects and present a seminar about scientific literature and about lab projects.				
<b>Content:</b> The module provides a broad overview of general and specific issues in genetics and genomics and plant epigenetics. In the seminar, current topics are reviewed, presented and critically discussed with the aid of original literature and presentations by AG Schubert lab members and put into practice in the exercise. Students will also learn experimental planning within the course.				
<b>Modes of instruction</b>	<b>Contact hours</b> (hours per week during the semester)	<b>Types of active participation</b>	<b>Workload</b> (in hours)	
Seminar (S)	1	–	Class attendance (seminar) Preparation, before and after (seminar)	15 15
Practice sessions (Ü)	2	Carrying out and documenting experiments	Class attendance (practice session) Preparation, before and after (practice session)  Exam preparation and exam	30 15  75
<b>Module assessment</b>		Written exam (60 minutes), wholly or partially in multiple-choice format; can also be carried out electronically or written report on research results (approx. 10 pages) or examination colloquium (approx. 20 minutes)		
<b>Language</b>		English		
<b>Regular attendance required</b>		yes		
<b>Total workload</b>		150 hours	5 credit points	
<b>Duration</b>		one semester		
<b>Frequency</b>		irregular		
<b>Applicability</b>		Master's degree program M.Sc. Biology		

Utilization in the following specializations (decision by the examining board):

Biodiversity, Evolution and Ecology	
Genetics and Genomics	x
Microbiology	
Molecular- and Cellular Biology	x
Molecular Plant Sciences	x
Neurobiology	
Biology	x