

# Module Catalogue for the Subject

# Geography (Focus Physical Geography)

as a major in a Bachelor's degree programme with the degree "Bachelor of Science" (120 ECTS credits)

Examination regulations version: 2010

Responsible: Faculty of Arts, Historical, Philological, Cultural and Geographical

Studies

Responsible: Institute of Geography and Geology



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# The subject is divided into

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#### **Content and Objectives of the Programme**

The program of studies is intended to provide a solid background in the most important subfields of physical geography and familiarize the student with the techniques of geographical reasoning and working. Their education and training towards analytical and synthetic thinking is to provide the future geographers with the skills to adapt to new tasks and to gain and develop the basic knowledge required for achieving their Bachelor- and Master-Degrees. Therefore, the main focus is on the comprehension of the fundamental geographical terms and theories as well as on a sound knowledge of techniques and the development of typical thought processes. The primary educational objective of the undergraduate studies towards a Bachelors degree with professional qualifications is thus the acquisition of skills to purposefully analyze, assess and effectively co-design the development of current land management with regard to its effect on society and economy.

Specifically, the following student outcomes (knowledge, skills and competencies) are achieved:

- Expert knowledge about physical geography and spatial science.
- Overview of the relationship of their own disciplines
- Ability to identify, formulate and supported by personally researched literature solve subjectspecific problems and tasks.
- Processing of analysis, synthesis and development tasks with particular reference to scientific, technical, social, ecological, economic and social constraints and standards by means of appropriate methods and the application of adequate working techniques (particularly regarding EDP).
- Preparation for flexible employment in various professional areas through methodical and subject-specific skills.
- Capability to discuss geographical contents and problems with peers and colleagues and to explain them to a more diverse audience.
- Ability to work independently as well as cooperatively, to effectively organize and carry out projects and to develop into and assume managerial responsibilities.
- Preparation for their start into professional (industrial or scientific) life by sufficient practical experience and vocational training.

The final examination is to determine whether the geographical aspects taught during the program of studies have been understood, and whether the candidate has achieved the skill to apply the scientific methods.

#### **Abbreviations used**

Course types:  $\mathbf{E} = \text{field trip}$ ,  $\mathbf{K} = \text{colloquium}$ ,  $\mathbf{O} = \text{conversatorium}$ ,  $\mathbf{P} = \text{placement/lab course}$ ,  $\mathbf{R} = \text{project}$ ,  $\mathbf{S} = \text{seminar}$ ,  $\mathbf{T} = \text{tutorial}$ ,  $\ddot{\mathbf{U}} = \text{exercise}$ ,  $\mathbf{V} = \text{lecture}$ 

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: A = thesis, LV = course(s), PL = assessment(s), TN = participants, VL = prerequisite(s)

#### **Conventions**

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

#### **Notes**

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should the module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

#### In accordance with

the general regulations governing the degree subject described in this module catalogue:

#### ASP02009

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

#### 21-Mar-2011 (2011-32)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.



# **Compulsory Courses**

(60 ECTS credits)



# **General Physical Geography**

(15 ECTS credits)



Module title			Abbreviation		
General Physical Geography				09-PG1-102-m01	
Module coordinator				Module offered by	
holder of the Chair of Physical Geography			aphy	Institute of Geography and Geology	
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)	
15	nume	rical grade			
Duration Module level Other prerequisites					
1 seme	ester	undergraduate			

#### **Contents**

Introduction to "Physical Geography": basics of exogenous dynamics, endogenous dynamics and climatology.

#### **Intended learning outcomes**

Students dispose over the following skills: basics of the system Earth, i.e. the understanding of processes that are dominating the landscape on the Earth's surface and which are driven by the geological factors rocks, relief, climate, soil, water, flora and fauna. They are decisive for the understanding of the structure, function and dynamics of the natural space and its anthropogenic transformation (i.e. the environment, which has been shaped from humans by land using, settlements, transport routes etc.).

**Courses** (type, number of weekly contact hours, language — if other than German)

This module comprises 3 module components. Information on courses will be listed separately for each module component.

- o9-PG1-2-082: V + T (no information on SWS (weekly contact hours) and course language available)
- o9-PG1-3-082: V + T (no information on SWS (weekly contact hours) and course language available)
- og-PG1-1-102: V + T (no information on SWS (weekly contact hours) and course language available)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.

**Assessment in module component 09-PG1-2-082:** General Physical Geography 2 (Earth System: Climate System) General Physical Geography 2 (Earth System: Climate System)

- 5 ECTS, Method of grading: numerical grade
- written examination (approx. 45 minutes)

**Assessment in module component 09-PG1-3-082:** General Physical Geography 3 (Earth System: Endogenic Dynamics) General Physical Geography 3 (Earth System: Endogenic Dynamics)

- 5 ECTS, Method of grading: numerical grade
- written examination (approx. 45 minutes)

**Assessment in module component 09-PG1-1-102:** General Physical Geography 1 (Earth System: Exogeneous Dynamics - Geomorphology) General Physical Geography 1 (Earth System: Exogeneous Dynamics - Geomorphology)

- 5 ECTS, Method of grading: numerical grade
- written examination (approx. 45 minutes)

Allocation of places	
Additional information	
Workload	
Teaching cycle	



#### **Referred to in LPO I** (examination regulations for teaching-degree programmes)

§ 47 (1) 1. Geographie Physiogeographie

§ 66 (1) 1. Geographie Physiogeographie

#### Module appears in

Bachelor' degree (1 major) Geography (2010)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)



# **General Human Geography**

(10 ECTS credits)



Module title			Abbreviation		
General Human Geography - Part 1				09-HG1T1-102-m01	
Module coordinator				Module offered by	
holder	holder of the Chair of Economic Geography			Institute of Geography and Geology	
ECTS	Metho	od of grading	Only after succ. co	mpl. of module(s)	
10	nume	rical grade			
Duration Module level Other prerequisit		S			
1 semester undergraduate					
Conte	Contents				

Introduction to "Basic Concepts" and individual sub-areas of "Human Geography".

#### Intended learning outcomes

Students possess the following skills: basics and definitions to Human Geography, research institutions and technical conception to Human Geography. This includes Urban Geography, Geography of Rural Settlements, Economic Geography, Social Georgaphy, Population Geography and Civilisation Geographical Research.

**Courses** (type, number of weekly contact hours, language — if other than German)

This module has 3 components; information on courses listed separately for each component.

- og-HG1-1-082: V + T (no information on language and number of weekly contact hours available)
- og-HG1-2-082: V + T (no information on language and number of weekly contact hours available)
- og-HG1-3-082: V + T (no information on language and number of weekly contact hours available)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

This module has the following 3 assessment components. To pass the module as a whole students must pass two out of these three assessment components.

Assessment component to module component og-HG1-1-082: Einführung in die Siedlungsgeographie

- 5 ECTS credits, method of grading: numerical grade
- written examination (approx. 45 minutes)

Assessment component to module component o9-HG1-2-082: Einführung in die Wirtschaftsgeographie

- 5 ECTS credits, method of grading: numerical grade
- written examination (approx. 45 minutes)

Assessment component to module component o9-HG1-3-082: Einführung in die Sozial- and Bevölkerungsgeo-

- 5 ECTS credits, method of grading: numerical grade
- written examination (approx. 45 minutes)

# Allocation of places **Additional information**

#### Workload

#### **Teaching cycle**

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

§ 47 (1) 1. Geographie Humangeographie

§ 66 (1) 1. Geographie Humangeographie

#### Module appears in

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)



# **Special Problems of Physical Geography**

(5 ECTS credits)



Module title					Abbreviation
Special Problems of Physical Geography 1			graphy 1		09-PG2T1-102-m01
Modul	Module coordinator			Module offered by	
holder	holder of the Chair of Physical Geography			Institute of Geography and Geology	
ECTS	Meth	od of grading	Only after succ. co	mpl. of module(s)	
5	numerical grade				
Duration Module level		Other prerequisites	Other prerequisites		
1 semester undergraduate					
Conter	Contents				

This module covers synthesis and networking of physical-geographical factors in the light of different methodical approaches and particularly on the basis of the human impact: geomorphology, climate, soil, hydro geography, global change and past global change incl. geo and ecosystem research and ecosystem prediction as well as the cycle of materials on Earth's surface.

#### **Intended learning outcomes**

Students are acquainted with the synthesis and interconnectedness of skills that have already been acquired concerning the processes on Earth's surface, which are dominating the landscape on Earth's surface and are driven by the geological factors rock, relief, climate, soil, water, flora and fauna. These processes determine structure, function and dynamics of the natural environment and its anthropogenic transformation (the environment that has been shaped from humans by land utilisation, settlements, transport routes etc.). Through the quantitative acquisition of current process structures, Physical Geography is not only able to derive predications for the capability and capacity of geological systems, but also to predict changes in future by analysing the development and change of geographical territories in the past. These important planning decision-making bases concerning the management as well as the sustainable use and development, are given weight to the task of Physical Geography in the practical area.

**Courses** (type, number of weekly contact hours, language — if other than German)

V (no information on SWS (weekly contact hours) and course language available)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 45 minutes)

#### Allocation of places

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#### **Additional information**

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#### Workload

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#### **Teaching cycle**

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#### $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$

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#### Module appears in

Bachelor' degree (1 major) Mathematics (2012)

Bachelor' degree (1 major) Mathematics (2013)

Bachelor's degree (1 major, 1 minor) Geography (Minor, 2012)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)

Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)



# **Working methods of Physical Geography**

(15 ECTS credits)



Module title					Abbreviation
Data Acquisition and Processing in Physical Geography					09-MT1-102-m01
Module	e coord	inator		Module offered by	
holder	holder of the Chair of Physical Geography			Institute of Geography and Geology	
ECTS	ECTS Method of grading Only after succ. con		Only after succ. con	npl. of module(s)	
5	nume	numerical grade			
Duration Module level Other prerequi		Other prerequisites			
1 semester undergraduate					
Conten	Contents				

Consolidation of methodical knowledge concerning the collection and processing of data sets, which will be adduced in "Physical Geography" as a typical example in order to understand the natural environment; Advanced students can attend alternative seminars, in which applications from the areas ground climatology, climate modelling, geophysical methods, soil science of fields, remote sensing and GIS (geographic information system) will be offered optionally.

#### **Intended learning outcomes**

Students have advanced knowledge of the area basic principles, methodology, cartography and EDP (if necessary statistics, too), which are gained by means of a precise task. Thus, each form of data collection in the field or the modelling at the computer with different stages of data processing in the lab or at the computer will be linked together in order to teach the practical dealing with geophysical measurement methods as well as the dealing with different software applications.

**Courses** (type, number of weekly contact hours, language — if other than German)

S (no information on SWS (weekly contact hours) and course language available)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

presentation (approx. 15 minutes) with written elaboration (15 pages), weighted 1:1

#### Allocation of places

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#### **Additional information**

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#### Workload

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#### **Teaching cycle**

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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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#### Module appears in

Bachelor' degree (1 major) Geography (2010)

Bachelor' degree (1 major) Mathematics (2012)

Bachelor' degree (1 major) Mathematics (2013)

Bachelor's degree (1 major, 1 minor) Geography (Minor, 2012)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)



Module title				Abbreviation	
Working Methods: Solid Earth System				09-MT3-082-m01	
Modul	Module coordinator			Module offered by	
I .	holder of the Chair of Geodynamics and Geomaterials Research			Institute of Geography and Geology	
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)	
10	nume	rical grade			
Duration Module level Other prerequisit		Other prerequisites	3		
1 semester undergraduate					
Contor	Contents				

Contents

Basic observations on geological materials that can already be made in the field and which can lead to a first interpretation of geological processes, which took place, as well as the creation of value of geomaterials. Students will be provided with distinctive features and characteristics of the most important rock-forming and economically relevant minerals by means of chosen visuals. Subsequently, the classification of the most important sedimentary, igneous and metamorphic rock types will be elucidated and practised on the basis of their in the hand-piece identifiable mineral existence and structure. In the following modular section, the understanding of two-dimensional display of three-dimensional display of geological phenomena like the geographical distribution of different rock types or tectonic structures will be developed in form of geological maps and sections as well as simple structural-geological diagrams.

#### Intended learning outcomes

Students are able to identify the most important mineral types and as far as possible, to outline and interpret the rock samples without analytical tools. Moreover, they are able to interpret geological maps correctly and to show geological field observations in map form, profiles and suitable diagrams.

**Courses** (type, number of weekly contact hours, language — if other than German)

This module comprises 2 module components. Information on courses will be listed separately for each module component.

- o9-MT3-1-082: S (no information on SWS (weekly contact hours) and course language available)
- og-MT3-2-082: Ü (no information on SWS (weekly contact hours) and course language available)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.

#### **Assessment in module component 09-MT3-1-082:** Mineral and Rock Identification

- 5 ECTS, Method of grading: numerical grade
- written or oral examination of one candidate each (30 minutes each)

#### **Assessment in module component 09-MT3-2-082:** Geological Maps and Structures

- 5 ECTS, Method of grading: numerical grade
- written or oral examination of one candidate each (approx. 30 minutes each) or term paper (approx. 20 pages)

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Allocation of places	
Additional information	
Workload	



#### **Teaching cycle**

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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

§ 66 (1) 2. Geographie Methoden der Geographie

#### Module appears in

Bachelor' degree (1 major) Geography (2008)

Bachelor' degree (1 major) Geography (2010)

Bachelor' degree (1 major) Mathematics (2008)

Bachelor' degree (1 major) Mathematics (2012)

Bachelor' degree (1 major) Mathematics (2013)

Bachelor's degree (1 major, 1 minor) Geography (Minor, 2012)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)



# **Statistics and Cartography**

(15 ECTS credits)



Module title			Abbreviation			
Cartography and Statistics 1				09-STATKART1-102-m01		
Module coordinator				Module offered by		
holder	holder of the Professorship of Cultural Geography				Institute of Geography and Geology	
ECTS	CTS Method of grading Only after succ. co		. com	pl. of module(s)		
10	nume	rical grade				
Duration Module level Other prerequisi		sites				
1 semester undergraduate						
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#### **Contents**

Introduction to "Cartography" and to the "Collection and Processing of Geodata", introduction to "Statistical Working Methods to Geography": basics of univariate and multivariate statistics.

#### **Intended learning outcomes**

Students have the following skills: Basics of Cartography and the use of geo data. Students have the knowledge of basic statistical processes of data analysis and thus, are familiar with one part of the basics concerning the methodological and practical area.

Courses (type, number of weekly contact hours, language - if other than German)

This module comprises 2 module components. Information on courses will be listed separately for each module component.

- o9-KART-1-082: V + T (no information on SWS (weekly contact hours) and course language available)
- o9-STAT-1-082: V + T (no information on SWS (weekly contact hours) and course language available)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.

Assessment in module component og-KART-1-082: Cartography and Geodata Cartography and Geodata

- 5 ECTS, Method of grading: numerical grade
- written examination (approx. 75 minutes) and practice work (approx. 30 hours for creating approx. 3 maps or diagrams); weighted 1:1

**Assessment in module component og-STAT-1-082:** Statistics 1: Fundamentals of Descriptive and Inferential Statistics Statistics 1: Fundamentals of Descriptive and Inferential Statistics

- 5 ECTS, Method of grading: numerical grade
- written examination (approx. 60 minutes)

# Allocation of places -Additional information -Workload

#### Teaching cycle

 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 

§ 66 (1) 2. Geographie Methoden der Geographie

#### Module appears in

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010) Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)



Modul	e title				Abbreviation	
Cartog	raphy a	and Statistics 2			09-STATKART2-102-m01	
Modul	e coord	inator		Module offered by	y	
holder	of the	Chair of Physical Geog	raphy	Institute of Geogr	aphy and Geology	
ECTS	Meth	od of grading	Only after succ. c	ompl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisit	Other prerequisites		
1 seme	ster	undergraduate				
Conter	ıts					
		o "GIS", consolidation ariate statistics.	of "statistical working	g methods to Geogra	phy": Specific processes and ba-	
Intend	ed lear	ning outcomes				
Students have the following skills: Basics of GIS. Students have the knowledge of basic specific and multivariate statistical processes of data analysis and hence, are acquainted with a further part of the basics concerning the methodological and practical area.						
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)						

- o9-STAT-2-102: V + T (no information on language and number of weekly contact hours available)
- og-KART-2-102: S (no information on language and number of weekly contact hours available)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

This module has the following 2 assessment components. To pass the module as a whole students must pass one of the two assessment components.

**Assessment component to module component og-STAT-2-102:** Statistik 2: Spezielle and multivariate Verfahren

- 5 ECTS credits, method of grading: numerical grade
- written examination (approx. 60 minutes)

**Assessment component to module component og-KART-2-102:** Geographische Informationssysteme (GIS)

# • 5 ECTS credits, method of grading: numerical grade • practice work (approx. 5 pieces of practice work to be completed in approx. 30 hours) Allocation of places - Additional information - Workload - Teaching cycle - Referred to in LPO I (examination regulations for teaching-degree programmes) - Module appears in

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010) Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)



# **Compulsory Electives**

(30 ECTS credits)



# **Special and Applied Physical Geography**

(ECTS credits)



Module title					Abbreviation
Special Problems of Physical Geography 2					09-PG2T2-102-m01
Module coordinator				Module offered by	
holder	holder of the Chair of Physical Geography			Institute of Geography and Geology	
ECTS	Meth	od of grading	Only after succ. co	mpl. of module(s)	
5	nume	erical grade			
Duration Module level Othe		Other prerequisites	S		
1 semester undergraduate					
Conter	Contents				

This module covers synthesis and networking of physical-geographical factors in the light of different methodical approaches and particularly on the basis of the human impact: geomorphology, climate, soil, hydro geography, global change and past global change incl. geo and ecosystem research and ecosystem prediction as well as the cycle of materials on Earth's surface.

#### Intended learning outcomes

Students are acquainted with the synthesis and interconnectedness of skills that have already been acquired concerning the processes on Earth's surface, which are dominating the landscape on Earth's surface and are driven by the geological factors rock, relief, climate, soil, water, flora and fauna. These processes determine structure, function and dynamics of the natural environment and its anthropogenic transformation (the environment that has been shaped from humans by land utilisation, settlements, transport routes etc.). Through the quantitative acquisition of current process structures, Physical Geography is not only able to derive predications for the capability and capacity of geological systems, but also to predict changes in future by analysing the development and change of geographical territories in the past. These important planning decision-making bases concerning the management as well as the sustainable use and development, are given weight to the task of Physical Geography in the practical area.

**Courses** (type, number of weekly contact hours, language — if other than German)

S (no information on SWS (weekly contact hours) and course language available)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

presentation (approx. 30 minutes) with written elaboration (approx. 20 pages), weighted 1:1

#### Allocation of places

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#### **Additional information**

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#### Workload

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#### **Teaching cycle**

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#### $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$

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#### Module appears in

Bachelor' degree (1 major) Mathematics (2012)

Bachelor' degree (1 major) Mathematics (2013)

Bachelor's degree (1 major, 1 minor) Geography (Minor, 2012)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)

Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)



Modul	e title				Abbreviation	
Applied Physical Geography					09-PG3-102-m01	
Module coordinator				Module offered by		
holder	holder of the Chair of Physical Geography			Institute of Geography and Geology		
ECTS	Meth	od of grading	Only after succ. co	mpl. of module(s)		
10	nume	rical grade				
Durati	Duration Module level		Other prerequisite	Other prerequisites		
1 seme	ester	undergraduate				
<i>-</i> .	Containte					

#### **Contents**

Students will choose a topic of "Physical Geography" and attend a project seminar: data collection, data analysis and presentation of explored issues.

#### **Intended learning outcomes**

Students know how to use their skills, which they have already acquired in the area basics and methods, in order to implement them practically. Based on a specific issue, which is partly integrated in a current research project, process steps of geographical research and method will be undergone. Students are acquainted with the data collection in the field or the modelling at the computer, the application of statistical processes, the cartographic visualisation and presentation in form of lectures, posters, films, Internet or reports. They also possess the ability to work independently.

**Courses** (type, number of weekly contact hours, language — if other than German)

This module comprises 2 module components. Information on courses will be listed separately for each module component.

- og-PG3-1-o82: S (no information on SWS (weekly contact hours) and course language available)
- og-PG3-2-102: S (no information on SWS (weekly contact hours) and course language available)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.

**Assessment in module component 09-PG3-1-082:** Project Seminar: Establishing Current Status and Data Acquisition

- 5 ECTS, Method of grading: numerical grade
- presentation (30 minutes) with written elaboration (20 pages), weighted 1:1

**Assessment in module component 09-PG3-2-102:** Project Seminar: Data Evaluation, Data Visualisation and Presentation

5 ECTS, Method of grading: numerical grade

# project report (approx. 20 pages) Allocation of places - Additional information - Workload - Teaching cycle - Referred to in LPO 1 (examination regulations for teaching-degree programmes)



#### Module appears in

Bachelor' degree (1 major) Geography (2010)

Bachelor' degree (1 major) Mathematics (2012)

Bachelor' degree (1 major) Mathematics (2013)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)



# Cartography

(ECTS credits)



Module	Module title Abbreviation						
Statist	ics 2				09-STAT2-102-m01		
Module	coord	inator		Module offered by			
holder	of the (	Chair of Physical Geograp	hy	Institute of Geograp	ohy and Geology		
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	undergraduate					
Conten	ts						
Introdu	ction to	o "Statistical Working Me	thods to Geography"	: basics of multivaria	ate statistics.		
Intende	ed learı	ning outcomes					
	of the r	nethodological and pract	•		sis and thus, are familiar with the n the computerised data analysis		
Course	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	rman)			
V + T (n	o infor	mation on SWS (weekly c	ontact hours) and co	urse language availa	able)		
		<b>essment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether		
written	exami	nation (approx. 60 minut	es)				
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
Teachi	ng cycl	e					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module	Module appears in						
Bachel	Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010) Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010) Bachelor's degree (2 majors) Geography (2010)						



Module	Module title Abbreviation					
Geogra	Geographical Information Systems (GIS) 09-KART2-102-m01					
Module coordinator Module offered by						
holder	of the	Chair of Physical Geograp	ohy	Institute of Geograp	phy and Geology	
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	its		•			
Introdu	ıction t	o "GIS".				
Intend	ed lear	ning outcomes				
Studer	its pos	sess the following skills:	Students acquire the	ability to deal with g	geo data and GIS.	
		number of weekly contact hours,	<u>'</u>	·		
S (no ii	nforma	tion on SWS (weekly con	tact hours) and cours	e language available	e)	
Metho	d of as	sessment (type, scope, langua	age — if other than German,	examination offered — if no	ot every semester, information on whether	
		ple for bonus)				
practic	e work	(approx. 5 pieces of prac	tice work to be comp	leted in approx. 30 h	nours)	
Allocat	ion of	places				
Additio	nal inf	ormation				
Worklo	ad					
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulation	is for teaching-degree progra	ımmes)		
Module appears in						
Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)						
	Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)					
Bachelor's degree (2 majors) Geography (2010)						



# **Remote Sensing**

(ECTS credits)



Module title					Abbreviation	
Remot	e Sensi	ng 1			09-FERN1-102-m01	
Modul	e coord	inator		Module offered by		
holder	of the (	Chair of Remote Sensing		Institute of Geograp	ohy and Geology	
ECTS	Metho	od of grading	Only after succ. con	ipl. of module(s)		
5	nume	rical grade				
Durati	on	Module level	Other prerequisites			
1 seme	ester	undergraduate				
Conte	nts					
Introdu	uction to	o "Geographical Remote :	Sensing".			
Intend	ed lear	ning outcomes				
		sess the following skills: nd of different sensor and			System, Remote Sensing against	
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)		
V + T (1	no infor	mation on SWS (weekly o	ontact hours) and co	urse language availa	able)	
		<b>sessment</b> (type, scope, langua ole for bonus)	ge — if other than German, (	examination offered — if no	ot every semester, information on whether	
writter	exami	nation (approx. 45 minut	es)			
Alloca	tion of p	places				
Additio	onal inf	ormation				
Workle	oad					
	1					
Teachi	ing cycl	e				
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		
§ 66 (1	2. Geo	ographie Methoden der G	eographie			
Module appears in						
Bachelor' degree (1 major) Computer Science (2014)  Bachelor' degree (1 major) Mathematics (2014)  Bachelor' degree (1 major) Mathematics (2012)  Bachelor' degree (1 major) Mathematics (2013)  Bachelor's degree (1 major, 1 minor) Geography (Minor, 2012)  Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)						
	Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)					



Module title Abbreviation					
Remot	e Sensi	ng 2			09-FERN2-102-m01
Modul	e coord	inator		Module offered by	<u> </u>
holder	of the	Chair of Remote Sensing		Institute of Geograp	ohy and Geology
ECTS	Meth	od of grading	Only after succ. com	ıpl. of module(s)	
5	nume	rical grade			
Durati	on	Module level	Other prerequisites		
1 seme	ester	undergraduate			
Conte	nts				
Applic	ation of	Remote Sensing to Geog	graphy.		
		ning outcomes			
		e skills of current geograp of application possibiliti			e cross-sectional methodology, fications.
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)	
V + T (	no infor	mation on SWS (weekly o	ontact hours) and co	urse language availa	able)
		sessment (type, scope, langua ole for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether
writter	exami	nation (approx. 45 minut	es)		
Alloca	tion of <sub> </sub>	places			
Additi	onal inf	ormation			
Workle	o <u>ad</u>				
Teachi	ing cycl	e			
Referr	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)	
-					
Modul	e appea	ars in			
Bachelor' degree (1 major) Computer Science (2014)  Bachelor' degree (1 major) Mathematics (2014)  Bachelor' degree (1 major) Mathematics (2012)  Bachelor' degree (1 major) Mathematics (2013)  Bachelor's degree (1 major, 1 minor) Geography (Minor, 2012)  Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)  Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)					
Bacnelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)					



# **Regional Geography**

(ECTS credits)



Modul	e title	'	Abbreviation			
Region	nal Geo	graphy 1 - Part 1			09-RG1T1-102-m01	
Module coordinator				Module offered by		
holder	holder of the Chair of Physical Geography			Institute of Geography and Geology		
ECTS	Meth	od of grading	Only after succ. co	mpl. of module(s)		
5	nume	erical grade				
Duratio	Duration Module level		Other prerequisites	Other prerequisites		
1 semester undergraduate						
Conter	Contents					

The module covers issues of "General Geography" in terms of European subspaces or subspaces outside of Europe. This can be individual states as well as distinctive subspaces to Europe or European subspaces due to their lay (e.g. Northern Europe, Alpine countries or North America) or due to common features of distinctive states/regions (e.g. European Union or Arabian Peninsula).

#### **Intended learning outcomes**

Students possess the following skills: Students will apply general-geographical skills to regional-related issues, particularly partial steps:

- 1. Differentiation and characterisation of a region,
- 2. Working out of specific issues and spatial interactions as well as
- 3. Synthesis and demonstration of perspectives/problem solutions with thematic emphasis.

**Courses** (type, number of weekly contact hours, language — if other than German)

V (no information on SWS (weekly contact hours) and course language available)

 $\textbf{Method of assessment} \ (\textbf{type}, \textbf{scope}, \textbf{language} - \textbf{if other than German, examination offered} - \textbf{if not every semester, information on whether} \ (\textbf{type}, \textbf{scope}, \textbf{language} - \textbf{if other than German, examination offered} - \textbf{if not every semester, information on whether} \ (\textbf{type}, \textbf{scope}, \textbf{language}) \ (\textbf{type}, \textbf{language}) \$ module is creditable for bonus)

a) written examination (approx. 45 minutes) or b) oral examination of one candidate each (approx. 15 minutes) or c) oral examination in groups (groups of 3, 45 minutes)

#### Allocation of places

#### Additional information

#### Workload

#### **Teaching cycle**

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

#### Module appears in

Bachelor's degree (1 major, 1 minor) Geography (Minor, 2012)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)

Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)



Module	e title				Abbreviation	
Region	al Geo	graphy 1 - Part 2			09-RG1T2-102-m01	
Module coordinator				Module offered by		
holder	holder of the Chair of Physical Geography			Institute of Geography and Geology		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	1 semester undergraduate					
Conten	Contents					

The module covers issues of "General Geography" in terms of European subspaces or subspaces outside of European. This can be individual states as well as distinctive subspaces to Europe or European subspaces due to their lay (e.g. Northern Europe, Alpine countries or North America) or due to common features of distinctive states/regions (e.g. European Union or Arabian Peninsula).

#### Intended learning outcomes

Students possess the following skills: tudents will apply general-geographical skills to regional-related issues, particularly partial steps:

- 1. Differentiation and characterisation of a region,
- 2. Working out of specific issues and spatial interactions as well as
- 3. Synthesis and demonstration of perspectives/problem solutions with thematic emphasis.

**Courses** (type, number of weekly contact hours, language — if other than German)

S (no information on SWS (weekly contact hours) and course language available)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

presentation (approx. 30 minutes) with written elaboration (approx. 20 pages), weighted 1:1

#### **Allocation of places**

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#### **Additional information**

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#### Workload

--

#### **Teaching cycle**

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#### **Referred to in LPO I** (examination regulations for teaching-degree programmes)

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#### Module appears in

Bachelor's degree (1 major, 1 minor) Geography (Minor, 2012)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)

Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)



# **Human Geography**

(ECTS credits)



Modul	e title			Abbreviation		
General Human Geography - Part 2					09-HG1T2-102-m01	
Module coordinator				Module offered by	I.	
holder	holder of the Chair of Economic Geography			Institute of Geography and Geology		
ECTS	Meth	od of grading	Only after succ. co	npl. of module(s)		
5	nume	rical grade				
Duratio	Duration Module level		Other prerequisites	Other prerequisites		
1 semester undergraduate						
Conter	Contents					

Introduction to "Basic Concepts" and particular sub-areas of "Human Geography".

#### Intended learning outcomes

Students possess the following skills: Basics and definitions of a research field and technical conception of Human Geography. This includes Urban Geography, Geography of Rural Settlements, Economic Geography, Social Geography, Population Geography and Civilisation Geographical Research.

**Courses** (type, number of weekly contact hours, language — if other than German)

This module has 3 components; information on courses listed separately for each component.

- og-HG1-1-o82: V + T (no information on language and number of weekly contact hours available)
- og-HG1-2-082: V + T (no information on language and number of weekly contact hours available)
- og-HG1-3-082: V + T (no information on language and number of weekly contact hours available)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

This module has the following 3 assessment components. To pass the module as a whole students must pass one of the three assessment components.

Assessment component to module component og-HG1-1-082: Einführung in die Siedlungsgeographie

- 5 ECTS credits, method of grading: numerical grade
- written examination (approx. 45 minutes)

Assessment component to module component og-HG1-2-082: Einführung in die Wirtschaftsgeographie

- 5 ECTS credits, method of grading: numerical grade
- written examination (approx. 45 minutes)

Assessment component to module component o9-HG1-3-082: Einführung in die Sozial- and Bevölkerungsgeographie

- 5 ECTS credits, method of grading: numerical grade
- written examination (approx. 45 minutes)

# Allocation of places

**Additional information** 

Workload

**Teaching cycle** 

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

§ 47 (1) 1. Geographie Humangeographie

§ 66 (1) 1. Geographie Humangeographie

#### Module appears in

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)



Module	Module title Abbreviation					
Special Issues of Human Geography 1 09-HG2T1-102-m01					09-HG2T1-102-m01	
Module	e coord	inator		Module offered by		
holder	of the I	Professorship of Social G	eography	Institute of Geograp	ohy and Geology	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	its		•			
		leals with and consolidat Iuman Geography".	es chosen issues of '	'Theoretical and App	lied Human Geography" from a	
Intend	ed lear	ning outcomes				
S (no in	es (type, r	number of weekly contact hours, l	anguage — if other than Ger act hours) and cours	<sub>man)</sub> e language available	e)  to every semester, information on whether	
presen	tation (	(approx. 30 minutes) with	written elaboration	(approx. 20 pages),	weighted 1:1	
Allocat	ion of p	places	,			
Additio	nal inf	ormation				
Workload						
Teaching cycle						
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	immes)		

#### Module appears in

Bachelor' degree (1 major) Mathematics (2012)

Bachelor' degree (1 major) Mathematics (2013)

Bachelor's degree (1 major, 1 minor) Geography (Minor, 2012)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)

Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)



Module title					Abbreviation	
Specia	al Issue	s of Human Geography 2		09-HG2T2-102-m01		
Module coordinator				Module offered by		
holder	of the	Professorship of Social G	eography	Institute of Geograp	ohy and Geology	
ECTS	Meth	od of grading	Only after succ. con	ipl. of module(s)		
5	nume	rical grade				
Durati	on	Module level	Other prerequisites			
1 seme	ester	undergraduate				
Conte	nts					
		leals with and consolidat Iuman Geography".	es chosen issues of '	Theoretical and App	lied Human Geography" from a	
Intend	led lear	ning outcomes				
their a sis of i	pplicati indeper	ion-oriented implementat	cion. They are acquaing ell as presentation o	nted with the produc f the seminar papers	-area of Human Geography and ction of seminar papers on the ba s in a freely hold presentation.	
	_	tion on SWS (weekly cont				
module	is creditat	ole for bonus)			ot every semester, information on whether	
•	tion of	(approx. 30 minutes) with	i writteri etaboration	(approx. 20 pages),	weighted 1:1	
Alluca	tion or	places				
Vqqiti.	onal inf	ormation				
Additi	Onat iiii	Offication				
Workle	nad					
	<u> </u>					
Teachi	ing cycl	Δ				
	ing cycl					
Poforr	ed to in	LPO I (examination regulation	s for toaching dograp progra	mmas)		
	eu to iii	Li O i (examination regulation)	s for teaching-degree progra	illilles)		
Modul	le appea	ars in				
Bachelor' degree (1 major) Mathematics (2012) Bachelor' degree (1 major) Mathematics (2013) Bachelor's degree (1 major, 1 minor) Geography (Minor, 2012) Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)						
Bache	Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)					



### **Thesis**

(10 ECTS credits)



Module title					Abbreviation
Bachelor Thesis Geography					09-AA-Ge0-102-m01
Module coordinator				Module offered by	
Managi gy	Managing Director of the Institute of Geography and Geology			Institute of Geograp	bhy and Geology
ECTS	Meth	od of grading	Only after succ. con	ıpl. of module(s)	
10	nume	rical grade			
Duration Module level		Other prerequisites			
1 semester undergraduate -			·		

#### **Contents**

Adhering to the principles of good scholarly practice, students will independently process a scientific issue and draw up a bachelor's thesis.

#### **Intended learning outcomes**

Students have the following knowledge:

- Ability to produce a scientific work independently (description and analysis of a problem, literary research, theory reference, interpretation of data, logical conclusion and solution approaches of a scientific issue).
- linguistic competence.
- Ability to master tasks within a given period of time.

**Courses** (type, number of weekly contact hours, language — if other than German)

no courses assigned

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written elaboration (approx. 40 pages)

Language of assessment: German, English

#### **Allocation of places**

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#### **Additional information**

Additional information on module duration: 8 weeks.

#### Workload

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#### **Teaching cycle**

--

#### **Referred to in LPO I** (examination regulations for teaching-degree programmes)

--

#### Module appears in

Bachelor' degree (1 major) Geography (2010)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)

Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)



# **Subject-specific Key Skills**

(15 ECTS credits)



Modu	le title	<u> </u>		Abbreviation			
Chairi	ng and	Presenting			09-SQL1-102-m01		
Modu	le coord	inator		Module offered by			
holde	r of the I	Professorship of Cultural	Geography	Institute of Geograp	ohy and Geology		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
5	(not)	successfully completed					
Durati	on	Module level	Other prerequisites				
1 sem	ester	undergraduate					
Conte	nts		,				
Stude Proces		acquire general key skills	for their studies. Int	roduction to"Rresear	rch Methods" and the "Research		
Intend	led lear	ning outcomes					
		ose over the following sk adequate working techn		tation, dealing with	methods of the scientific work,		
Cours	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)			
S (no i	informa	tion on SWS (weekly cont	act hours) and cours	e language available	2)		
		<b>sessment</b> (type, scope, langua ole for bonus)	ge — if other than German,	examination offered — if no	t every semester, information on whether		
	ntation/ ted 1:1	moderation (approx. 30 r	ninutes) as well as (s	mall pieces of) proje	ect work (approx. 30 hours),		
Alloca	tion of <sub> </sub>	places					
Additi	onal inf	ormation					
Workl	oad						
Teach	ing cycl	e					
	-						
Referr	Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in							
	Bachelor' degree (1 major) Geography (2010)						
		gree (1 major, 1 minor) Ge					
		gree (1 major, 1 minor) Ge	• , , .	an Geography) (2010	o)		
Bache	Bachelor's degree (2 majors) Geography (2010)						



Module title					Abbreviation
Job-related Practical Experience					09-PRAK-072-m01
Module coordinator				Module offered by	
holder of the Chair of Physical Geography				Institute of Geography and Geology	
ECTS	Meth	od of grading	Only after succ. compl. of module(s)		
10	(not)	successfully completed			
Duration		Module level	Other prerequisites		
1 semester		undergraduate			

#### **Contents**

The work placement has to be completed in two module-relevant offices or companies, which fit the professional career the student is looking for or must be completed by field work for eight weeks outside of Europe. The work placement should comprise tasks that provides the intern with a comprehensive and adequate insight into the vocational world.

#### **Intended learning outcomes**

Students will get first insights into the job opportunities of a geographer by doing, in total, eight weeks of work placement with two different employers. Thus, students will have the opportunity to establish contacts and to get in touch with different vocational practices.

**Courses** (type, number of weekly contact hours, language — if other than German)

This module comprises 2 module components. Information on courses will be listed separately for each module component.

- 09-PRAK-1-072: P (no information on SWS (weekly contact hours) and course language available)
- og-PRAK-2-072: P (no information on SWS (weekly contact hours) and course language available)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.

#### Assessment in module component og-PRAK-1-072: Job-related Practical Experience 1

- 5 ECTS, Method of grading: (not) successfully completed
- placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 10 pages)
- Language of assessment: German, English

#### Assessment in module component og-PRAK-2-072: Job-related Practical Experience 2

- 5 ECTS, Method of grading: (not) successfully completed
- placement report / fieldwork report / report on practical training / report on practical course / project

# report / report on technical course (approx. 10 pages) • Language of assessment: German, English Allocation of places **Additional information** Workload **Teaching cycle Referred to in LPO I** (examination regulations for teaching-degree programmes)



#### Module appears in

Bachelor' degree (1 major) Geography (2007)

Bachelor' degree (1 major) Geography (2008)

Bachelor' degree (1 major) Geography (2010)

Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)

Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)