

## **Annex SFB**

## Studienfachbeschreibung (subject description, SFB) for the subject Applied Earth Observation and Geoanalysis (EAGLE) as a Master's with 1 major with the degree "Master of Science" (120 ECTS credits)

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

Responsible: Institute of Geography and Geology

Examination regulations version: 2016

Examination regulations version: 2016

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

= 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 for the

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not cre-

modules in this SFB: ditable for bonus.

Information on Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the meassessment procedures: thod 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 a 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:

## ASP02015

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

## 01-Jun-2016 (2016-79)

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.

Every module will be described using the following form:

Abbreviation	Module title	Module title											
	ECTS		Duration	(in semesters)	Method of grading	Method of grading Mc							
	Courses		To be sp	To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y									
	Method of as	sessm	ent										
	Only after su completion o		ıl if applic	if applicable									
	Other prereq	uisites	if applic	if applicable									
	Participants and allocation of places		ocati- if applic	if applicable									
	Additional information		ion if applic	if applicable									
	Referred to in LPO I		if applic	if applicable (examination regulations for teaching-degree programmes)									

Compulsory Courses (55 ECTS credits)												
<b>Theoretical Basics</b>	(10 ECTS cred	its)										
04-GEO-TB1-162-	Introduction	to Remote	Sensir	g and Geoanalysis								
mo1	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (2) Module taught in: English								
			written examination (approx. 45 minutes) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)									
04-GEO-TB2-162-	Applications of Earth Observation											
mo1	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		V (2) Modu	V (2) Module taught in: English								
	Method of as	ssessment	written examination (approx. 45 minutes) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)									
Metholodological	Basics (15 ECT	S credits)										
04-GEO-MB1-162-	Digital Image Analysis and GIS											
mo1	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		Ü (2) Module taught in: English									
	Method of as	ssessment	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) creditable for bonus									
04-GEO-MB2-162-	Introduction	to Progran	nming	and Geostatistics								
mo1	ECTS 5	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		Ü (2) Module taught in: English									
	Method of as	ssessment	Langu ble, d	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) creditable for bonus								

04-GEO-MB3-162-	From Fi	From Field Measurements to Geoinformation											
mo1	ECTS 5 Duration			1 semester	Method of grading   numerical grade	Modul level	graduate						
	Course	S		Ü (2) Modu	lle taught in: English	1							
	Method	d of ass	essment	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) creditable for bonus									
Internship (15 ECTS	ernship (15 ECTS credits)												
04-GEO-INT-162-	Interns	hip											
mo1	ECTS	15	Duratio	า	1 semester	Method of grading (not) successfully comp	leted Modul level	graduate					
	Course	S		P (o) Module taught in: English or German									
	Method	d of ass	essment	report in the form of a presentation (approx. 15 minutes) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)									
	Additio	nal Info	rmation	Additional information on module duration: 8 weeks.									
Step towards Mast	er Thesi	s (15 EC	TS credit	s)									
04-GEO-TMT1-162-	Innova	tion Lat	oratory										
mo1	ECTS	10	Duratio		1 semester	Method of grading   numerical grade	Modul level	graduate					
	Courses			P (3) Module taught in: English									
	Method	d of ass	essment	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)									
04-GEO-TMT2-162-	Project	Semin	ar										
mo1	ECTS	5	Duratio	n	1 semester	Method of grading (not) successfully comp	leted Modul level	graduate					
	Courses			S (1) Module taught in: English									
	Method of assessment			presentation (approx. 30 minutes) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)									

<b>Compulsory Electiv</b>	es (35 ECTS cred	dits)									
Applications of Ear	th Observation (	10-15 EC	TS cred	lits)							
04-GEO-APP1-162-	Land Surface D	ynamics									
mo1	ECTS 5	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		S (2) Modu	S (2) Module taught in: English							
	Method of asse		a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (15 pages) Assessment offered: Once a year, summer semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)								
04-GEO-APP2-162-	<b>Land and Wate</b>	r Manage	ement								
mo1	ECTS 5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		S (1) + Modu	- Ü (1) le taught in: English							
			a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) Assessment offered: Once a year, summer semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) creditable for bonus								
04-GEO-APP3-162-	Exploration of Mineral Deposits										
mo1	ECTS 5	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		S (1) + Ü (1) Module taught in: English								
	Method of asse	essment	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) Assessment offered: Once a year, summer semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) creditable for bonus								
04-GEO-APP4-162-	Selected Appli	cations									
mo1	ECTS 5	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		S (1) + Ü (1) Module taught in: English								
	Method of asse	essment	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) Assessment offered: Once a year, summer semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) creditable for bonus								

<b>Advanced Methods</b>	and Mo	deling	(5-10 ECT	S credi	ts)								
04-GEO-MET1-162-	Spatial	Modeli	ng and Pi	rediction									
mo1	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		'	S (1) - Modu	- Ü (1) le taught in: Englis	h	-	,	,-				
	Method	l of ass	essment	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) Assessment offered: Once a year, summer semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) creditable for bonus									
04-GEO-MET2-162-	Advanc	ed Spat	tial Analy	sis for	Geoscientists								
mo1	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S	·		S (1) + Ü (1) Module taught in: English								
	Method of assessment			a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) Assessment offered: Once a year, summer semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) creditable for bonus									
	Special	Special Methodological Issues											
mo1	ECTS 5 Duratio			1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			S (1) + Ü (1) Module taught in: English									
	Method	l of ass	essment	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) Assessment offered: Once a year, summer semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German) creditable for bonus									
Resources and Env	ironment	t (5-10 l	CTS cred	its)									
04-GEO-RE1-162-	Selecte	d Topic	s in Geog	raphy	I								
mo1	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S	•	V (2) Module taught in: English									
	Method of assessment			written examination (approx. 45 minutes) Assessment offered: Once a year, winter semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)									

04-GEO-RE2-162-	Selecte	Selected Topics in Geography II												
mo1	ECTS	5	Duratio	n 1 semester		Method of grading numerical grade	Modul level	graduate						
	Course	·S		V (2) Modu	le taught in: Englis	sh	•							
	Method	d of ass	essment	written examination (approx. 45 minutes) Assessment offered: Once a year, winter semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)										
04-GEO-RE3-162-	Minera	Mineral Resources in Space and Time												
mo1	ECTS	5	Duratio	n	1 semester	Method of grading   numerical grade	Modul level	graduate						
	Course	·S		V (2) Module taught in: English										
	Method	d of ass	essment	written examination (approx. 45 minutes) Assessment offered: Once a year, winter semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)										
Soft Skills (5 ECTS	credits)													
04-GEO-SOS1-162-	Advanced applied Project management / Scientific presentation / Scientific Writing													
mo1	ECTS 5 Duratio			n	1 semester	Method of grading (not) successfully compl	eted Modul level	graduate						
	Courses			S (2) Module taught in: English										
	Method	d of ass	essment	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) or d) log (2 to 3 pages) Assessment offered: Once a year, winter semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)										
04-GEO-SOS2-162-	Advanc	Advanced skills on the Master's level												
mo1	ECTS	5	Duratio	n	1 semester	Method of grading (not) successfully compl	eted Modul level	graduate						
	Course	·S		S (2) Module taught in: English										
	Method	d of ass	essment	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) or d) log (2 to 3 pages) Assessment offered: Once a year, winter semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)										

04-GEO-SOS3-162-	Advan	Advanced Instructions on Scientific Working												
mo1	ECTS 5 Duration				1 semester	Method of grading	(not) successfu	lly completed	Modul level	graduate				
	Course	!S	-	S (2) Module taught in: English or German										
	Metho	d of ass	essment	a) presentation (approx. 30 minutes) or b) preparing a poster (approx. 10 hours total) or c) term paper (approx. 15 pages) or d) log (2 to 3 pages) Assessment offered: Once a year, winter semester Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)										
Thesis (30 ECTS cre	edits)													
04-GEO-MA1-162-	Master-Thesis EAGLE													
mo1	ECTS 28 Duratio			n	1 semester	Method of grading	numerical grade	e	Modul level	graduate				
	Course	!S		No courses assigned to module										
	Method of assessment			Master's thesis (approx. 60 pages) Language of assessment: English										
	Additional Information			Time to complete: 6 months.										
04-GEO-MA2-162-	Final Colloquium on Master Thesis													
mo1	ECTS	2	Duratio	า		Method of grading	numerical grade	e	Modul level	graduate				
	Courses			K (o) Module taught in: English										
	Method of assessment			talk (approx. 30 minutes) with subsequent discussion (approx. 15 minutes) Language of assessment: English or German (assessment will be held in English; in addition, the examiner may, where possible, decide to hold assessment in German)										