

University College Freiburg – Module Handbook B.A./B.Sc. "Liberal Arts and Sciences" – Academic Year 2014/15



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This handbook provides all necessary information on the modules of the four-year bachelor program "Liberal Arts and Sciences" (LAS). The legal foundation for the LAS program is provided in the Rules and Regulations that were passed (in German) by the University Senate in its meeting on 25 April 2012 and approved by the Rector on 16 May 2012 (see Official Bulletins Volume 43, No. 55, pp. 212–232, 18 May 2012). The non-binding English version is available on the UCF website.

Module Descriptions

1 Core Modules

1.1 Liberal Arts and Sciences – Backgrounds, Ideas, Challenges # 2100				# 2100
Subject area	Core			
Type of module	Compulsory Module			
Frequency taught	Yearly, block I & II	Year	1	
Duration	16 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	1 lecture/seminar (3 ECTS), 1 workground - Liberal Arts and Sciences (workground - Lib			
Module Coordinator	Dr. N. Eschenbruch			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	None			
Module content & objectives	The module introduces the Liberal Arts and Sciences. It elucidates the historical background and current positioning of LAS in the national and international educational landscape and discusses the specific expectations and learning experience of students in an LAS framework. Special emphasis will be put on a concrete and practical introduction to the epistemological focus of the LAS study program.			
Learning Goals	 Upon successful completion of this module, students are able to (1) Basic knowledge of the historical genesis of LAS and contemporary developments in this approach to education. (2) Basic ability to classify and reflect upon one's own learning experiences in the LAS framework, and encouragement to do so. (3) Basic knowledge of epistemology and scholarly/scientific research, as well as approaches to critical reflection about these topics, particularly: methodological procedure in scholarship and research (experiment, systematic observation, modeling, hermeneutics, among others) objectivity and subjectivity the history and sociology of academic disciplines 			
Methods of assessment & grading structure	3 ECTS, Block 1: a learning journal witwo pages; 3 ECTS, Block 2: an essay			

1.2 Exploring Complex Problems				# 2200
Subject area	Core			
Type of module	Compulsory Module			
Frequency taught	Yearly, block I	Year	1	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	า
Course format	1 lecture/seminar (3 ECTS), 1 workgro- Exploring Complex Problems (lecture	• ` '		
Module Coordinator	Dr. S. Büchner			
Lecturers	Dr. S. Büchner, Dr. N. Eschenbruch, Eblast	Dr. K. Moll, Dr. R.	Plumley	, S. Wagen-
Convener Prof. Dr. B. Zimmermann				
Prerequisites	None			
Module content & objectives	The students will learn how to independently research literature how			
Learning Goals	Upon successful completion of this module, students are able to (1) Recognize and classify different forms of knowledge and their usage. (2) Identification and classification of scholarly and non-scholarly texts. (3) Find literature on a particular topic in libraries, search engines and literature data bases. (4) The ability to understand and summarize simple scholarly texts. (5) The ability to present a topic to peers within a given time frame.			eir usage. ly texts. es and litera- exts.
Methods of assessment & grading structure	sessment & grading			vorkgroup on the

1.3 Sharing Knowledge # 225				
Subject area	Core			
Type of module	Compulsory Module			
Frequency taught	Yearly, block II	Year	1	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40h attendance)	Language	English	า
Course format	1 lecture/seminar (3 ECTS), 1 workgroup - Sharing Knowledge (lecture and works			
Module Coordinator	Dr. R. Plumley			
Convener	Prof. Dr. B. Zimmermann			
Module content & objectives	This module introduces students to the challenges of sharing knowledge through written expression. One overarching goal is to explore how writing is not simply a passive medium of communication but also a social activity that involves many actors and has multiple effects in the world. To that end, writing skills are developed in response to one of a set of complex social, intellectual, and cultural problems that provide the topical material for the module. Particular emphasis will be put on the genre of the short, thesis-based essay that deploys logic, evidence, and rhetoric in order to both inform and persuade an audience. Over eight weeks, the students will develop an essay relevant to one of the set of specific topics. This development will involve preparatory writing, research, outlining, drafting, and revising in progressive stages.			
Learning Goals	 Upon successful completion of this module, students are able to Learning to think of writing as a process with multiple stages, including preparation, composition, and revision. The development of basic writing skills such as outlining, free-writing, and self-directed revision. The ability to organize and effectively recapitulate information to others in writing. The ability to give appropriate attention to context—including audience, situation, genre, and discipline—in one's writing. The ability to argue for a well-informed opinion in writing with evidentiary, logical, and rhetorical rigor. Recognition of the importance of clear and convincing writing to scholarship and other forms of sharing knowledge. 			
Methods of assessment & grading structure	3 ECTS, satisfactory participation in w 3 ECTS, A provisional 250–500 words argumentative essay on a topic related polished thesis-based essay (2,000–2 research and developed over multiple	research statemed to their work gro ,500 words) base	ent and oup (30 %	%) AND a

1.4 Numerical Literacy				# 2300
Subject area	Core			
Type of module	Type of module Compulsory Module			
Frequency taught	Yearly, block IV	Year	1	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	1 lecture/seminar (3 ECTS), 1 workgr - Dealing with Numerical Information -	. ` '	(group)	
Module Coordinator	Dr. K. Moll			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	None			
Module content & objectives				
Learning Goals	Upon successful completion of this module, students are able to (1) Interpret and analyse numerical and graphical information. (2) Illustrate numerical data meaningfully. (3) Recall key concepts of probability theory, descriptive and inference statistics. (4) Apply basic descriptive and analytical statistics to different sets of data.			
Methods of assessment & grading structure 3 ECTS, attendance during work group and software tutorials and satisfactory participation in class activities; 3 ECTS, formal written exam (90 min). Requirement to be admitted to the exam: 50 % of all possible points awarded for correct answers in the exercises).			ed to the	

1.5 Theories of Knowledge				# 2350
Subject area	Core			
Type of module	Compulsory			
Frequency taught	Winter Semester	Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Lecture, work groups			
Module Coordinator	Chair for Epistemology and Theory of	Science		
Convener	Chair for Epistemology and Theory of	Science		
Prerequisites	Prerequisites			
Module content & objectives	shin ()t spacial relevance are the disciplines of the History and the Philos			
Learning Goals	Upon successful completion of this module, students are able to (1) describe and explain the fundamental concepts of science, e.g., 'theory', 'observation', 'experiment'. (2) discuss different conceptions of scientific explanation and confirmation. (3) reflect upon the (alleged) rationality and objectivity of science. (4) analyse the difference between a normative and a socio-historical view on science. (5) contrast the perspective of this module with the perspective of the corresponding module Knowledge in Context.			
Methods of assessment & grading structure Oral or written				

1.6 Knowledge in Co	ontext			# 2400
Subject area	Core			
Type of module	Compulsory			
Frequency taught	Summer Semester	Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Lecture, work groups			
Module Coordinator	Chair for Science and Technology Stu	ıdies		
Convener	Chair for Science and Technology Stu	ıdies		
Prerequisites				
Module content & objectives	This is a fundamental module of the LAS program which teaches students how science and scholarship can be described and analyzed as sociocultural phenomena. Of special relevance are the disciplines of Science and Technology Studies, Anthropology of Science, History of Science and Sociology of Science; the emphasis may vary, but there will always be a strong empirical element to the module.			
Learning Goals	 Upon successful completion of this module, students are able to (1) Describe and explain fundamental elements of a sociocultural perspective on science and scholarship. (2) Apply the general outlook of at least one of the key disciplines of the module to at least one empirical setting (e.g. history of the experiment, sociology of laboratory work) (3) Analyse, compare and contrast some key works ("obligatory passage points") in the field. (4) Contrast the perspective of this module with the perspective of the corresponding module Theories of Science (5) Formulate tentative research questions that could be addressed to scientific and scholarly phenomena in the contemporary world. 			
Methods of assessment & grading structure	Oral or written			

1.7 Anthropology an	d Experience		# 2450	
Subject area	Core			
Type of module	Type of module Compulsory Module			
Frequency taught		Year	1 and 2	
Duration	4–8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	1 lecture/seminar (3 ECTS), 1 workgrd - Anthropology and Experience (seminar and her Role (seminar and her Role)	nar and workgroup))	
Module Coordinator	Dr. Nicholas Eschenbruch			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	None			
Module content & objectives				
Upon successful completion of this module, students are able to (1) To realise that different academic disciplines have quite different views on human nature, and get acquainted with some classic disciplinary positions and approaches to that question. (2) To realise that implicit or explicit ideas on human nature can structure both scientific inquiry about humans and actual human behaviour. (3) To develop a clearer idea about one's own assumptions and positions about what it means to be human, to be able to relate them critically to academic positions on that question, and to be able to sustain or challenge them in discussion.			uite different views assic disciplinary po- ature can structure an behaviour. ions and positions te them critically to to sustain or chal-	
assessment & grading structure	Seminar: regular attendance and an e Work Group: regular active attendance	•	UU words	

1.8 Action, Rationality and Responsibility			# 2500	
Subject area	Core			
Type of module	Compulsory			
Frequency taught		Year of study	1–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Lecture, work groups			
Module Coordinator	Chair for Epistemology and Theory of	Science		
Convener	TBA			
Prerequisites				
Module content & objectives	The module focuses on practical rationality and ethics. While the emphasis may vary in each seminar, it is concerned with questions of free will, the rationality of action and decision-making, and the ethical foundations and implications of human action. Of central relevance are the disciplines of Theoretical and Practical Philosophy, while Economics, Psychology and Cognitive Neuroscience may also play a key role. The module may involve up to 50 % of practical exploration through simulations, games etc.			
Learning Goals	 Upon successful completion of this module, students are able to (1) describe, understand and explain the fundamental concepts of the disciplinary perspectives emphasised, (e.g. 'agent', 'will', 'freedom', 'rationality'.) (2) discuss their fundamental dilemmas (e.g. in what sense agents can act freely and responsibly) (3) discuss possible conflicts that can occur between different rationalities and/or different ethical outlooks. (4) apply the theoretical insights to actual life-world examples 			
Methods of assessment & grading structure (4) apply the theoretical insights to actual life-world examples Oral or written				

1.9 Vision and Leadership				# 2550
Subject area	Core			
Type of module	Type of module Compulsory			
Frequency taught		Year of study	3–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar			
Module Coordinator	Dr. Nicholas Eschenbruch			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites				
Module content & objectives	This module aims at giving students both academic insights and applicable skills in the area of leadership. The focus of individual courses may be more on the structural side (e.g. project management, organisational development, etc.) or more in the personal field (e.g. personal leadership styles), but both aspects should be present.			
Learning Goals	 Upon successful completion of this module, students are able to Describe and explain the relevance of leadership skills for making a difference in shaping the social world. Demonstrate an understanding of the relationship between leadership, settings and personality. Analyse, compare and contrast different approaches to leadership as discussed in the literature, with relevance to different tasks and settings. Formulate problem-oriented suggestions for tackling leadership problems in the workplace and beyond. Critically evaluate the pros and cons of such suggestions. Critically evaluate the setting, advantages and limitations of the "leadership" discourse. 			
Methods of assessment & grading structure	SL: Regular attendance, preparation of active teaching formats (e.g. cases, since PL: written work			on in inter-

1.10 Culture and Com	munication			# 2600
Subject area	Core			
Type of module	Compulsory			
Frequency taught		Year of study	3–4	
Duration	8 weeks	ECTS		
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Lecture, work groups			
Module Coordinator	Dr. Nicholas Eschenbruch			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	None			
Module content & objectives	This module aims at giving students skills in the area of culture and com courses may vary, but makes special social psychology, communication pethology, and international business.	munication. The enterence to at least	emphasis ast one of	of individual the fields of
Learning Goals	 Upon successful completion of this monotonic cation skills for effectively navigated. Analyse, compare and contrast diand culture as discussed in the liter of situations. Demonstrate an understanding of settings and personality, in their contract of cultural problems in the workplaced cultural problems in the workplaced discussed in the literature, with a send practical applicability 	ce of cultural aware ing the social and fferent approaches erature, with relevant the interplay betweet ultural context. estions for tackling and beyond.	eness and profession s to commance to different commance communication and	I communi- nal world. nunication iferent types nunication, icative and
Methods of assessment & grading structure	PL: Regular attendance, preparation of active teaching formats (e.g. cases, si SL: Written			on in inter-

2 Modules of the Major Culture and History

2.1 Introduction to C	ulture and History			# 3100
Subject area	Major			
Type of module	Compulsory for Culture and History Majors Compulsory Elective for other Majors			
Frequency taught	Three times per year, Blocks III and IV	Year of study	1–2	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar (3 ECTS) and Work Group (3	BECTS)		
Module Coordinator	Dr. Ryan Plumley			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	None			
Module content & objectives	In this module, students encounter and work with typical objects of study and research in the humanities: literary and philosophical texts, works of art, and customs or rituals. At the same time, they practice the scholarly methods of critical inquiry and interpretation that can be applied to these objects and practices. In the Seminar, students read and discuss important works, many of them classics in their field, which introduce the problems and promise of specific scholarly approaches to humanistic research and study. In the Work Group, students undertake the techniques of humanistic interpretation with specific cultural objects or practices. Although the objects and practices are not all necessarily derived from the same temporal or geographic context, students also learn to think about how cultural work emerges out of historical and other contexts.			
Learning Goals	 Upon successful completion of this module, students are able to (1) Explain a range of interpretive approaches that can be taken to any given cultural object. (2) Intelligently interpret a cultural object or practice at a basic level. (3) Critically evaluate the strength of competing interpretations of a cultural object based on empirical evidence drawn directly from that object. 			
Methods of assessment & grading structure	3 ECTS (Assessed Coursework): satisfies associated activities (including adepolicy), satisfactory completion of all results as ECTS (Graded Examination): a these than 2,500 words that addresses one and engages with one scholarly response.	quate attendance equired small assi- sis-based, interpret of the objects of si	according t gnments. tive essay t tudy from tl	to the LAS of no more



2.2 Culture as a Top	ic of Academic Inquiry		# 3150)
Subject area	Major			
Type of module	Compulsory for Culture and History Majors Elective for other Majors			
Frequency taught	Once every second year	Year of study	2–3	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar (3 ECTS) and Work Group (3	BECTS)		
Module Coordinator	Dr. Ryan Plumley			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introduction to Culture and History (wa	aived at instructor'	s discretion)	
Module content & objectives	This module provides significant theoretical and/or methodological insight into the scholarly study of culture. "Culture" is explored as an analytical category and a theoretical orientation used by scholars to understand certain parts of the human experience: everyday life, custom and habit, identity and difference among human groups, hegemony and resistance beyond formal politics, and so on. Different understandings of culture demand different objects and means of study, so the module will also investigate the methods appropriate to the study of culture. In the Work Group, the module grounds the approach to theoretical and methodological issues in a specific case or cases. Hence, some courses will have geographic, period, or thematic content. In the Seminar, the theoretical and methodological focus may include: the problematic distinction between "high" and "low" culture, the culture disciplines (anthropology, ethnology, folklore, cultural studies, etc.), the high culture disciplines (art history, literary studies, etc.), or (cultural) history. The module is offered in varying forms. For specific details about the content, about the theoretical/methodological emphasis, and about the teaching/learning format consult the course catalogue and instructor in the relevant			
Learning Goals	 Upon successful completion of this module, students are able to (1) Analytically distinguish between different scholarly approaches to the study of culture. (2) Correctly use some of the specific vocabulary and conceptual tools shared by scholars of culture. (3) Connect material from other modules into a more comprehensive understanding of the study of culture. 			
Methods of assessment & grading structure	3 ECTS (Assessed Coursework): satistics associated activities (including ade policy), satisfactory completion of all r 3 ECTS (Graded Examination): typical more than 5,000 words. Specific details the course.	quate attendance equired small assi Illy an analytical/in	according to the L gnments. terpretive essay o	AS f no

2.3 History as a Top	ic of Academic Inquiry		# 3200
Subject area	Major		
Type of module	Compulsory for Culture and History Majors Elective for other Majors		
Frequency taught	Once every second year	Year of study	2–3
Duration	8 weeks	ECTS	6
Workload	180 h (of which 40 h attendance)	Language	English
Course format	Seminar (3 ECTS) and Work Group (3	BECTS)	
Module Coordinator	Dr. Ryan Plumley		
Convener	Prof. Dr. B. Zimmermann		
Prerequisites	Introduction to Culture and History (wa	aived at instructor's	s discretion)
Module content & objectives	This module provides significant theoretical and/or methodological insight into the scholarly and scientific study of history. "History" is explored as an object of study (the past), as an academic discipline (History or "historiology") and as a genre of writing (historiography). In the Work Group, the module grounds the approach to theoretical and methodological issues in a specific case or cases. Hence, some courses will have geographic, period, or thematic content. In the Seminar, the theoretical focus may include: positivism, empiricism, objectivity in history, the linguistic/experiential/affective turn, the history of History, challenges of historical representation, the relationships between academic/public/amateur historical work, or the range of ways in which historicism informs other disciplines, among others. Specific versions of this module may include a methodological focus on: source criticism, problems of representation, archival research methods, crowd-sourcing in the collection historical sources, among others. The module is offered in varying forms. For specific details about the content, about the theoretical/methodological emphasis, and about the teaching/learning format consult the course catalogue and instructor in the relevant Block.		
Learning Goals	 Upon successful completion of this module, students are able to (1) Analytically distinguish between different scholarly approaches to the study of the past. (2) Correctly use some of the specific vocabulary and conceptual tools shared by historians and other scholars who study the past. (3) Connect material from other modules into a more comprehensive understanding of the study of the past. 		
Methods of assessment & grading structure	3 ECTS (Assessed Coursework): satistics associated activities (including ade policy), satisfactory completion of all r 3 ECTS (Graded Examination): typical more than 5,000 words. Specific details the course.	quate attendance equired small assi Ily an analytical/in	according to the LAS gnments. terpretive essay of no

2.4 Culture and Histo	ory up to the Early Modern Period			# 3500
Subject area	Major			
Type of module	Compulsory Elective for Culture and History Majors Elective for other Majors			
Frequency taught	Once a year	Year of study	1–3	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar (3 ECTS) and Work Group (3	BECTS)		
Module Coordinator	Dr. Ryan Plumley			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introduction to Culture and History (wa	aived at instructor's	s discretio	n)
Module content & objectives	In this module students encounter the cultural and historical study of a premodern geographical and temporal context (up to around 1800, depending on the specific topic). In doing so, they learn how to work with the typical source materials for the study of pre-modern societies and cultures. The Work Group substantively develops students' knowledge about a specific pre-modern society and culture. Emphasis may be put on cultivating general historical context, exploration of a theme or problem, or working with a specific body of source materials. The Seminar develops students' theoretical and methodological knowledge and abilities in ways suited to the study of pre-modern societies and cultures. Methodological and theoretical points of focus may include archaeology, hermeneutics, literary theory, reception analysis, the analysis of visual culture, or historical methods, among others. The module is offered in varying forms with varying topics. For specific details about the content, about the theoretical/methodological emphasis, and about the teaching/learning format consult the course catalogue and instructor in the relevant Block.			
Learning Goals	 Upon successful completion of this modern society or culture covered modern society or culture covered (2) apply their methodological and the the specific topical material studie (3) relate their learning about pre-moderns and issues. 	fic body of knowled I in the Work Grou eoretical learning f d in the Work Gro	dge about p. rom the Se up.	eminar to
Methods of assessment & grading structure	3 ECTS (Assessed Coursework): satisfies associated activities (including ade policy), satisfactory completion of all reasons (Graded Examination): typical AND/OR a written examination not to be announced on the first day of the course of th	quate attendance equired small assi Ily an essay not to exceed 90 minutes	according gnments. exceed 5	to the LAS ,000 words

2.5 Culture and History	ory Since the Early Modern Period			# 3550
Subject area	Major			
Type of module	Compulsory Elective for Culture and History Majors Elective for other Majors			
Frequency taught	Once a year Year of study 1–3			
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar (3 ECTS) and Work Group (3	3 ECTS)		
Module Coordinator	Dr. Ryan Plumley			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introduction to Culture and History (wa	aived at instructor'	s discretion	on)
Module content & objectives	In this module students encounter the cultural and historical study of a modern geographical and temporal context (since around 1800, depending on the specific topic). In doing so, they learn how to work with the typical source materials for the study of modern societies and cultures. The Work Group substantively develops students' knowledge about a specific topic chosen by the instructor. Emphasis may be put on cultivating general historical context, exploration of a theme or problem, or working with a specific body of source materials. The Seminar develops students' theoretical and methodological knowledge and abilities in ways suited to the study of modern societies and cultures. Methodological and theoretical points of focus may include oral history and memory studies, (historical) sociology and anthropology, philosophy and social theory, literary studies, art history, or historical methods, among others. The module is offered in varying forms with varying topics. For specific details about the content, about the theoretical/methodological emphasis, and about the teaching/learning format consult the course catalogue and instructor in the relevant Block.			
Learning Goals	 Upon successful completion of this methodological and the specific topical material studies (2) apply their methodological and the specific topical material studies (3) relate their learning about modern and issues. 	fic body of knowle Vork Group. eoretical learning f ed in the Work Gro	dge about from the Sup.	eminar to
Methods of assessment & grading structure	3 ECTS (Assessed Coursework): satistics associated activities (including ade policy), satisfactory completion of all r 3 ECTS (Graded Examination): typical AND/OR a written examination not to be announced on the first day of the control of the co	quate attendance equired small assi illy an essay not to exceed 90 minute	according gnments. exceed 5	to the LAS 5,000 words

2.6 Sociocultural An	thropology or Area Studies		# 3600		
Subject area	Major				
Type of module	Compulsory Elective for Culture and History Majors Elective for other Majors				
Frequency taught	Once a year	Once a year Year of study 1–3			
Duration	8 weeks	ECTS	6		
Workload	180 h (of which 40 h attendance)	Language	English		
Course format	Seminar (3 ECTS) and Work Group (3	BECTS)			
Module Coordinator	Dr. Ryan Plumley				
Convener	Prof. Dr. B. Zimmermann				
Prerequisites	Introduction to Culture and History (wa	aived at instructor's	s discretion)		
Module content & objectives	In this module students encounter some geographic or social space of human cultural activity. They develop their capacity to learn about, research, and understand human cultures by reflecting on the theories and practicing the methods of sociocultural anthropology and related disciplines. The emphasis in this module is on synchronic rather than the diachronic study of culture, although some versions may include a historical element. The Work Group substantively develops students' knowledge about a specific cultural realm (a region, a culture group), a cultural theme/problem (violence, leisure, etc.), or both. The Seminar substantively develops students' theoretical and methodological knowledge and abilities in ways suited to the synchronic study of human cultures. Methodological and theoretical points of focus may include ethnography, ethnology, anthropology, social and cultural theory, media studies, gender studies, or postcolonial studies, among others. The module is offered in varying forms with varying topics. For specific details about the content, about the theoretical/methodological emphasis, and about the teaching/learning format consult the course catalogue and instructor in the relevant Block.				
Learning Goals	 Upon successful completion of this module, students are able to (1) demonstrate mastery of the specific body of knowledge about a culture covered in the Work Group. (2) apply their methodological and theoretical learning from the Seminar to the specific topical material studied in the Work Group. (3) relate their learning about a specific space of human cultural activity to the study of other kinds of objects of research in the humanities. 				
Methods of assessment & grading structure	3 ECTS (Assessed Coursework): satistic associated activities (including ade policy), satisfactory completion of all r 3 ECTS (Graded Examination): typical graphic report, or similar) not to exceed ination not to exceed 90 minutes. Spefirst day of the course.	quate attendance equired small assign a written assign d 5,000 words AN	according to the LAS gnments. Imment (essay, ethno-ID/OR a written exam-		



2.7 Contemporary A	rt, Literature, Aesthetics or Music			# 3650
Subject area	Major			
Type of module	Compulsory Elective for Culture and History Majors Elective for other Majors			
Frequency taught	Once a year	Year of study	1–3	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar (3 ECTS) and Work Group (3	3 ECTS)		
Module Coordinator	Dr. Ryan Plumley			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introduction to Culture and History (wa	aived at instructor'	s discretio	on)
Module content & objectives	In this module, students learn about specific works of art (visual, literary, musical, performance, or other) as well as the theories and methodologies used in the critical analysis, interpretation, and evaluation of such works. The socio-cultural and historical horizon of artistic production and reception are also considered. Although specific versions of the module may have an art historical emphasis, all versions address contemporary problems of art and aesthetics. The Work Group substantively develops students' knowledge about specific works of art, traditions of artistic production, or contexts of artistic reception. The Seminar substantively develops students' theoretical and methodological knowledge and abilities in ways suited to the study of art and aesthetics. Points of focus may include aesthetic theory, reception theory, cultural studies, formal analysis, or art history, among others. The module is offered in varying forms with varying topics. For specific details about the content, about the theoretical/methodological emphasis, and about the teaching/learning format consult the course catalogue and instructor in the relevant Block.			
Learning Goals	 Upon successful completion of this met (1) Demonstrate mastery of the special aesthetics covered in the Work G (2) Apply their methodological and the specific topical material studies (3) Relate their learning about art and objects of research in the humanic 	ific body of knowle roup. eoretical learning t ed in the Work Gro d aesthetics to the	dge about from the Sup.	Seminar to
Methods of assessment & grading structure	3 ECTS (Assessed Coursework): satistics associated activities (including ade policy), satisfactory completion of all r 3 ECTS (Graded Examination): typical AND/OR a written examination not to be announced on the first day of the control of the co	quate attendance equired small assi ally an essay not to exceed 90 minute	according gnments. exceed 5	to the LAS

2.8 Advanced Cultur	e and History I			# 3700
Subject area	Major			
Type of module	Compulsory Elective for Culture and History Majors Elective for other Majors			
Frequency taught		Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar (3 ECTS) and Work Group (3	BECTS)		
Module Coordinator	Dr. Ryan Plumley			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introduction to Culture and History (wa	aived at instructor'	s discretio	n)
Module content & objectives	In this module, students expand their knowledge and training in the humanities by further study in an area they have already encountered. Students can choose among courses offered as one of the other Compulsory Electives within the Culture and History Major, and sometimes courses will be offered exclusively as Advanced Culture and History I/II. The module is offered in varying forms with varying topics. For specific details about the content, about the theoretical/methodological emphasis, and about the teaching/learning format consult the course catalogue and instructor in the relevant Block.			
Learning Goals	Dependent upon the specific course. structor in the relevant Block.	Consult the course	e catalogu	e and in-
Methods of assessment & grading structure	3 ECTS (Assessed Coursework): satisfactory participation in the module and its associated activities (including adequate attendance according to the LAS policy), satisfactory completion of all required small assignments. 3 ECTS (Graded Examination): typically a written assignment not to exceed 5,000 words AND/OR a written examination not to exceed 90 minutes. Specific details will be announced on the first day of a course.			

2.9 Advanced Cultur	e and History II			# 3750
Subject area	Major			
Type of module	Compulsory Elective for Culture and Elective for other Majors	History Majors		
Frequency taught		Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar (3 ECTS) and Work Group (3	BECTS)		
Module Coordinator	Dr. Ryan Plumley			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introduction to Culture and History (waived at instructor's discretion)			
Module content & objectives	In this module, students expand their knowledge and training in the humanities by further study in an area they have already encountered. Students can choose among courses offered as one of the other Compulsory Electives within the Culture and History Major, and sometimes courses will be offered exclusively as Advanced Culture and History I/II. The module is offered in varying forms with varying topics. For specific details about the content, about the theoretical/methodological emphasis, and about the teaching/learning format consult the course catalogue and instructor in the relevant Block.			
Learning Goals	Dependent upon the specific course. structor in the relevant Block.	Consult the course	e catalogue	e and in-
Methods of assessment & grading structure	3 ECTS (Assessed Coursework): satisfactory participation in the module and its associated activities (including adequate attendance according to the LAS policy), satisfactory completion of all required small assignments. 3 ECTS (Graded Examination): typically a written assignment not to exceed 5,000 words AND/OR a written examination not to exceed 90 minutes. Specific details will be announced on the first day of a course.			

2.10 Specialization Op	ption: Culture			# 3800
Subject area	Major			
Type of module	Compulsory Elective for Culture and History Majors Elective for other Majors			
Frequency taught		Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar (3 ECTS) and Work Group (3	B ECTS)		
Module Coordinator	Dr. Ryan Plumley			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introduction to Culture and History (wa	aived at instructor's	s discretio	n)
Module content & objectives	In this module, students deepen their ties through research-oriented study can mean either focused investigation search or independent research under The module can be fulfilled in three w. (1) Some courses offered as one of the Culture and History Major will sime vanced level and with a research- (2) Sometimes advanced courses wild (3) Students may also undertake a Seafe.9 and §6.12 of the StuPO. Guina available from LAS instructional search module is offered in varying form about the content, about the theoretic the teaching/learning format consult the relevant Block.	of human culture on into a particula rtaken at an under ays: he other Compulso ultaneously be offerorientation. I be offered specificated independelines and applicately. s with varying topical/methodological	Research res	h orientation scholarly re- level. es within the more ad- nis module. ly, as per edure are lecific details s, and about
Learning Goals	 Upon successful completion of this methods in approaching a specific study. (1) demonstrate critical engagement arship relevant to the study of cult (2) evaluate the possibilities and limit methods in approaching a specific study. (3) formulate a viable research agence 	with a specific bod ture. s of specific huma c cultural object (or	y of humanistic theo	ories and jects) of
Methods of assessment & grading structure	A written assignment not to exceed 10 tion not to exceed 90 minutes. Specifically of a course.			



2.11 Specialization O	ption: History			# 3850
Subject area	Major			
Type of module	Compulsory Elective for Culture and Elective for other Majors	History Majors		
Frequency taught		Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar (3 ECTS) and Work Group (3	B ECTS)		
Module Coordinator	Dr. Ryan Plumley			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introduction to Culture and History (w	aived at instructor'	s discretio	on)
Module content & objectives	 In this module, students deepen their knowledge and training in the humanities through research-oriented study of human history. Research orientation can mean either focused investigation into a particular field of scholarly research or independent research undertaken at an undergraduate level. The module can be fulfilled in three ways: (1) Some courses offered as one of the other Compulsory Electives within the Culture and History Major will simultaneously be offered at a more advanced level and with a research-orientation. (2) Sometimes advanced courses will be offered specifically for this module. (3) Students may also undertake a Supervised Independent Study, as per §6.9 and §6.12 of the StuPO. Guidelines and application procedure are available from LAS instructional staff. The module is offered in varying forms with varying topics. For specific details about the content, about the theoretical/methodological emphasis, and about the teaching/learning format consult the course catalogue and instructor in the relevant Block. 			
Learning Goals	 Upon successful completion of this methods in approaching a specific (3) formulate a viable research agence 	with a specific bod tory. s of specific huma c past.	ly of huma	anistic schol- ories and
Methods of assessment & grading structure	A written assignment not to exceed 10 tion not to exceed 90 minutes. Specifiday of a course.			

3 Modules of the Major Governance

3.1 Introduction to G	Governance		# 4100
Subject area	Governance		
Type of module	Compulsory for Governance Major Compulsory Elective for other Majors		
Frequency taught	Twice a year, block 4 & 5	Year of study	1
Duration	8 weeks	ECTS	6
Workload	180 h (of which 40 h attendance)	Language	English
Course format	1 lecture/seminar (3 ECTS), 1 workgr	oup (3 ECTS)	
Module Coordinator	Dr. Liudmila Mikalayeva		
Convener	Prof. Dr. B. Zimmermann		
Prerequisites	None		
Module content & objectives	This module acquaints students with central topics in the study of how human communities govern themselves, gives them the appropriate vocabulary and prepares them to understand which ways of presentation, explanation and argumentation are judged acceptable by governance scholars' community. The Workgroups then explore these topics and skills based on additional material (video, images, games, texts) discussed in pairs and small groups. This work is supervised and framed, but is student-led and student-oriented. In addition to the specific intellectual skills addressed in each week, it also develops students' ability to formulate and present their standpoint, their sensitivity to alternative points of view, their debating and discussion skills. Weekly lectures cover the following topics: social contract theory; collective action; democracy, old and new; relationship between politics and administration; agenda setting; forecasts: politics of the future. Weekly workgroups focus on the following skills: makings sense of visuals (images, graphs, models); political imagery; working with definitions; humour in and about politics; negotiation and debate; evaluation and assessment.		
Learning Goals	 Upon successful completion of this module, students are able to (1) become acquainted with central topics in the study of governance; (2) understand and be able to use key concepts in the study of governance; (3) acquire intellectual skills useful in further studies and carrier; (4) get experience in rigorous and creative exploration of complicated issues, in group and autonomously. 		
Methods of assessment & grading structure	3 ECTS: Regular attendance of classes and active participation in group work and exercises. 3 ECTS: 3 short written assignments and written exam.		

3.2 Theoretical Foun	dations and Hermeneutical Methods		# 4150
Subject area	Governance		
Type of module	Compulsory for Governance Major Compulsory Elective for other Majors		
Frequency taught		Year of study	2
Duration	8 weeks	ECTS	6
Workload	180 h (of which 40 h attendance)	Language	English
Course format	1 lecture/seminar (3 ECTS), 1 workgro	oup (3 ECTS)	
Module Coordinator	Dr. Liudmila Mikalayeva		
Convener	Prof. Dr. B. Zimmermann		
Prerequisites	None		
Module content & objectives	This module offers the necessary there social science studies. Students lear works, used in the study of commusense of how to navigate complex the with the classic authors as well as motical, epistemological, and methodolog. The module provides students with the forms them on useful heuristics and cars analysing the structure and work kets, as well as instructs them on the tion procedures. The Seminar allows space for student presented in the Lecture and to prace soning techniques they learn from reather theoretical foundation material. Referstructor of the module to get the detimodule.	rn the fundamenta nities, states and heoretical landsca re recent develope ical dimensions of the generally acces conceptual tools a sings of communital formal logic and atts to actively enga- tice in the use of dings. In the forms of the course of ailed information	al conceptual frame- markets, and get a apes; get acquainted ments in the ontolog- the social inquiry. epted vocabulary, in- vailable to the schol- cies, states and mar- rigorous argumenta- age with the material vocabulary and rea- e focused on political ry and other types of atalogue and the in- on the design of the
Learning Goals	 Upon successful completion of this module, students are able to (1) analytically engage with complex theoretical material on social and political systems and activities; (2) become knowledgeable in the use of vocabulary and analytical apparatus accepted among the scholars of communities, states, and markets; (3) connect material from other modules into a conceptual understanding of socio-political sphere, distinguishing between ontology, epistemology and methodology of academic and practice-oriented inquiry. 		
Methods of assessment & grading structure	3 ECTS: Regular attendance, active participation in the module, group work and satisfactory completion of all obligatory exercises. 3 ECTS: Oral or written exam.		

3.3 Qualitative and G	Quantitative Methods			# 4200
Subject area	Governance			
Type of module	Compulsory for Governance Major Compulsory Elective for other Majors			
Frequency taught		Year of study	2–3	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	Englisl	า
Course format	1 lecture/seminar (3 ECTS), 1 workground	oup (3 ECTS)		
Module Coordinator	Dr. Liudmila Mikalayeva			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	By default, successful completion of the	ne module Introduc	ction to (Governance
Module content & objectives	This module focuses on the methodo quiry and introduces students into the od(s). The module can be realized in tive and/or quantitative methods. Reference of the module for detailed information for courses on qualitative methods, and practical skills in one of the following discourse analysis, qualitative cases viewing, socio-historical inquiry, ethnosearch in political communication, or analysis. For courses on quantitative economics, politics and sociology can metrics, survey methodology, quantic comparative studies. The module covers issues of method and practical purposes, discusses the odological studies and applications, as The Workgroup offers space for studies the method(s) discussed in the module practical understanding of the method as theoretical and practical challenges.	e details of a (set a variety of ways, er to the course or rmation. tudents receive a greathead methods: qualitate another established er methods, statisted to be focused upon tative content and desired another established er methods, statisted to be focused upon tative content and desired another established er methods, statisted to be focused upon tative content and desired another established enter to have a hardule, and thus prod's strengths and	t of) par focusing theoretic ative tex I area seal and seed type ics in the n, as we alysis, of particum the desection prediction prediction prediction prediction prediction security.	ticular meth- g on qualita- e and the in- cal basis and t analysis or tudies, inter- ocial life, re- of qualitative ne sphere of ell as econo- or multi-case alar research sign of meth- ocesses.
Learning Goals	 Upon successful completion of this module, students are able to (1) know the area of applicability, strengths and weaknesses of the method(s) considered in the module; (2) understand and discuss applications of the method(s) in research and application literature; (3) apply the method(s) to the relevant areas of socio-political inquiry. 			
Methods of assessment & grading structure	3 ECTS: Regular attendance, active p and satisfactory completion of all oblig 3 ECTS: Oral or written exam.		module,	group work

3.4 Law				# 4500
Subject area	Governance			
Type of module	Compulsory Elective for Governance I Elective for other Majors	Major		
Frequency taught		Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	1
Course format	1 lecture/seminar (3 ECTS), 1 workgro	oup (3 ECTS)		
Module Coordinator	Dr. Liudmila Mikalayeva			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	By default, successful completion of the	ne module Introdu	ction to C	Governance
Module content & objectives	This module focuses on the legal regunomic life. It introduces students to a be organized as an introductory cours lation, or as a course focusing on or and philosophy; legal process; law in tions, European Union); international law of international organizations; cargumentation; constitutional law; social law; history of law, or another relectourse catalogue and the instructor of This module acquaints students with by researchers and practitioners of a contextualized understanding of legal and functions of law, legislation and multi-layer and multi-goal communities. The Workgroup offers space for the dapplications of the material to case structor.	particular area of the into the foundation of the following multi-layered polipublic law; international public law; international public law; international public law; cology of law; envertage of legal of the module for definition of the concepts and a specific area of procedures and a normative process, states and mark liscussion of cours studies/exercises	legal inquions of lag areas: itical entiational edilegal reavironment inquiry. Etailed inforces with tets. It is essential designed.	uiry and can aw and legis- legal theory ities (federa- conomic law; asoning and atal law; me- Refer to the formation. ag applicable udents get a of the place nin complex, al as well as d by the in-
Learning Goals	 Upon successful completion of this module; (1) understand the principles of organ cable, theories and analytical fram covered in the module; (2) understand and discuss specialized module; (3) apply knowledge acquired to historian of communities, states and module. 	nization and workin neworks within the ed texts in the area orical and current o	ngs and, area of l	when applilegal studies
Methods of assessment & grading structure	3 ECTS: Regular attendance, active participation in the module, group work and satisfactory completion of all obligatory exercises. 3 ECTS: Oral or written exam.			

3.5 Economics				# 4550
Subject area	Governance			
Type of module	Compulsory Elective for Governance Elective for other Majors	Major		
Frequency taught		Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	Englisl	h
Course format	1 lecture/seminar (3 ECTS), 1 workground	oup (3 ECTS)		
Module Coordinator	Dr. Liudmila Mikalayeva			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	By default, successful completion of the	ne module Introdu	ction to (Governance
Module content & objectives	This module focuses on the understanding and analysis of economic life. It introduces students to a particular area of the study of the market and can be organized as an introductory course into the foundations of macro- and microeconomics, or as a course focusing on one of the following areas: advanced micro- or macroeconomics; economic theory/history; political economy; (comparative) economic policy; welfare state; finance, capital and investment; globalization and global markets; management of organizations; public management; marketing studies; economic geography; challenges in economic regulation, or another relevant area of the study of the market. Refer to the course catalogue and the instructor of the module for detailed information on the course's design. It offers to students an insight into the theoretical foundations of the study of the market, its views on human nature and motivation, cyclical processes of historical development, relationship between micro-, meso- and macro-levels, organization of social structures and processes, and global trends. The Workgroup offers space for the discussion of course material as well as application of the material to case studies/exercises designed by the instructor. It can encompass a section on methodology, useful for an in-depth study of the chosen area of analysis.			rket and can f macro- and ng areas: adolitical econapital and inguital and inguital and inguital econapital ec
Learning Goals	 Upon successful completion of this module, students are able to (1) understand the principles of organization, processes, and, when applicable, theories and analytical frameworks within the area of market studies covered in the module; (2) understand and be able to discuss specialized texts in the area covered in the module; (3) apply acquired knowledge to historical and current cases of market structures and processes. 			
Methods of assessment & grading structure	3 ECTS: Regular attendance, active participation in the module, group work and satisfactory completion of all obligatory exercises. 3 ECTS: Oral or written exam.			



3.6 Comparative Gov	vernment		# 4600
Subject area	Governance		
Type of module	Compulsory Elective for Governance Elective for other Majors	Major	
Frequency taught		Year of study	2–4
Duration	8 weeks	ECTS	6
Workload	180 h (of which 40 h attendance)	Language	English
Course format	1 lecture/seminar (3 ECTS), 1 workgr	oup (3 ECTS)	
Module Coordinator	Dr. Liudmila Mikalayeva		
Convener	Prof. Dr. B. Zimmermann		
Prerequisites	By default, successful completion of the	he module Introdu	ction to Governance
Module content & objectives	This module focuses on the political decision-making and regulation of communal, national and economic life. It covers national, international, and communal/group level of analysis, thus extending beyond the traditional narrow disciplinary definition of political science into areas of scholarly inquiry traditionally identified as international relations as well as political sociology. The focus on the comparative dimension enlarges the conceptual horizon of the module and puts an additional emphasis on epistemology and methods. The module introduces students to a particular area of political institutions, decision-making and regulation activities and can be organized as an introductory course into the foundations to politics and regulation, or as a course focusing on one of the following areas: political systems and regimes; governance in a sector or policy area (e.g., environmental governance); theories/history of international relations; global and globalized politics; international organizations; international regimes and institutions; political sociology, or other relevant area of political inquiry. This module aims at increasing students' motivation and ability to understand the development, functioning and transformation of political institutions in specific historico-cultural contexts. It gives them the necessary theoretical and conceptual basis to make sense of the dimension of social life centred on power and regulation.		
Learning Goals	 Upon successful completion of this module, students are able to (1) understand theories, analytical frameworks, institutions and processes within the area of governance covered in the module; (2) analytically engage with academic and policy-oriented texts in the area covered in the module; (3) apply acquired knowledge to historical and current cases of political regulation of communities, states and markets. 		
Methods of assessment & grading structure	3 ECTS: Regular attendance, active p and satisfactory completion of all oblig 3 ECTS: Oral or written exam.		module, group work

3.7 Advanced Gover	nance I		# 4650	
Subject area	Governance			
Type of module	Compulsory Elective for Governance Major Elective for other Majors			
Frequency taught		Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	1 lecture/seminar (3 ECTS), 1 workgroup (3 ECTS)			
Module Coordinator	Dr. Liudmila Mikalayeva			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	By default, successful completion of the	he module Introdu	ction to Governance	
Module content & objectives	In this module, students can choose among courses offered within the modules Law, Economics, or Comparative Government. It is necessary to refer to the course catalogue and the instructor of the module to get the detailed information on the design of the course.			
Learning Goals	Learning goals depend on the course chosen			
Methods of assessment & grading structure	The type of assessment and requirements depend on the course chosen			

3.8 Advanced Gover	nance II		# 4700	
Subject area	Governance			
Type of module	Compulsory Elective for Governance Major Elective for other Majors			
Frequency taught		Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	1 lecture/seminar (3 ECTS), 1 workgroup (3 ECTS)			
Module Coordinator	Dr. Liudmila Mikalayeva			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	By default, successful completion of the	he module Introdu	ction to Governance	
Module content & objectives	In this module, students can choose among courses offered within the modules Law, Economics, or Comparative Government. It is necessary to refer to the course catalogue and the instructor of the module to get the detailed information on the design of the course.			
Learning Goals	Learning goals depend on the course chosen			
Methods of assessment & grading structure	The type of assessment and requirements depend on the course chosen			

3.9 Advanced Governance III				# 4750
Subject area	Governance			
Type of module	Compulsory Elective for Governance Major Elective for other Majors			
Frequency taught		Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	1
Course format	1 lecture/seminar (3 ECTS), 1 workground	oup (3 ECTS)		
Module Coordinator	Dr. Liudmila Mikalayeva			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	By default, successful completion of the module Introduction to Governance. Additional requirements may be imposed by the instructor of the course.			
Module content & objectives	In this module, students can choose among courses offered within the modules Law, Economics, or Comparative Government. Alternatively, students can choose a course of their own selection from the areas of political or business ethics. It is necessary to refer to the course catalogue and the instructor of the module to get the detailed information on its exact realization.			
Learning Goals	Learning goals depend on the course chosen			
Methods of assessment & grading structure	The type of assessment and requirements depend on the course chosen			

3.10 Specialization Op	otion: Politics, Law, and Administrati	on	# 4800
Subject area	Governance		
Type of module	Compulsory Elective for Governance Elective for other Majors	Major	
Frequency taught		Year of study	3–4
Duration	8 weeks	ECTS	6
Workload	180 h (of which 40 h attendance)	Language	English
Course format	1 lecture/seminar (3 ECTS), 1 workground	oup (3 ECTS)	
Module Coordinator	Dr. Liudmila Mikalayeva		
Convener	Prof. Dr. B. Zimmermann		
Prerequisites	Successful completion of the module requirements may be imposed by the		
Module content & objectives	This Specialization Option module offers an opportunity for students to study a particular topic within the widely defined area of political, legal and administrative inquiry in considerable depth. This module is more research-oriented than other compulsory electives within the major. It allows students to get solid grasp of a current research topic, learning from academic scholars and practitioners. In this sense, the module is not only research-oriented, but also research-based to a larger extent than other modules offered within the major. The Workgroup offers intellectual space for an active dialogue between students, instructors and (when applicable) invited experts/researchers. This module is therefore better suited for advanced students, normally, from their fifth semester of studies. This is because this type of interaction will be most efficient when students already possess knowledge of the basic vocabulary, theories and conceptual frameworks to actively engage with the advanced material and the demanding format of the module. Refer to the course catalogue and the instructor of the module for detailed information on the design of the course.		
Learning Goals	 Upon successful completion of this module, students are able to (1) have received intensive training in specific research topic and/or method within the corresponding area of political, legal or administrative inquiry; (2) thoroughly understand the use of conceptual frameworks and methods within the area covered in the context of their real application; (3) actively engage with the variety of theoretical and methodological approaches to the study of the topic covered in the module. 		
Methods of assessment & grading structure	3 ECTS: Regular attendance, active participation in the module, group work and satisfactory completion of all obligatory exercises. 3 ECTS: Oral or written exam.		

3.11 Specialization Op	otion: Economics			# 4850
Subject area	Governance			
Type of module	Compulsory Elective for Governance Elective for other Majors	Major		
Frequency taught		Year of study	3–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	Englisl	h
Course format	1 lecture/seminar (3 ECTS), 1 workground	oup (3 ECTS)		
Module Coordinator	Dr. Liudmila Mikalayeva			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Successful completion of the module requirements may be imposed by the			e. Additional
Module content & objectives	This Specialization Option module offers an opportunity for students to study a particular topic within the widely defined area of economics in considerable depth. This module is more research-oriented than other compulsory electives within the major. It allows students to get solid grasp of a current research topic, learning from scholars and practitioners, so that the module is not only research-oriented, but also research-based to a larger extent than other modules offered within the major. The Workgroup offers intellectual space for an active dialogue between students, instructors and (when applicable) invited experts/researchers. This module is therefore better suited for advanced students, normally, from their fifth semester of studies. This is because this type of interaction will be most efficient when students already possess knowledge of the basic vocabulary, theories and conceptual frameworks to actively engage with the advanced material and the demanding format of the module. Refer to the course catalogue and the instructor of the module for detailed information on the design of the course.			
Learning Goals	 Upon successful completion of this module, students are able to (1) have received intensive training in specific research topic and/or method within the corresponding area of economics; (2) thoroughly understand the use of conceptual frameworks and methods within the area covered in the context of their real application; (3) actively engage with the variety of theoretical and methodological approaches to the study of the topic covered in the module. 			
Methods of assessment & grading structure	3 ECTS: Regular attendance, active participation in the module, group work and satisfactory completion of all obligatory exercises. 3 ECTS: Oral or written exam.			

4 Modules of the Major Life Sciences

4.1 Introductory Module: Thought and Research in the Life Sciences # 5100			# 5100
Subject area	Life Sciences		
Type of module	Compulsory for Life Sciences Major Compulsory Elective for other Majors		
Frequency taught	Twice a year	Year of study	1
Duration	8 weeks	ECTS	6
Workload	180 h (of which 40 h attendance)	Language	English
Course format	1 lecture/seminar (3 ECTS), 1 workground Introduction to Life Sciences	oup (3 ECTS):	
Module Coordinator	Dr. Simon J. Büchner		
Convener	Prof. Dr. B. Zimmermann		
Prerequisites	None		
Module content & objectives	In this module, students will learn about basic concepts in the Life Sciences. In particular, the course will focus on the biological and cognitive systems that sustain a human being and allow him or her to interact with a complex environment. The human being is approached from the outside to the inside, starting at the behavioural level, continuing with physiological systems that allow the realization of behaviour and vegetative functions, leading to the composition and functioning of cells. Besides the structures and processes that make up these systems, students will learn about the Scientific Method as the predominant way of knowledge acquisition in the Life Sciences. In Work Groups, students will research, present and discuss challenges from the fields of Cell Biology, Physiology, Neurobiology and Cognitive Psychology. Lab visits to different kinds of lab, in which students will experience the work in scientific laboratories, will round off the course.		
Learning Goals	 Upon successful completion of this module, students are able to (1) have basic knowledge about biological and cognitive systems of the human body and the ways they allow human beings to interact with the environment (2) have advanced knowledge in one challenge from the Life Sciences (3) present a topic according to basic scientific standards 		
Methods of assessment & grading structure	3 ECTS: satisfactory participation in the module and its associated activities, satisfactory completion of all required assignments as announced in class. 3 ECTS: a formal written exam (45 min, 50 %) AND a term paper (50 %).		

4.2 Mathematics and Physics for the Liberal Arts and Sciences # 5150				# 5150
Subject area	Life Sciences			
Type of module	Compulsory for Life Sciences Major Compulsory for Earth and Environmen Elective for Governance Major and Cu			Nr. 6150)
Frequency taught	Once a year	Year of study	2	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	h
Course format	Lecture and workgroup Maths & Physics for the Sciences			
Module Coordinator	Dr. Simon J. Büchner			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	None			
Module content & objectives	This module introduces basic concepts of mathematics and physics, the former in the context to the latter. While emphasis is laid on the application of the corresponding physical description to practical problems, the respective theoretical background is also be clarified whenever suitable, as well as possible connections to other concepts or their embedment into the framework of a more general theory (e.g. the relation between simple dynamics and Newtonian dynamics). Accordingly, most mathematical concepts are taught with their application to physics in mind (e. g. properties of functions, derivatives, integrals, and geometrical vectors), to subsequently allow a quantitative analysis of simple physical problems (e.g. the interplay of forces or dynamics in gravitational field), with a few short outlooks into other fields of physics.			
Learning Goals	 Upon successful completion of this module, students are able to (1) master basic concepts of analysis and linear algebra, Newtonian physics (2) identify appropriate physical and mathematical approaches to treat given problems, and solve the latter accordingly in a quantitative way. (3) recognise abstract concepts behind a given problem to find similarities to already known situations. 			
Methods of assessment & grading structure	Pass/Fail Assignment (3 ECTS): Regular attendance during the lectures and workgroups and satisfactory participation in class activities. Graded Assignment (3 ECTS): Proctored exam (90 min) as announced at the beginning of the course.			

4.3 Biochemistry			# 5250
Subject area	Life Sciences		
Type of module	Compulsory for Life Sciences Major Elective for other Majors		
Frequency taught	Once a year	Year of study	2
Duration	8 weeks	ECTS	6
Workload	180 h (of which 40 h attendance)	Language	English
Course format	1 lecture/seminar (3 ECTS), 1 workground Biochemistry	oup (3 ECTS):	
Module Coordinator	Dr. Simon J. Büchner		
Convener	Prof. Dr. B. Zimmermann		
Prerequisites	None		
Module content & objectives	This module provides the students with the knowledge about biochemical reactions and signalling pathways relevant to understand intra- and intercellular processes. This may include, but is not limited to, signal transduction (cellular receptors and signalling chains), metabolic processes (e.g. ATP synthase through the citric acid cycle), protein biosynthesis, and molecular genetics. For this, it will introduce the four major classes of molecules that are involved in the chemistry of a living cell, namely carbohydrates, lipids, amino acids and their polymers, proteins, as well as nucleic acids and their polymers, DNA and RNA. The module puts particular emphasis on molecular reactions playing a role in cellular functions and physiological processes and points out how pathways on different levels of consideration (molecular, cellular, supra-cellular, systemic) interact and rely on each other.		
Learning Goals	 Upon successful completion of this module, students are able to (1) know about the basic chemical pathways that run a cell; (2) know about the basic molecules involved in biochemical reactions and understand what role these molecules play in different cellular functions (3) are able to describe the role of intracellular reactions in relation to cellular activities and physiological processes 		
Methods of assessment & grading structure	3 ECTS: satisfactory participation in the module and its associated activities, satisfactory completion of all required assignments as announced in class. 3 ECTS: oral or written exam.		

4.4 Cell Biology				# 5350
Subject area	Life Sciences			
Type of module	Compulsory for Life Sciences Major Elective for other Majors			
Frequency taught	Once a year	Year of study	2	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	h
Course format	1 lecture/seminar (3 ECTS), 1 workground Cell Biology	oup (3 ECTS)		
Module Coordinator	Dr. Simon J. Büchner			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	None			
Module content & objectives	The module introduces the structure and functions of the different components of eukaryotic cells. This includes the structure and function of different cell organelles and analyses of cellular processes as well as their regulation. Topics may include, but are not limited to, cell formation, motility, and division, cell-to-cell interaction, endocytosis, exocytosis, intracellular transport protein sorting, trafficking, and targeting, and gene expression. The module puts emphasis on how cellular processes mediate processes occurring on the chemical level on the one hand and the physiological leve on the other hand and shows how processes on the different levels are closely related. Additional laboratory exercises will provide the students with initial practical experiences in the lab. Using common methods (such as microscopy) students will study structural aspects of the cell.			on of different eir regulation. lity, and divi- lar transport, te processes ological level int levels are
Learning Goals	 Upon successful completion of this module, students are able to (1) understand the structure and molecular function of living cells (2) understand and be able to discuss specialized texts in the areas covered by the module (3) be able to apply knowledge acquired to historical and current cases of legal regulation of communities, states and markets. 			ls reas cov-
Methods of assessment & grading structure	3 ECTS: satisfactory participation in the satisfactory completion of all required 3 ECTS: oral or written exam.			

4.5 Physiology			# 5300
Subject area	Life Sciences		
Type of module	Compulsory for Life Sciences Major Elective for other Majors		
Frequency taught	Once a year	Year of study	2–3
Duration	8 weeks	ECTS	6
Workload	180 h (of which 40 h attendance)	Language	English
Course format	1 lecture/seminar (3 ECTS), 1 workgro	oup (3 ECTS)	
Module Coordinator	Dr. Simon J. Büchner		
Convener	Prof. Dr. B. Zimmermann		
Prerequisites	Successful completion of the module Cell Biology		
Module content & objectives	The module introduces physiological concepts of body systems including their structure and functions in the context of maintaining homeostasis. Topics may include, but are not limited to, the immune system, the respiratory system, the circulatory system, the urinary system, the nervous system, the endocrine system, and the muscular system. At least one of these systems will be covered in-depth. Particular emphasis will be put on the regulation of these systems and their interaction with other systems as well as their adaption to changes in the environment. Mechanisms of regulation will be discussed on different levels (molecular, cellular, systems level).		
Learning Goals	Upon successful completion of this module, students are able to (1) differentiate between and describe different physiological systems (2) explain one physiological system in-depth (3) understand how different systems interact		
Methods of assessment & grading structure	3 ECTS: satisfactory participation in the module and its associated activities, satisfactory completion of all required assignments as announced in class. 3 ECTS: oral or written exam.		

4.6 Laboratory Work	for the Life Sciences			# 5200
Subject area	Life Sciences			
Type of module	Compulsory for Life Sciences Major			
Frequency taught		Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	า
Course format	Internship			
Module Coordinator	Dr. Simon J. Büchner			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Successful completion of the modules Cell Biology, Biochemistry, and Physiology			
Module content & objectives	In this module students carry out practical work in a scientific laboratory in one of the disciplines of the Life Sciences. Students actively participate in a project carried out in a lab and learn to perform basic procedures to carry out work in a lab (e.g. to pipet, lab security, operating research instruments such as a microscope etc.) depending on the type of lab they choose. Students select and apply for a lab autonomously. The course coordinator supports and advices them in this process. Before the module starts the student names a supervisor from the lab who takes responsibility for care and support of the student during the time in the lab and informs the course coordinator about it.			
Learning Goals	Upon successful completion of this metal. (1) behave in a laboratory space safe. (2) carry out basic procedures typical. (3) describe the working procedures of project they worked on	ely for the lab of their	· choice	
Methods of assessment & grading structure	3 ECTS: satisfactory participation in the all required assignments by the lab sur 3 ECTS: lab report/project report		actory co	empletion of



4.7 Computer Science, Data Processing, and Modelling in the Life Sciences # 5410				
Subject area	Life Sciences			
Type of module	Compulsory for Life Sciences Major Elective for other Majors			
Frequency taught	Once a year	Year of study	2–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	1 lecture/seminar (3 ECTS), 1 workground	oup (3 ECTS)		
Module Coordinator	Dr. Simon J. Büchner			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Successful completion of the module "Mathematics and Physics for the Liberal Arts and Sciences"			
Module content & objectives	The module introduces students to computational modelling in the Life Sciences. It covers the multiple uses of scientific models as visualizations, research tools, and research objects and discusses their epistemological role for knowledge production in the sciences. Advantages and disadvantages of the use of models for research will be discussed with an emphasis on the relation between the model and the modelled. The module includes a practical part in which students acquire basic programming skills that are required to create simple computational models. Students learn how structures and processes of real-life systems from the Life Sciences can be represented in a software environment and how the resulting models can be used to simulate processes and make predictions.			
Learning Goals	Upon successful completion of this module, students are able to (1) know of different types of models that are used in the Life Sciences (2) are able to explain the epistemological status of scientific models (3) are able to create simple computational models			
Methods of assessment & grading structure	3 ECTS: satisfactory participation in the module and its associated activities, satisfactory completion of all required assignments as announced in class. 3 ECTS: written exam or project			

4.8 Advanced Life So	4.8 Advanced Life Sciences I		
Subject area	Life Sciences		
Type of module	Compulsory Elective for Life Sciences Major Elective for other Majors		
Frequency taught		Year of study	2–4
Duration	8 weeks	ECTS	6
Workload	180 h (of which 40 h attendance)	Language	English
Course format	variable		
Module Coordinator	Dr. Simon J. Büchner		
Convener	Prof. Dr. B. Zimmermann		
Prerequisites	Successful completion of the module "Introduction to Life Sciences." Additional prerequisites may apply depending on the course chosen.		
Module content & objectives	In this module, students can choose among courses offered within the fields cognitive and neuro-sciences, genetics, biological anthropology, biotechnology, electrical engineering for biological and medical purposes, physiology, and cell biology. Refer to the course catalogue and the instructor of the module to get the detailed information on the design of the course.		
Learning Goals	Learning goals depend on the course	chosen	
Methods of assessment & grading structure	The type of assessment and requirem	ents depend on th	ne course chosen

4.9 Advanced Life Sciences II			# 5550
Subject area	Life Sciences		
Type of module	Compulsory Elective for Life Sciences Major Elective for other Majors		
Frequency taught		Year of study	2–4
Duration	8 weeks	ECTS	6
Workload	180 h (of which 40 h attendance)	Language	English
Course format	variable		
Module Coordinator	Dr. Simon J. Büchner		
Convener	Prof. Dr. B. Zimmermann		
Prerequisites	Successful completion of the module "Introduction to Life Sciences." Additional prerequisites may apply depending on the course chosen.		
Module content & objectives	In this module, students can choose among courses offered within the fields of cognitive and neuro-sciences, genetics, biological anthropology, biotechnology, electrical engineering for biological and medical purposes, physiology, and cell biology. Refer to the course catalogue and the instructor of the module to get the detailed information on the design of the course.		
Learning Goals	Learning goals depend on the course	chosen	
Methods of assessment & grading structure	The type of assessment and requirements depend on the course chosen		

4.10 Specialization Option: Life Sciences I # 5			# 5600	
Subject area	Life Sciences			
Type of module	Compulsory Elective for Life Sciences Elective for other Majors	s Major		
Frequency taught		Year study 3–4		
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	า
Course format	variable			
Module Coordinator	Dr. Simon J. Büchner			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Successful completion of the modules Cell Biology, Biochemistry, Physiology, and Laboratory Work for the Life Sciences. Additional prerequisites may apply.			
Module content & objectives	This module allows students to choose a course on an advanced topic they intend to specialize in. They can choose among courses offered within the fields of cognitive and neuro-sciences, genetics, biological anthropology, biotechnology, electrical engineering for biological and medical purposes, physiology, and cell biology. The module puts special emphasis on research and covers a focussed topic in its full range. Theoretical and methodological aspects will be discussed indepth in order to provide students with a thorough background in the topic.			ed within the anthropology, al purposes, cussed topic discussed in-
Learning Goals	 Upon successful completion of this module, students are able to (1) have received intensive training in the specific research topic and/or method (2) thoroughly understand the concepts and methods within the area covered (3) actively engage with the variety of theoretical and methodological approaches to the study of the topic covered in the module. 			
Methods of assessment & grading structure	The type of assessment and requirements depend on the course chosen			

4.11 Specialization Option: Life Sciences II				# 5650
Subject area	Life Sciences			
Type of module	Compulsory Elective for Life Sciences Elective for other Majors	Major		
Frequency taught		Year of study	3–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	Englisl	h
Course format	variable			
Module Coordinator	Dr. Simon J. Büchner			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Successful completion of the modules Cell Biology, Biochemistry, Physiology, and Laboratory Work for the Life Sciences. Additional prerequisites may apply.			
Module content & objectives	This module allows students to choose a course on an advanced topic they intend to specialize in. They can choose among courses offered within the fields of cognitive and neuro-sciences, genetics, biological anthropology, biotechnology, electrical engineering for biological and medical purposes, physiology, and cell biology. The module puts special emphasis on research and covers a focussed topic in its full range. Theoretical and methodological aspects will be discussed indepth in order to provide students with a thorough background in the topic.			
Learning Goals	 Upon successful completion of this module, students are able to (1) have received intensive training in the specific research topic and/or method (2) thoroughly understand the concepts and methods within the area covered (3) actively engage with the variety of theoretical and methodological approaches to the study of the topic covered in the module. 			
Methods of assessment & grading structure	The type of assessment and requirements depend on the course chosen			

5 Modules of the Major Earth and Environmental Sciences

5.1 Introductory Module: Thought and Research in the Earth and Environmental Sciences				# 6100
Subject area	Earth and Environmental Sciences			
Type of module	Compulsory for Earth and Environmental Sciences Major Compulsory Elective for other Majors			
Frequency taught	Yearly	Year of study	1	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Lecture with practical classes and wor	kgroup		
Module Coordinator	Dr. K. Moll			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Exploring Complex Problems Sharing Knowledge Numerical Literacy (or permission by the instructor)			
Module content & objectives	In this module, students acquire basic knowledge of the interacting components of our Earth system. These components include our physical environment (e.g. structure and function of the atmosphere), our living environment (e.g. structure and function of ecosystems), as well as the interaction between the two. In addition, students engage with scientific work related to a contemporary environmental issue that is strongly linked to both the physical and living environment (e.g. climate change). Furthermore, students familiarise themselves with basic research methods that are used in the field of environmental sciences. Students learn about components of the Earth system during lectures and practice research methods during practical classes. During the workgroups, students engage with scientific work that is related to a contemporary environmental challenge.			
Learning Goals	 Upon successful completion of this module, students are able to (1) recall basic structures and functions of different components of the Earth system and their interaction with each other. (2) explain links between these components and past and contemporary environmental challenges. (3) perform basic scientific work/experiments. (4) present a topic according to basic scientific standards (orally and in written form). 			
Methods of assessment & grading structure	Pass/Fail Assignment (3 ECTS): Regular attendance during the workgroups and practical classes and satisfactory participation in class activities, including an oral presentation on a given topic (15 to 30 min per candidate). Graded Assignment (3 ECTS): The final examination for this module consists of two parts (both contributing 50 % to the final grade), a proctored exam (45 min) and a written paper as announced at the beginning of the course.			

5.2 Mathematics and Physics for the Liberal Arts and Sciences # 6150				# 6150
Subject area	Earth and Environmental Sciences			
Type of module	Compulsory for Earth and Environmental Sciences Major Compulsory for Life Sciences Major (Module Nr. 5150) Elective for Governance Major and Culture and History Major			
Frequency taught	Yearly	Year of study	2	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Lecture and workgroup			
Module Coordinator	Dr. K. Moll			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Recommended: Introductory Module: Thought and Research in the Area of Earth and Environmental Sciences			e Area of
Module content & objectives	This module introduces basic concepts of mathematics and physics, the former in the context of the latter. While emphasis is laid on the application of the physical description to practical problems, the respective theoretical background is also clarified whenever suitable, as well as possible connections to other concepts or their embedment within the framework of more general theories (e.g. the relation between simple dynamics and Newtonian dynamics). Accordingly, most mathematical concepts are taught with their application to physics in mind (e. g. properties of functions, derivatives, integrals, and geometrical vectors), to subsequently allow quantitative analysis of simple physical problems (e.g. the interplay of forces or dynamics in gravitational field), with some brief exploration into other fields of physics.			
Learning Goals	 Upon successful completion of this module, students are able to (1) master basic concepts of analysis and linear algebra, and Newtonian physics (2) identify appropriate physical and mathematical approaches to treat given problems, and solve the them accordingly in a quantitative way. (3) recognise abstract concepts behind a given problem to find similarities to already known situations. 			
Methods of assessment & grading structure	Pass/Fail Assignment (3 ECTS): Regular attendance during the lectures and workgroups and satisfactory participation in class activities. Graded Assignment (3 ECTS): proctored exam (90 min) or an oral exam interview (15 to 20 min per candidate) as announced at the beginning of the course.			

5.3 Methods of Obse	rving Nature			# 6200	
Subject area	Earth and Environmental Sciences				
Type of module	Compulsory for Earth and Environment Elective for other Majors	Compulsory for Earth and Environmental Sciences Major Elective for other Majors			
Frequency taught	Every other year	Year of study	2–3		
Duration	1–2 weeks full-time (+ preparation)	ECTS	6		
Workload	180 h (of which 40 h attendance)	Language	English		
Course format	Excursion/practical and seminar				
Module Coordinator	Dr. K. Moll				
Convener	Prof. Dr. B. Zimmermann				
Prerequisites	Introductory Module: Thought and Research in the Area of Earth and Environmental Sciences (or permission by the instructor) Recommended: Earth Sciences, Ecology				
Module content & objectives	In this module, students explore natural phenomena through direct field and/or laboratory experience. Students gain hands-on experience with methods used to study our environment. Individual field trips and/or laboratory classes are accompanied by a seminar that focuses on particular natural processes (e.g. rock formation) or environmental problems (e.g. soil erosion), which are addressed in an interdisciplinary way. Thereby, students integrate their observations with acquired knowledge of Earth sciences, chemistry and/or ecology and discuss the interaction between observed natural processes and humans.				
Learning Goals	 Upon successful completion of this module, students are able to (1) describe and report observations of natural processes according to scientific standards. (2) link their theoretical knowledge of Earth Sciences, chemistry and ecology to observations of natural processes or problems in the field or laboratory. (3) explain links between particular natural processes and human actions. 				
Methods of assessment & grading structure	Pass/Fail Assignment (3 ECTS): Regular attendance during the practical/excursion and the seminar and satisfactory participation in class activities. Graded Assignment (3 ECTS): An oral presentation on a given topic (15 to 30 min per candidate) and/or a written paper as announced at the beginning of the course.				

5.4 Chemistry				# 6250	
Subject area	Earth and Environmental Sciences				
Type of module	Compulsory for Earth and Environment Elective for other Majors	Compulsory for Earth and Environmental Sciences Major Elective for other Majors			
Frequency taught	Yearly – every other year	Year of study	2		
Duration	4–7 weeks	ECTS	6		
Workload	180 h (of which 40 h attendance)	Language	English		
Course format	Lecture and tutorial				
Module Coordinator	Dr. K. Moll				
Convener	Prof. Dr. B. Zimmermann				
Prerequisites		Introductory Module: Thought and Research in the Area of Earth and Environmental Sciences (or permission by the instructor)			
Module content & objectives	In this module students are introduced to the Central Science Chemistry. Students study the main building blocks of our material world composed of atoms, ions and molecules. They investigate fundamental chemical reactions and electron-transfer reactions (redox chemistry). In addition, they are introduced to basic thermodynamic and kinetic principles driving chemical reactions. Finally, they explore the essential elements of life on Earth and their biogeochemical cycles, and they will take a closer look at the chemistry of several important biological processes. These topics are introduced during the lectures. In the tutorials selected topics will be presented by the students and discussed in depth.				
Learning Goals	 Upon successful completion of this module, students are able to (1) describe the basic electronic and structural features of molecules. (2) set up and complete chemical equations. (3) understand elementary thermodynamic (heat) and kinetic (velocity) aspects of chemical reactions. (4) apply the principles of structure and reactivity to essential life processes in the presence and absence of dioxygen. (5) present/discuss a selected topic and write a paper (short publication). 				
Methods of assessment & grading structure	Pass/Fail Assignment (3 ECTS): Regular attendance during the lectures and tutorials and satisfactory participation in class activities, including an oral presentation on a given topic (15 to 30 min per candidate). Graded Assignment (3 ECTS): The final examination for this module consists of two parts (both contributing 50 % to the final grade), a proctored exam (45 min) and a written paper as announced at the beginning of the course.				

5.5 Earth Sciences			# 6300		
Subject area	Earth and Environmental Sciences				
Type of module	Compulsory for Earth and Environmental Sciences Major Elective for other Majors				
Frequency taught	Yearly – every other year	Year of study	2		
Duration	7 weeks	ECTS	6		
Workload	180 h (of which 40 h attendance)	Language	English		
Course format	Lecture with practical/excursion and s	eminar			
Module Coordinator	Dr. K. Moll				
Convener	Prof. Dr. B. Zimmermann				
Prerequisites	Introductory Module: Thought and Resronmental Sciences (or permission by		of Earth and Envi-		
Module content & objectives	In this module, students explore fundamental principles of endogenous and exogenous geology to gain basic understanding of the form and functioning of our planet. Regarding endogenous geology, students learn about the Earth's interior structure and internal processes. These processes include the formation of rocks, in particular igneous rocks and metamorphic rocks, and deformation (plate tectonics). With respect to exogenous geology, students learn about processes and forces near the Earth's surface, such as the physical and chemical weathering of rocks, transport of materials (through wind, water and ice) and deposition of materials in different environments (glaciers, lakes, sea) as sedimentary rocks. In addition, an emphasis is placed on the link between both exogenous and endogenous principles and contemporary environmental challenges (e.g. earth quakes, reservoirs of resources). Students learn about endogenous and exogenous geology during lectures and study their appearance during practical classes and excursions. During the seminar, students link their acquired knowledge to current environmental challenges.				
Learning Goals	 Upon successful completion of this module, students are able to (1) describe and understand basic principles of endogenous geology (the Earth's interior structures and processes), exogenous geology (processes and forces near the Earth's surface) and fundamental methods to study these principles. (2) apply their acquired theoretical knowledge to identify the appearance of geological processes in nature (e.g. metamorphic grade of rocks, plate boundaries, chemical and physical weathering) (3) examine links between basic principles of endogenous and exogenous geology and contemporary environmental challenges (e.g. earth quakes, reservoirs of resources) 				
Methods of assessment & grading structure	Pass/Fail Assignment (3 ECTS): Regulation and satisfactory participation presentation on a given topic (15 to 30 Graded Assignment (3 ECTS): The firm of two parts (both contributing 50 % to min) AND a written paper.	in class activities,) min per candidat nal examination for	including an oral re). re this module consists		



5.6 Ecology				# 6350
Subject area	Earth and Environmental Sciences			
Type of module	Compulsory for Earth and Environmental Sciences Major Elective for other Majors			
Frequency taught	Yearly – every other year	Year of study	2	
Duration	7 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Lecture with practical/excursion and s	eminar		
Module Coordinator	Dr. K. Moll			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introductory Module: Thought and Research in the Area of Earth and Environmental Sciences			
Module content & objectives	This module introduces fundamental ecological theories and concepts, and research approaches used by ecologists to study the environment. Students learn about principles that control and regulate populations, communities and ecosystems, and methods to study these principles. In addition, the implication of these principles for nature conservation, resource use and the study of human impact on the environment are addressed. Students acquire fundamental knowledge about ecological concepts, theories and research approaches during the lecture; they practice ecological research methods during practical classes/excursions and discuss ecological research and its implication during the seminar.			
Learning Goals	 Upon successful completion of this module, students are able to (1) recall basic ecological theories and concepts (ecological principles that control and regulate populations, communities and ecosystems) (2) explain patterns in nature by applying these principles. (3) discuss implications of these principles for nature conservation, resource use and/or the study of human impact on the environment. (4) perform basic ecological research and report its outcome in formal scientific style (orally or written). 			
Methods of assessment & grading structure	Pass/Fail Assignment (3 ECTS): Regular attendance during the classes and satisfactory participation in class activities, including an oral presentation on a given topic (15 to 30 min per candidate). Graded Assignment (3 ECTS): The final examination for this module consists of a single proctored exam (90 min) or of two parts (both contributing 50 % to the final grade), a proctored exam (45 min) and a written paper as announced at the beginning of the course.			

5.7 Global Cycles of Matter and Materials			# 6500		
Subject area	Earth and Environmental Sciences				
Type of module	Compulsory Elective for Earth and En Elective for other Majors	Compulsory Elective for Earth and Environmental Sciences Major Elective for other Majors			
Frequency taught	Yearly – every other year	Year of study	3–4		
Duration	8 weeks	ECTS	6		
Workload	180 h (of which 40 h attendance)	Language	English		
Course format	Lecture and Seminar				
Module Coordinator	Dr. K. Moll				
Convener	Prof. Dr. B. Zimmermann				
Prerequisites	Introductory Module: Thought and Research in the Area of Earth and Environmental Sciences (or permission by the instructor)			and Envi-	
Module content & objectives	In this module students explore the cycling of matter and materials on a global scale. Students select an advanced course that engages thoroughly with the cycling of a specific element (e.g. carbon, nitrogen), a specific molecule (e.g. water) or a certain natural or human-made material (e.g. sand, metal, plastic). Students learn about processes and mechanisms that govern the cycling of the studied matter/material, about its flow and flux patterns, about its various forms as it goes through the different phases of the cycle, and about important reservoirs and residence times. Students also explore interactions with other cycles. In addition, students examine the linkage between the cycle and humans (i.e. the influence of the cycle on humans and the influence of humans on the cycle), and discuss environmental management strategies.			ghly with the nolecule (e.g. etal, plastic). he cycling of ut its various out important his with other humans (i.e.	
Learning Goals	 Upon successful completion of this module, students are able to (1) describe a specific cycles of matter or material in detail. (2) understand and discuss specialized texts and research methods in the area covered in the module. (3) apply acquired knowledge and research skills to the study of other global cycles of matter or material. 				
Methods of assessment & grading structure	Pass/Fail Assignment (3 ECTS): Regular attendance during the classes and satisfactory participation in class activities, including an oral presentation on a given topic (15 to 30 min per candidate). Graded Assignment (3 ECTS): A written paper on a given topic or a proctored written examination (90 min) as announced at the beginning of the course.			entation on a	

5.8 Environment and	d Health			# 6550
Subject area	Earth and Environmental Sciences			
Type of module	Compulsory Elective for Earth and Environmental Sciences Major Elective for other Majors			
Frequency taught	Yearly – every other year	Year of study	3–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Lecture and Seminar			
Module Coordinator	Dr. K. Moll			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introductory Module: Thought and Research in the Area of Earth and Environmental Sciences (or permission by the Instructor) Recommended: Introductory Module: Thought and Research in the Area of Life Sciences			
Module content & objectives	In this module students explore the complex relationship between the environment and human health. Students select an advanced course that deeply engages with the physical, chemical and biological properties of specific environmental hazards, their causes, their mechanisms of release into the environment, major environmental pathways and fates, and their effect on human health. In addition, students develop basic skills in environmental risk assessment and management strategies. Amongst others, individual courses may cover the following areas of study that are linked to human health: freshwater contamination, air pollution, waste management, natural disasters.			
Learning Goals	 Upon successful completion of this module, students are able to (1) describe specific environmental hazards and their relationship to human health in detail. (2) understand and discuss specialized texts and research methods in the area covered in the module. (3) apply acquired knowledge and research skills to other topics about environmental hazards and their relationship to human health. 			
Methods of assessment & grading structure	Pass/Fail Assignment (3 ECTS): Regular attendance during the classes and satisfactory participation in class activities, including an oral presentation on a given topic (15 to 30 min per candidate). Graded Assignment (3 ECTS): A written paper on a given topic or a proctored written examination (90 min) as announced at the beginning of the course.			

5.9 Evolution and Dynamics of the Planetary System				6600
Subject area	Earth and Environmental Sciences			
Type of module	Compulsory Elective for Earth and Environmental Sciences Major Elective for other Majors			
Frequency taught	Yearly – every other year	Year of study	3–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Lecture and Seminar			
Module Coordinator	Dr. K. Moll			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introductory Module: Thought and Research in the Area of Earth and Environmental Sciences (or permission by the instructor) Recommended: Earth Sciences			
Module content & objectives	In this module students explore the evolution and dynamics of the planetary system in order to gain better understanding of the present state of the Earth. Students select an advanced course that examines one of the following areas in depth: the evolution and dynamics of the solar system, of the Earth (e.g. formation of a layered planet) or of a specific Earth system (e.g. plate tectonic system). In addition, students explore and discuss research methods that are used to study the respective topic.			
Learning Goals	 Upon successful completion of this module, students are able to (1) describe the evolution and dynamics of the system covered in the module in depth. (2) understand and discuss specialized texts and research methods in the area covered in the module. (3) apply acquired knowledge and research skills to other topics related to the evolution and dynamics of the planetary system. 			
Methods of assessment & grading structure	Pass/Fail Assignment (3 ECTS): Regular attendance during the classes and satisfactory participation in class activities, including an oral presentation on a given topic (15 to 30 min per candidate). Graded Assignment (3 ECTS): A written paper on a given topic or a proctored written examination (90 min) as announced at the beginning of the course.			

5.10 Specialization Option: Earth and Environmental Sciences I # 6650				# 6650	
Subject area	Earth and Environmental Sciences				
Type of module	Compulsory Elective for Earth and En Elective for other Majors	Compulsory Elective for Earth and Environmental Sciences Major Elective for other Majors			
Frequency taught	Yearly – every other year	Year of study	3–4		
Duration	8 weeks	ECTS	6		
Workload	180 h (of which 40 h attendance)	Language	English		
Course format	Seminar and/or Practical				
Module Coordinator	Dr. K. Moll				
Convener	Prof. Dr. B. Zimmermann				
Prerequisites	Introductory Module: Thought and Research in the Area of Earth and Environmental Sciences (or permission by the instructor)				
Module content & objectives	This module allows students to select a course on an advanced topic or research method they intend to specialize in. Students can choose from specialization courses offered in the fields of ecology, Earth sciences, chemistry and physics and interdisciplinary courses that are related to these fields of study. The module puts special emphasis on research and/or research methods and covers a focussed topic and/or method in its full range. Relevant theory is discussed in depth in order to provide students with a thorough background on the topic. Research methods are trained intensively in order to advance practical research skills. With prior approval of the Board of Examiners, this module can be replaced by supervised independent science research (see guidelines for independent projects).				
Learning Goals	 Upon successful completion of this module, students are able to (1) thoroughly understand the concepts and methods relevant to the research area covered in the module. (2) apply the acquired concepts and methods to the study of other topics related to the research area covered in the module. (3) evaluate research in the area covered in the module. 				
Methods of assessment & grading structure	As announced at the beginning of the course.				

5.11 Specialization Option: Earth and Environmental Sciences I # 6700				# 6700
Subject area	Earth and Environmental Sciences			
Type of module	Compulsory Elective for Earth and Environmental Sciences Major Elective for other Majors			
Frequency taught	Yearly – every other year	Year of study	3–4	
Duration	8 weeks	ECTS	6	
Workload	180 h (of which 40 h attendance)	Language	English	
Course format	Seminar and/or Practical			
Module Coordinator	Dr. K. Moll			
Convener	Prof. Dr. B. Zimmermann			
Prerequisites	Introductory Module: Thought and Research in the Area of Earth and Environmental Sciences (or permission by the instructor)			
Module content & objectives	This module allows students to select a course on an advanced topic or research method they intend to specialize in. Students can choose from specialization courses offered in the fields of ecology, Earth sciences, chemistry and physics and interdisciplinary courses that are related to these fields of study. The module puts special emphasis on research and/or research methods and covers a focussed topic and/or method in its full range. Relevant theory is discussed in depth in order to provide students with a thorough background on the topic. Research methods are trained intensively in order to advance practical research skills. With prior approval of the Board of Examiners, this module can be replaced by supervised independent science research (see guidelines for independent projects).			
Learning Goals	 Upon successful completion of this module, students are able to (1) thoroughly understand the concepts and methods relevant to the research area covered in the module. (2) apply the acquired concepts and methods to the study of other topics related to the research area covered in the module. (3) evaluate research in the area covered in the module. 			
Methods of assessment & grading structure	As announced at the beginning of the course.			

6 Language Modules

6.1 Language	# 7100
Subject area	Languages
Type of module	Compulsory Elective
Module coordinator	Annick Guilhem-Hou
Module description	 Students must earn 36 ECTS credits by enrolling in courses that will help them to acquire or to improve their existing foreign language skills. (1) Students can take language courses offered by the UCF (These courses are only offered depending on student need). (2) Students can take language courses offered by the Language Teaching Centre of the University of Freiburg or other institutions of the University of Freiburg. Courses outside UCF require prior approval by the Board of Studies.
Module content & objectives	As announced for the respective course.
Learning Goals	As announced for the respective course.
Methods of assessment & grading structure	As announced for the respective course.

7 Electives

7.1 Elective	# 7250
Subject area	Electives
Type of module	Compulsory Elective
Module description	 Students must earn a total of 48 ECTS credits by taking elective courses (of these, a minimum of 18 ECTS credits must be acquired from modules requiring an exam). Some of these courses require prior approval by the Board of Studies. Courses that do not require prior approval by the Board of Studies: (1) Students can take modules of their own choice from courses offered as part of the specialization studies (up to eight modules). Courses that require prior approval by the Board of Studies: (2) Students can take suitable courses that are part of other degree programs at the University of Freiburg (up to 24 ECTS credits). (3) Students can enrol in additional courses offered by the Language Teaching Centre of the University of Freiburg (up to 24 ECTS credits). (4) Students can undertake an internship or a practical project (up to 18 ECTS credits). (5) Students can undertake supervised independent scientific research (up to 12 ECTS).
Module content & objectives	As announced for the respective course.
Learning Goals	As announced for the respective course.
Assessed (Pass/Fail) Coursework	As announced for the respective course.
Methods of assessment & grading structure	As announced for the respective course.

7.2 Frontiers in Rese	earch	# 7270
Subject area	Electives	
Type of module	Elective	
Module content & objectives	Students attend a research seminar, research-oriented talk ser "Kolloquium" or research conference covering at least three fulleast 45 minutes each. They produce a portfolio of work which et to engage with the research presented, and which documents ment. Prior to the event, students need to recruit a member of acad ALU as elective supervisor. This needs to be documented in supervisor specifies the assignment choices as listed below at the fulfilment of the requirements. The module is primarily aimed at students in their third and fourt studies, and is especially encouraged in conjunction with a back Unless specified otherwise by the Dean of Studies prior to the evers two ECTS. By adding several such modules over the cours degree program, no more than six ECTS should be covered.	ull talks of at enables them that engage- lemic staff of writing. The nd evaluates the year of the left thesis. The vent, it co-
Learning Goals	 to get to know a standard academic discussion format to prepare a systematic engagement with challenging currer to compare and contrast contributions within an oral scientifi to synthesize information from such formats and put it in wri to understand the role of oral scientific formats in research 	ic format
Methods of assessment & grading structure	 Studienleistung only. The supervisor has to make sure ECTS and workload requirements are met and documented, especial number of talks attended is small. (1) Attendance at all events, in accordance with the LAS attend certified in writing by the host institution. (2) An annotated bibliography of at least ten titles relating to the topic of the talk series/ workshop, prepared in advance. (3) A structured summary of each talk in the series/ event, 250-plus a short list of open questions, critical remarks or further ing to each talk. (4) A review of the event, in a form that mirrors a standard reviews used in the discipline in question (as used in journals or onli sources). This can be completed as a group assignment of a participants. 1200 words per participant. OR (5) Two book reviews of directly topically relevant works of one speakers at the event. 750 words each. 	ally when the ance rules, e over-all 500 words, ideas relatew format ne re-up to three

(Beschluss der Studienkommission LAS vom 6.2.2015)