
pb229 - Introductory Molecular Systematics

Module label

Modulkürzel

Credit points

Workload

Verwendbarkeit des Moduls

Introductory Molecular Systematics

pb229

6.0 KP

180 h

- Bachelor's Programme Biology (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Business Administration and Law (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Business Informatics (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Chemistry (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Comparative and European Law (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Computing Science (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Economics and Business Administration (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Education (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Engineering Physics (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Environmental Science (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Intercultural Education and Counselling (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Mathematics (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Physics (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Physics, Engineering and Medicine (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Social Studies (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Sustainability Economics (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme Art and Media (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme Biology (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme Chemistry (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme Computing Science (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme Dutch Linguistics and Literary Studies (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme Economic Education (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme Economics and Business Administration (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme Education (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme Elementary Mathematics (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme English Studies (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme Gender Studies (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme General Education (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme German Studies (Bachelor) > Fachnahe Angebote Biologie
- Dual-Subject Bachelor's Programme History (Bachelor) > Fachnahe Angebote Biologie

	• Dual-subject bachelor's programme Low German (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Material Culture: Textiles (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Mathematics (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Music (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Philosophy / Values and Norms (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Physics (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Politics-Economics (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Protestant Theology and Religious Education (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Slavic Studies (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Social Studies (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Special Needs Education (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Sport Science (Bachelor) > Fachnahe Angebote Biologie • Dual-Subject Bachelor's Programme Technology (Bachelor) > Fachnahe Angebote Biologie • Fach-Bachelor Pädagogisches Handeln in der Migrationsgesellschaft (Bachelor) > Fachnahe Angebote Biologie • Bininda-Emonds, Olaf (module responsibility) • Bininda-Emonds, Olaf (Prüfungsberechtigt) • Albach, Dirk Carl (Prüfungsberechtigt) • Albach, Dirk Carl (Module counselling)	
Zuständige Personen		
Prerequisites	Grundlegende Computerkenntnisse	
Skills to be acquired in this module	++ biological knowledge ++ knowledge of biological working methods ++ statistics & scientific programming + abstract, logical, analytical thinking ++ deepened expertise in biological specialist field + independent learning and (research-based) working ++ teamwork + project and time management	
	The students will gain practical experience with diverse methods used in phylogenetic reconstruction, including: 1) the types of and manipulation of phylogenetic data with an emphasis on DNA sequence data, 2) the construction of phylogenetic trees using different optimization criteria and methods, and 3) the application of phylogenetic trees in biology. General introduction to phylogenetic data (morphology and sequence data), phylogenetic trees, and sequence databases. Introduction to the theory underlying different optimization criteria and management of phylogenetic data as well as gaining hands-on practical experience of their use and the application of phylogenetic trees through diverse computer programs. Knoop, V. and K. Müller. 2009. Gene und Stammbäume: ein Handbuch zur molekularen Phylogenetik. 2. Auflage. Spektrum Akademischer Verlag. 386 pp.	
Module contents		
Literatureempfehlungen		
Links		
Languages of instruction	German, English	
Duration (semesters)	1 Semester	
Module frequency	jährlich	
Module capacity	unlimited	
Type of module	Ergänzung/Professionalisierung	
Module level	PB (Professionalisierungsbereich / Professionalization)	
Examination	Prüfungszeiten	Type of examination
Final exam of module		Portfolio (100%) (2 Achievements)

Examination

Prüfungszeiten

Type of examination

PLEASE NOTE:

Additional conditions regarding attendance and ungraded activities as determined by the persons responsible for the module will apply.

Lehrveranstaltungsform

Exercises

SWS

4

Frequency