



UNIVERSITY
COLLEGE
FREIBURG



Course Catalog

B.A./B.Sc. Program Bachelor of
Liberal Arts and Sciences
Summer Semester 2022

Albert-Ludwigs-Universität Freiburg

UNI
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I General Information

Due to the limited places in Liberal Arts and Sciences (LAS) courses, all courses listed in the LAS Course Catalog are open to LAS students and students of the official exchange partners and partner degree programs of UCF only.

1 Teaching Periods and Dates

Teaching Period	Dates
Pre Block	21 March – 4 April
Block III	11 April – 3 June
Block IV	13 June – 29 July
University Semester	25 April – 29 July (semester-long LAS courses run according the university semester)
Resit Period	4 October – 30 October (resit examinations that require students' presence only)

The university is closed on public holidays! Dates for individual courses may slightly vary from these dates (see course descriptions).

2 EPICUR – The European University

Uni Freiburg and UCF are part of **EPICUR, a pilot European University of the future**. As of winter semester 2020/21, EPICUR offers LAS-based seminars and other teaching activities across the alliance:

- EPICUR courses taught by **UCF EPICUR staff** are organized as regular UCF courses and listed in the LAS Course Catalog. Reserved EPICUR slots not taken by students from EPICUR partners will be assigned to UCF students on the waiting list during the post-registration period 2 and in registration period 3.
- EPICUR courses offered at the EPICUR partners can be taken by UCF students. These courses adhere to the individual partner's academic calendar and course organization.

Due to the international schedule, EPICUR courses and the LAS semester are not in sync. The EPICUR LAS autumn 2022 course catalog will be published soon! Registration will open in May.

More information on upcoming courses and on course registration is available in the course catalog and on **EPICampus**, the EPICUR Virtual Campus Learning Platform. Credit recognition at UCF follows the procedure for courses taken outside the University of Freiburg during LAS.

Please also see the upcoming EPICUR course offerings in the field of **Language & Culture.**

3 LAS Academic Calendar

Date		Important Dates and Deadlines
March 2022		
Starting 12.03.		LAS Course Registration with consecutive periods (see Course Registration)
Fri	28.03.	Registration for SLI Language Courses (new application procedure, please see LAS Info Board)
21.03-01.04.		Pre-Block Courses
April 2022		
Mon	11.04.	Block III begins
		Exam Registration and withdrawal for courses of Block III in HISinOne begins (<u>not</u> for Block IV <i>and</i> semester-long courses).
Fri	15.04.	Public Holiday: Good Friday (no teaching)
Mon	18.04.	Public Holiday: Easter Monday (no teaching)
Thu	22.04.	Event: Inter-Cohort Get-Together / Project Presentation R+L1 (tbc)
Fri	23.04.	Deadline: Application for Courses of other Degree Programs at the University of Freiburg Courses (for graded examinations in the <i>Majors/Core and in the Electives</i>) The application form and guidelines are available on the LAS Info Board on ILIAS.
Mon	25.04.	University semester begins
May 2022		
Mon	02.05.	Deadline: Application for Admission of Bachelor Thesis (4 th year students)
Fri	06.05.	Deadline: Exam Registration and Withdrawal for courses of Block III in HISinOne (<u>not</u> for Block IV <i>and</i> semester-long courses).
Tue	17.05.	Event: Study Abroad Fair (tbc)
Thu	26.05.	Public Holiday: Ascension Day (no teaching)
Sat	15.05.	Deadline: Application Credit Recognition for Study Abroad (Guidelines and application forms are available on the LAS Info Board on ILIAS)
June 2022		
Fri	03.06.	Block III ends
06.-10.06.		Pentecost Holidays (no teaching, but examinations of Block III possible)
Mon	13.06.	Block IV begins
		Exam Registration and Withdrawal for Courses of Block IV <i>and</i> semester-long courses in HISinOne begins.
Thu	16.06.	Public Holiday: Corpus Christi (no teaching)

July 2022		
Fri	01.07.	Deadline: Exam Registration and Withdrawal for courses of Block IV <i>and</i> semester-long courses in HISinOne
Wed	20.07.	Event: Major Information (tbc)
Fri	29.07.	Block IV ends
		University semester ends
Sat	31.07.	Deadline: Major Declaration
		Deadline: Application for Graduation SS 2022
August/September/October 2022		
01.-04.08.		LAS Selection Interviews
Beginning of September		Publication of the LAS Course Catalog WS 2022/23 on the UCF website
Mon	02.09.	Deadline: Application for Admission of Bachelor Thesis (4 th year students)
Starting 17./24.09.		LAS Course Registration for courses of the Winter Semester 2022/23 with consecutive registration periods (details tba)
26.09. – 07.10.		October Intensive Courses (details tba)
10. – 14.10.		LAS Welcome Week
Mon	18.10	University Semester begins
		Block I begins

II Course Registration

The outlined course registration procedure ensures that Liberal Arts and Sciences students and LAS exchange students can register for a sufficient number of courses to keep up with their studies and that they get priority for compulsory courses they require in order to graduate.

The LAS course registration procedure **applies to all courses offered by UCF that appear in the LAS Course Catalog (unless stated differently in the remarks section of the individual course descriptions)**. Information on taking courses of other degree programs and by the Sprachlehrinstitut (SLI) of the University of Freiburg is available on the [LAS Info Board on ILIAS](#).

1 When to Register for Courses?

LAS students register during the three consecutive registration periods as outlined below. Please note that students may have to register for different courses at different times.

LAS exchange students can register for courses during Registration Period II and III.

Students of partner degree programs at the University of Freiburg can register for courses during Registration Period III. Please additionally contact UCF (las.consultation@ucf.uni-freiburg.de) well in advance.

Registration Period I Sat, 12.3. - Tue, 15.3. (12:00h, noon)		
Who can register	For what	Comment
Liberal Arts and Sciences (LAS) students who have <u>formally</u> declared their major by 31 st of January	LAS courses to be recognized as Major courses only (<u>not</u> as Electives, Core or Language courses!)	LAS students are allowed to register for a maximum of 5 courses in total (including language courses paid by UCF, excluding pre-block courses). If students register for more than 5 courses they will be removed from the most popular courses. No exceptions to this rule will be made. LAS Students who have <u>not</u> formally declared their major by 31 st of January can only register for courses in Registration Period II.
<p>Places will be assigned after the registration period. Higher year students will get priority on places unless otherwise noted in the course description.</p> <p>You can check your registration status on Wednesday evening. Your registration request may have been declined or you may have been moved to a different workgroup. Students whose registration requests have been declined will have the opportunity to register for alternative courses on Thu, 17.3., 14:00h to 18:00h in HISinOne.</p> <p>Please, de-register from courses that you do not want to take immediately.</p>		

Registration Period II Sat, 19.3. - Tue, 22.3. (12:00h, noon)		
Who can register	For what	Comment
LAS students (who have not yet achieved all credits in the respective area) and LAS exchange students	All courses listed in the LAS Course Catalog.	LAS and Exchange Students are allowed to register for a maximum of 5 courses in total (including language courses paid by UCF, excluding pre-block courses). No exceptions to this rule will be made.
<p>Places will be assigned after the registration period. Higher year students will get priority on places unless otherwise noted in the course description. Whether or not a student has declared their major will not be considered anymore.</p> <p>You can check your registration status on Wednesday evening. Your registration request may have been declined or you may have been moved to a different workgroup. Students whose registration requests have been declined will have the opportunity to register for alternative courses on Thu, 24.3., 14:00h to 18:00h in HISinOne.</p> <p>Please, de-register from courses that you do not want to take immediately</p>		

Registration Period III Sat, 26.03. - Wed, 30.03. (12:00h, noon)		
Who can register	For what	Comment
LAS students, LAS Exchange students, and Students of partner degree programs at the University Freiburg	All courses listed in the LAS Course Catalog	Students can register for courses that still have places available. Students are allowed to register for a maximum of 6 courses in total .
Places will be assigned throughout the registration period. Regularly check your registration status in HISinOne. Your registration request may have been declined. In some cases, priority on places will be given to students of partner degree programs. Please, de-register from courses that you do not want to take immediately.		

2 How to Register for Courses?

Course registration takes place in the campus management system HISinOne. For a description of the registration process, please consult the [LAS Info Board](#) on ILIAS.

3 Participant Lists

Course participant lists will be finalized **on Monday, April 4, 2022** and passed on to the instructors. Later admissions to courses by the LAS program coordination will not be possible.

The final decision about participation in a course is always with the course instructor. Students may be excluded from a course at a later stage, e.g. if they do not fulfill the prerequisites or have not reached the required year of studies. It is also up to the instructors whether or not they admit students once the participant lists are finalized.

Courses with will less than five participants may be cancelled.

4 Problems with Course Registration?

If for some reason course registration does not work for you, please **contact the LAS program coordination** (las.consultation@ucf.uni-freiburg.de) **immediately**.
Requests after the deadline specified will not be considered.

Always provide

- your name, matriculation number and major (if declared formally),
- your study and examination regulations (2015, 2020, Exchange student),
- the exact course and module title that you wish to register for,
- and information about your problem. Please provide a screenshot of your problem whenever possible.

III Exam Registration

1 Who Needs to Register for Examination?

All students who wish to get credits for courses need to register for examinations.

2 When to Register for Examination?

Registration Period	Dates	Exam Registration and Withdrawal
1	28.3.2022 - 30.3.2022	Pre-Block Intensive courses
2	11.4.2022 – 6.5.2022	Block III
3	13.6.2022 – 1.7.2022	Block IV AND semester long courses

The registration periods apply to all courses offered by UCF (unless otherwise noted in the course details). Courses of other degree programs have different registration periods.

Please register right at the beginning of the registration period in case any problems arise. **Please remember: You are not allowed to take part in the exam or will not be given a grade for any written work if you have not registered by the deadline specified.**

3 How to Register for Examination?

All LAS students (including first year students) and LAS exchange students (on [UCF programs](#) only) register their examinations in the campus management system HISinOne as outline on the [LAS Info Board](#) on ILIAS.

3.1 Students of other degree programs and other exchange programs

UCF does not organize exam registration for students of other degree programs and for international exchange students from other departments. Here exam registration is organized at the relevant faculty or by the international office for students on international office exchange programs. Students should contact their faculty or the International Office.

3.2 Has the exam registration been successful?

Pass/fail assessments (Studienleistungen) will appear as REG (Registriert) and graded assessments (Prüfungsleistungen) as ZU (zugelassen) in HISinOne. See *My enrollments and registrations* or your transcript of records.

4 Problems with Exam Registration

See [Problems with Course Registration](#).

Foundational Year Schedule

	Monday	Tuesday	Wednesday		Thursday		Friday	
8-10	EES Lecture	LS Lecture			C&H WG 1			DNI Tut 1 + 2
10-12	DNI Lecture		DNI WG 1 + 2	EES WG 3	C&H WG 2	LS WG 1 + 2	GOV WG 2	DNI Tut 3 + 4
12-14	C&H Lecture		DNI WG 3 + 4		Gov WG 1		GOV WG 3	
14-16		EES WG 1 + 2			C&H WG 3	LS WG 3 + 4		
16-18	GOV Lecture	GOV Plenary				(LS WG 5)		
18-20								

Be aware of overlap and avoid clashes in your course registration.

2. Course Descriptions

1 Courses Offered in Block III

1.1 Study Area: Core

Conducting Qualitative Interviews			
Core		Block III	
Hannes Bürkel (hannes.buerkel@posteo.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	2	20	00LE62S-LAS-CO0075
Module(s) StuPo 2015		Module(s) StuPo 2020	
Elective		Advanced Academic Skills	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar, Practical Wed, 12-14h, KG 1034		
Course Description	Qualitative interviews are a versatile methodological tool to gain knowledge on people's thoughts, culture, mental frameworks, past and everyday experiences and the meaning people give them. In this introductory course we will discuss various forms of qualitative interviews (e.g. semi- and unstructured, ethnographic, focus group) and their analysis (e.g. coding, fine structure analysis, grounded theory) in a practice-oriented manner: students will plan, conduct and analyze an independently designed interview. To prepare for that we will draw on texts of cultural anthropology and sociology and address practical challenges as well as ethical considerations. Compared to quantitative methods, qualitative interviews bring along modalities to approach the subjects with less intricate guides, without predefined-answer surveys and with the subjects' greater freedom to express themselves. We will explore these advantages while keeping in mind that quantitative and qualitative approaches are not opposing concepts but methodological tools that can complement and enrich each other.		
Remarks	Students of the PO20 have priority.		
Examination	SL only		

1.2 Study Area: Earth and Environmental Sciences / Environmental and Sustainability Sciences

People, Landscape, Management: Planning for Ecosystem Services			
EES/ESS		Block III	
Dr. Joachim Schmerbeck (jschmerbeck@jschmerbeck.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-EE0029
Module(s) StuPo 2015		Module(s) StuPo 2020	
Human and the Environment, Specialization Option I or II		Human and the Environment I or II, Specialization Option I or II	
Prerequisites	Introduction to Earth and Environmental Sciences		
Format, Dates, Times and Rooms	Seminar Mon, 14-16h, AU 01065 Tue, 14-16h, FMF HS 01 009 05.05.2022, 14-16h, KG 1132 02.06.2022, 14-16h, room tbc 29.04.2022, Excursion		
Course Description	<p>For more than two decades we have become increasingly aware of the benefits that we derive from our living environment. We call these benefits ecosystem services. But it still seems that the sustainable utilisation of these services does not materialise in most human-nature systems. At the same time the importance of well-functioning management systems for our living environment is increasing in the face of a rising demand for ecosystem services, decreasing resources and profound changes in climatic conditions ahead of us.</p> <p>In this course we will develop the principal context in which human-nature systems and their planning happen. We will learn how landscapes are dynamic and which factors drive these dynamics. We will focus on the role humans play in landscape dynamics and how this influences the quantity and quality of ecosystem services. We will also understand the factors and methods that are essential for and the limitations of adaptive management systems for the sustainable use of ecosystem services.</p> <p>Based on this we work on cases of landscape management for ecosystem services taken from a recently completed GIZ (Gesellschaft für Internationale Zusammenarbeit) project which was led by Dr. Schmerbeck. We will do our own assessment and planning for cases in the landscape of the Western Himalayas after we become familiar with the natural settings and socioeconomic background of this region.</p> <p>We will primarily work together in student led workshops, while topics will be introduced in Seminars. The group work will be presented in presentations at the end of the course.</p>		
Remarks	EES/ESS students have priority		
Examination	40% written Assignment, 60% oral presentation, 31.05.2022		

Urban Forests and Human Health			
EES/ESS		Block III	
Dr. Rita Sousa Silva (rita.sousa.silva@frias.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-EE0030
Module(s) StuPo 2015		Module(s) StuPo 2020	
Human and the Environment Specialization Option I or II		Human and the Environment I or II Specialization Option I or II	
Prerequisites	Introduction to Earth and Environmental Sciences		
Format, Dates, Times and Rooms	Seminar Tue, 14-17h, Ph R1 Thu, 14-16h, AU 01036a Additional dates: 16.05. and 23.05.		
Course Description	<p>When we think about forests, we generally think of vast expanses of untamed wilderness, far from the busyness of the city. But the trees that line city streets and fill parks are indispensable features that make our cities more livable. This course will expose students to the breadth of knowledge linking urban forests and human health and well-being. From the question of why and how we want to create greener cities, the focus is then shifted to the role of urban forests as crucial public health assets of our cities. Through both lectures and case studies the course will provide an overview of the field of urban forestry, with emphasis on current research and good practices; address the theoretical context of relationships between nature and human health; explore the scientific evidence on physiological and psychological effects of nature exposure; outline contemporary public health issues and challenges; and demonstrate how various pathways, such as increased physical activity and improved air quality, can result in health benefits from urban forests.</p> <p>This course aims to:</p> <ul style="list-style-type: none">• Describe key concepts and challenges of urban forestry and the role and benefits of green space and trees in cities;• Provide a basic understanding of fundamental human health concepts and their linkages to the field of urban forestry. <p>By the end of the course students will be able to:</p> <ul style="list-style-type: none">• Understand how trees grow in urban areas – and how growth is challenged by urban conditions;• Discuss the benefits of urban forests for human health and well-being;• Explain the psychological and physiological mechanisms behind the benefits of human contact with nature;• Discuss the relationship between well-functioning and equally distributed urban forests and health for all.		
Remarks	EES/ESS students have priority		
Examination	First assignment: 12.05.2022; second assignment 24.05.2022		

1.3 Study Area: Life Sciences

Pandemics 2 - Detection, Containment, Control			
Life Sciences		Block III	
Dr. Simon J. Büchner (buechner@ucf.uni-freiburg.de) and Prof. Dr. Axel Kroeger			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	7 LAS students	00LE62S-LAS-LS0034
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Life Sciences I, II or III, Specialization Option I or II		Advanced Life Sciences I, II or III, Specialization Option I or II	
Prerequisites	Introduction to Life Sciences		
Format, Dates, Times and Rooms	Online Seminar 11.-22.4. self-study 22.4., 16-20h, kick-off event online 25.4.-20.5., online group work with mentors (self-scheduled by group members) 1.+ 3.6., 9-13h, final presentations (online)		
Course Description	<p>The emergence and re-emergence of a number of infectious diseases are influenced by the interaction between climate and human systems. Hence, they are subdivided in airborne, vector-borne and waterborne.</p> <p>All three disease groups tend to appear in large epidemic waves overstretching the health services and causing huge economic loss and social harm to societies. Forecasting outbreaks and their magnitude as well as forecasting resource requirements when an outbreak has already started will drastically enhance the preparedness for outbreak prevention and a rational resource allocation mitigating its disastrous effects.</p> <p>Two approaches to of dealing with outbreaks will be covered</p> <p>Group A: Forecasting outbreaks and their expected magnitude with the WHO-EWARS model (taking climate sensitive diseases as examples)</p> <p>Group B: Forecasting resource requirements when an outbreak has already started using the Freiburg modelling tool (taking the Corona Pandemic as an example)</p> <p>This is an excellent occasion for students to meet experts in pandemics and a unique opportunity to meet people from different academic backgrounds who will be working together to discuss the following topics on pandemics:</p> <ul style="list-style-type: none">• Early Warning and Response Systems (EWARS) for outbreaks: Temporal and spatial prediction model• Surveillance and response• Modelling resource needs for outbreak management		
Remarks	<p>Joint class with Global Urban Health Master (Uni Freiburg) and University of Gothenburg (SWE)</p> <p>You need to apply for participation in this class. Please, send it directly to damaris.martina.bockstahler@ucf.uni-freiburg.de by Feb 25, 2022.</p>		
Examination	03.06.2022		

1.4 Study Area: Multiple

Closing the Sustainability Loop? Governance of Sustainability, Actors, Rights and Principles			
EES/ESS, Governance		Block III	
Stoyan Panov (stoyan.panov@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	12	00LE62S-LAS-GOEE0004
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option Governance I, Specialization Option Governance II, EES: Human and the Environment I		Specialization Option Governance, ESS: Human and the Environment I and II	
Prerequisites	none		
Format, Dates, Times and Rooms	Online Seminar Tue, 9-12h, online Thu, 9-12h, online		
Course Description	<p>The 2030 Agenda for Sustainable Development, adopted by the United Nations in 2015, is a shared blueprint for peace and prosperity for people and the planet. At its core are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries in a global partnership. This collaborative, teaching-oriented project with the University of Exeter aims to offer a joint, credit-bearing course for students from the two partner institutions. The course will be highly interactive as it will allow students from the two universities and disciplines to work together. With a particular focus on an interdisciplinary approach to the topic of governance of sustainability, the course seeks to engage students in an exploration and exchange on such topics as:</p> <ul style="list-style-type: none">• Overview of the SDGs and corresponding legal and governance framework of applicability;• Focus on specific areas such as affordable and clean energy, climate actions and peace and justice;• The UN's 'Decent work' agenda and challenges for the future of work;• Interdisciplinary connection between rights and obligations of private entities and actors and socio-economic factors;• Role of technology development and corresponding regulation in circular sustainability efforts;• Comparative approaches on European and global levels to measuring the likelihood of SDG achievement;• Examination of critical junctures of sustainability and climate change in terms of policy development on European level;• Human Security concepts with direct relevance for sustainability. <p>The collaboration takes an explicit interactive approach, combining insights from specialists in the fields of law, business studies, sociology and economics. It will furthermore be interdisciplinary and combine political science, legal studies, work and employment studies, environmental studies and sociology insights, drawing on the expertise of the instructors from the partner institutions.</p> <p>The course will utilize a unique, student-centered, virtual and international learning format with focus on synchronous and asynchronous collaboration in mixed groups and student projects with particular output as presentations, research papers and/or colloquiums.</p>		

	<p>At the end of the course students will be able to</p> <ul style="list-style-type: none"> • understand the complex social, political, legal and economic challenges facing the governance of sustainability; • use concepts and methods of political science, legal studies, business studies and sociology to analyze these challenges; • compare the scope, explanatory power and methodology of different social science disciplines in exploring the topic, as well as make sense of regional specificities and commonalities across regions; • develop analytical skills, group work and project work skills, and build up virtual learning ability, while working in small groups across partner institutions; • students will furthermore have developed their intercultural competences, team working as well as digital skills.
Remarks	Meetings possible in the first half of June (joint international course).
Examination	Submission of the final part of the examined material by 30.06.2022.
Recommended Reading	UN's 2030 Agenda for Sustainable Development

2 Courses Offered in Block IV

2.1 Study Area: Earth and Environmental Sciences / Environmental and Sustainability Sciences

Ecology			
EES/ESS		Block IV	
Dr. Marco Basile (marco.basile@wsl.ch)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-EE0022
Module(s) StuPo 2015		Module(s) StuPo 2020	
Ecology		Ecology and Biodiversity	
Prerequisites	Introduction to Earth and Environmental Sciences		
Format, Dates, Times and Rooms	Seminar (exact dates tbd – sometimes possibly online) Mon, 14-16h, AU 01036a Tue, 14-18h, FMF HS 01 011 Thu, 14-16h, KG 1243 one additional date in June		
Course Description	<p>The science of ecology studies the interactions of organisms with each other and the environment. Understanding and solving fundamental questions of ecology help understand nature's mechanisms and the status of Earth's biodiversity. This course will provide an introduction to the extent and scope of ecology and will offer the possibility to discuss current ecological issues. The students will explore the biomes of the Earth, the biological organization of life, the interactions between species and their environments, and the effects humans are having on the planet, potential solutions and future outcomes. The course will consist of two parts: 1. An introduction to basic ecology and biodiversity, including lectures, workshops and assignments/group work; 2. Current ecological problems will be discussed via seminars, and assignments/group work. The second part will specifically focus on research problems in biodiversity and wildlife ecology, exploring real-world cases and 'hot' topic, the challenges faced by modern ecologist and their role in the society. At the end of the course, the students will be able to understand ecological problems, pose original and relevant questions, describe the potential research needed, and critically evaluate research findings.</p> <p>Students will learn:</p> <ul style="list-style-type: none">• The evolutionary processes determining the behavioural and physiological responses of individuals to their physical, chemical and ecological environment;• The mechanisms by which biotic/abiotic factors affect populations and how system changes in time and space govern biological communities;• The functioning of global ecosystems and how the fluxes of energy and matter determine environmental conditions at the local level;• To understand and discuss ideas from across the course and be able to appreciate the complexities of real-world cases;• To synthesise how the science of ecology understands modern problems in biodiversity conservation and provides solutions;• To critically understand research data and findings, and explore new ideas.		

	<p>Examples of guiding questions for the students to consider:</p> <ul style="list-style-type: none"> • Can we predict the future population trends of a species of interest (e.g. an endangered bird or an endemic plant), knowing the past history of population fluctuations of that species? • Given the constraints of the environment and the high levels of competition among organisms, why do we observe such high biological diversity in many ecosystems? <p>What ecological processes regulate the abundance and distribution of species in different ecosystems?</p>
Remarks	EES/ESS students have priority
Examination	06.08.2022 (written assignment)
Recommended Reading	<p>Courchamp F, Bradshaw CJA. 2018. 100 Articles Every Ecologist Should Read. Nat. Ecol. Evol. 2, 395–401. (doi:10.1038/s41559-017-0370-9)</p> <p>Krebs C.J., 2014. Introduction to the science of ecology. In Krebs C.J. (ed.), Ecology: The Experimental Analysis of Di</p>

2.2 Study Area: Life Sciences

Emerging Infectious Diseases			
Life Sciences		Block IV	
Prof. Dr. Bettina Fries (bettina.fries@stonybrookmedicine.edu)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	15	00LE62S-LAS-LS0022
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Life Sciences I, II or III; Specialization Option I or II		Advanced Life Sciences I, II or III; Specialization Option I or II	
Prerequisites	Introduction to Life Sciences		
Format, Dates, Times and Rooms	Seminar 27.6.-8.7.2022 Mon, 12-16h Tue, 8-12h Wed, 12-16h Thu, 12-16h Fri, 8-14h		
Course Description	This is an intensive course by guest Prof. Fries during two weeks in June/July. Make sure the dates don't overlap with your other courses! The course will be a mix of lectures, reading-based discussions and discussions with experts brought in through video-calls. 1. Introduction to basic concepts of Infectious diseases 2. Antimicrobial resistance 3. Foodborne and waterborne diseases 4. Vectorborne and zoonotic diseases 5. Vaccine development and use 6. Diseases of persons with impaired host defenses 7. Diseases of pregnant women and newborns 8. Diseases of travelers, immigrants, and refugees 9. How can new technology help fight emergence of infectious diseases 10. Health care policy		
Remarks	Two weeks intensive class in June/July. Make sure there is no overlap with your other classes.		
Examination	Written exam on 08.07.2022		

2.3 Study Area: Multiple

Heritage Interpretation as Education for Sustainable Development (ESD)			
EES/ESS, Culture and History		Block IV	
Patrick Lehnies (tbc)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	18	00LE62S-LAS-CHEE0006
Module(s) StuPo 2015		Module(s) StuPo 2020	
EES: Specialization Option: EES I or II, Human and the Environment Culture and History: Specialization Option: Culture and History I or II		ESS: Methods II, Specialization Option ESS I or II, Senior Profile Module Culture and History: Specialization Option: Culture and History I or II, Senior Profile Module	
Prerequisites	Introduction to Earth and Environmental Sciences		
Format, Dates, Times and Rooms	Seminar and Excursion Tue, 8-12h, FMF 01 011 Thu, 8-12h, R 2.5.1 (Herder-Verlagsgebäude) Additional dates: 01.07. and 15.07.2022		
Course Description	<p>Natural and cultural heritage encompasses various things such as protected areas, sites, collections and practices which are deemed worth preservation. Heritage Interpretation aims to enhance the visitor experience, e.g. through guided visits, self-guided trails or exhibitions.</p> <p>Interpreters highlight remarkable phenomena and provide meaningful context which resonates with their audiences. Good interpretation provokes reflection upon one's own place within nature and society; it can challenge preconceived clichés and stereotypes.</p> <p>We will study the theoretical background of Heritage Interpretation in relation to Education for Sustainable Development (ESD). How can Heritage Interpretation provide insights and activate values related to sustainability in its ecological, social and economic dimensions?</p> <p>During study visits we will evaluate concrete examples of interpretations at museums or heritage sites. Based on hands-on experience and group exercises, we will develop a methodology to assess the interpretive potential of heritage sites for ESD. This involves the task to specifically address target audiences which are indifferent or opposed to sustainability goals.</p> <p>You will collaborate in a small group and create a conceptual plan for interpreting a heritage site. It should focus on a sustainability related theme and address a specified target audience. Every group member will draft two interpretive panels intended to implement two stops of your group's project. Finally, the small groups will peer review the other groups' interpretive offers.</p>		
Examination	22.08.2022 (oral presentation, 30% and written assignment 70%)		

3 Semester long Courses

3.1 Study Area: Core

Foundational Year: Dealing with Numerical Information			
Core		Semester	
Dr. Sebastian Gehart (sebastian.gehart@ucf.uni-freiburg.de), tba			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 1-2	6	80	00LE62V-LAS-CO0005, 00LE62S-LAS-CO0005
Module(s) StuPo 2015		Module(s) StuPo 2020	
Dealing with Numerical Information		Dealing with Numerical Information	
Prerequisites	none		
Format, Dates, Times and Rooms	<div>Lecture Mon, 10-12h, AU HS 1 Workgroups</div> <div>WG 1: Wed, 10-12h, HH 9 R 00 003a Fri, 8-10h, Ph R1 WG 3: Wed, 12-14h, AU R 01 036a Fri 10-12h, Ph R1</div> <div>WG 2: Wed, 10-12h, Ph R2 Fri, 8-10h, KG 1142 WG 4: Wed, 12-14h, KG 1032 + 1034 Fri, 10-12h, Universitätsstr. 5, R2</div>		
Course Description	<p>The course introduces students to working with numerical data in a scientific and non-scientific context. Students procure basic theoretical and practical knowledge of probability theory, descriptive and inferential statistics, and learn about collecting and visualizing data. Basic theoretical knowledge of probability theory and descriptive and inferential statistics are presented during lectures and practiced in exercise tutorials.</p> <p>The acquired knowledge is then placed in context, discussed and applied in workgroups and software tutorials using the R software for statistical computing and graphics.</p>		
Remarks	The lecture and the workgroups are setup as two courses in HISinOne. Please register for the workgroup only.		
Examination	Written assignment (not to exceed 3,500 words total) in the last week of the semester.		

An Introduction to Science and Technology Studies			
Core		Semester	
Dr. Nicholas Buchanan (nicholas.buchanan@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	20	00LE62V-LAS-CO0017
Module(s) StuPo 2015		Module(s) StuPo 2020	
Science in Context		Science in Context	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Mon, 12-14h, AU 01 065 Wed, 12-14h, BT 205		
Course Description	<p>Science and technology are defining characteristics of our world. But how is scientific knowledge made, how are technologies developed? What impacts do these have on our lives and the lives of others, and in what ways do human choices shape science and technology?</p> <p>This course explores science and technology not as bodies of knowledge or collections of artifacts, but rather as social practices and processes. In it, we will examine the inter-relationships among science, technology, and society in historical and contemporary contexts, with the aim of better understanding the embeddedness of scientific and technical activities within society.</p> <p>Because Science and Technology Studies (STS) is an eclectic and wide-ranging field of inquiry that resists clean theoretical summary, the course will not be organized as a tour of major canonical theories within science and technology studies. Instead, lectures will explore how STS can help provide a deeper understanding of all-too-easily taken-for-granted categories in public discourse, such as “science,” “technology,” “bodies,” “nature,” “experts,” and “disciplines.” Throughout our discussion, we will nonetheless highlight important schools of thought within STS as we draw on sources in the history of science and technology, the sociology of scientific knowledge, and the anthropology of science and technology.</p>		
Remarks	<p>Priority for students who want to graduate in summer semester 2022 (or winter semester 2022-23).</p> <p>The next course fulfilling the Science in Context module will be offered in summer semester 2023.</p>		
Examination	<p>Studienleistung: preparation of readings for discussion, presentation(s) of selected readings, participation in in-class projects and exercises</p> <p>Prüfungsleistung: oral presentation of a group research project, written group report (length equal to 1000 words per group member).</p>		

Debating Multilateralism in the Age of Nationalistic Politics			
Core		Semester	
Dr. Kerstin Leitner (KerstinLeitner@web.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	2	20	00LE62S-LAS-CO0074
Module(s) StuPo 2015		Module(s) StuPo 2020	
Electives		Advanced Academic Skills	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar (mostly online) Mon, 12-14h, tba		
Course Description	<p>In this course we will discuss the United Nations, their mandate, developments since 1945, organisational setting, successes and failures, UN actions and working style.</p> <p>Learning goals:</p> <ul style="list-style-type: none">• reading and understanding of academic and non-academic publications in both English and German (optional, but recommended),• analysing clearly and summarizing concisely required reading material,• understanding different viewpoints,• practising different rhetorical styles, reaching verbal agreements and respecting disagreements,• distinguishing between opinions and arguments, hypotheses and provocative statements. <p>For each session there will be required reading selected by the lecturer with a set of questions to be answered. Each session will have a short introductory summary of the required reading by one or two participants, followed by a discussion in plenary or in groups.</p> <p>Sessions will be conducted in English, some documents might be in German.</p> <p>After each session 1-2 participants will prepare a short summary of the discussion in order to keep track of the topics and how they were covered.</p>		
Remarks	Most sessions will be online; one or two talks will be in Freiburg (tba).		
Examination	<p>Requirements (pass/fail): At the end of the semester all participants will take part in a questionnaire or an equivalent exercise. Active participation in the sessions and the results of the final exercise will determine the pass/fail of the course.</p> <p>The final exercise will be held on 4.7. and/or 11.7. depending on the participation and preference of the participants, followed by a wrap up.</p>		

Digital Literacy			
Core		Semester	
Dr. Johanna Gampe (johanna.gampe@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-CO0051
Module(s) StuPo 2015		Module(s) StuPo 2020	
Responsibility and Leadership 2		Responsibility and Leadership 2	
Prerequisites	none		
Format, Dates, Times and Rooms	Online Seminar Wed, 12-14h		
Course Description	<p>Digital Transformation has changed almost every sector of our lives and it is continuing at an ever-accelerating pace. This is true for our professional and learning skills, but even for our private lives. However, it is precisely because the phenomenon of digitalization is so omnipresent and so complex that it is difficult to see the overall picture and the underlying traits. What do we need to understand, what do we need to know and what competences do we need?</p> <p>This course has three components in order to give answers:</p> <ol style="list-style-type: none">1. tackling important traits and examples of the Digital in the before-and-after comparison and understanding its volatility, uncertainty, complexity and volatility (VUCA),2. analyzing models of digital literacy such as the "Framework for 21st Century Learning" and the "8 Cs of Digital Literacy" (Doug Belshaw) or the "The European Digital Competence Framework for Citizens",3. discussing and applying those models on our findings. <p>This course covers important topics and delves into key details with the goal of providing an interdisciplinary understanding of the phenomenon. Moreover, the course differentiates between different roles such as leader or citizen, entrepreneur or educator.</p> <p>The course is intended as a sharing lab that implies presentations and discussions, exercises and readings - it addresses the self-responsibility of students in their individual learning process. Participants contribute with their individual knowledge and interests (co-learning). Each participant presents a topic in class. The competences provided by this course allow participants to cope with Digital Change more confidently and raise the proficiency level of digital literacy.</p>		
Examination	Oral presentation and written assignment.		

Introduction to Mediation			
Core		Semester	
Theresa Sieß (theresa.sieess@konfliktberatung-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	2	15	00LE62S-LAS-CO0076
Module(s) StuPo 2015		Module(s) StuPo 2020	
Electives		Advanced Academic Skills	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Fri, 14-18h (13.5., 20.5., 3.6.), KG 1021 Fri, 14-17h (17.6.), KG 1021		
Course Description	This workshop introduces you to mediation as a conflict solving process. Its main goal is to achieve a win-win solution. The first two sessions have a more theoretical focus. On the one hand we will reflect our own behaviour in conflict situations, and we will take a closer look at how conflicts are defined. On the other hand, the current political situation gives us enough reason to analyse present conflicts. Consequently, you will be introduced into current conflict theories, into the main background and into the principals of mediation. We will discuss the advantages and disadvantages of this way to solve conflicts and you will get to know various fields, in which mediation processes are applied. In the last two sessions we will then step into the practical part of mediation. Here you will at least be introduced to one method with the help of a role play. The choice of methods depends on your experience and interest. The workshops will give you an opportunity to reflect on personal conflicts.		
Remarks	Students of the PO20 have priority.		
Examination	SL only		

Introduction to the Philosophy of Science			
Core		Semester	
Prof. Dr. Frieder Vogelmann (frieder.vogelmann@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-3	6	80	00LE62V-LAS-CO006
Module(s) StuPo 2015		Module(s) StuPo 2020	
Theory of Science		Theory of Science	
Prerequisites	none		
Format, Dates, Times and Rooms	Lecture Wed, 14-16h, AU HS1 Workgroups WG 1: Fri, 8-10h, AU 01036a WG 2: Fri, 10-12h, BT R 206 WG 3: Fri, 10-12h, AU 01065 WG 4: Fri, 10-12h, Universitätsstr. 5, R 2		
Course Description	The lecture introduces students to the philosophy of science by looking at the most important problems and debates: What are sciences, and how are they related to philosophy? How do scientific explanations work? Are there laws of nature? What roles do objectivity, rationality and other values play in scientific practices? And does science discover what is real? The lecture is organised in five sections: 1. Sciences, Philosophy and History: What are sciences, how are they related to philosophy and what role does history play? 2. Explanations, Interventions and Experiments: How do scientific explanations work? How do scientific practices represent and intervene in whatever they study? What are experiments and why are they so central? 3. Objects, Values and Laws: What are the components of scientific theories? Are there natural laws? Are “real sciences” value-free? 4. Realism, Anti-Realism and Relativism: Is reality what scientific practices discover? Is there progress towards truth? 5. Philosophical Issues in the Sciences: Specific sciences pose specific philosophical problems, for example: What are numbers? What is Life? Are social sciences and humanities categorically distinct from natural sciences?		
Examination	Examination: Written exam on the 27.07.2022, 14-16h (100%). Pass/Fail Examination: To be eligible for the exam, students must either write two response papers to two different texts discussed in the workgroups or give an oral presentation about one of the		
Recommended Reading	Okasha, Samir (2016): Philosophy of Science. A Very Short Introduction. 2nd ed. Oxford: Oxford University Press. Hacking, Ian (1983): Representing and Intervening. Introductory Topics in the Philosophy of Natural Science. Cambridge: Cambridge University P		

Who Am I? A Multidisciplinary Expedition of Human Identity			
Core		Semester	
Simone Kraiss (simone.kraiss@slf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-CO0074
Module(s) StuPo 2015		Module(s) StuPo 2020	
Responsibility and Leadership 2		Responsibility and Leadership 2	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Tue, 9:30-12h, Ph R1		
Course Description	<p><i>I am body. I am mind. I am soul. I am alive. I am mortal. I am love. I am rhythm. I am nature. I am culture. I am self. I am with you. I am many things. Who am I? What defines my identity? What does it mean to be human? And how much room do I have to move?</i></p> <p>Each of us is concerned with questions on our own identity, our place in this world and the human nature. In this class, we will see that interdisciplinary research provides enlightening approaches that can serve as inspiring framework for self-reflexion.</p> <p>In a theoretical block we will dive into academic concepts like self, identity, consciousness and a couple of basic human phenomena like the above mentioned. To meet the complexity of these issues, we will investigate them from multidisciplinary perspectives. Biology, Evolutionary Anthropology and Primatology for example will widen our concepts of time and make us aware that any human characteristic is a product of million-year long adaptation processes to natural and social environments. Archaeology and Cultural Anthropology will relativize our personal perspective by making clear that there are so many different ways of thinking about and doing things. Sociology makes us understand our social needs and human social behaviour while Psychology and Neurosciences shed light on cognitive and emotional aspects. All of these consulted disciplines have unique perspectives based on their sources and methods and thus they shed light on different aspects of the human condition. Therefore, in this class you will additionally learn about the different approaches of these academic disciplines.</p> <p>Self-reflection is the best and most effective way to learn. And as a human being you are the expert to answer the question “Who am I” – from your own unique perspective. Thus, most of our theoretical sessions will be followed by self-reflexion tasks that you will fulfil optional on your own or in peer-groups. Additionally you will participate in working groups organizing their own methodological creative group-project on human identity.</p>		
Examination	Graded essay due 26.7.2022		

3.2 Study Area: Culture and History

Foundational Year: Introduction to Culture and History			
Culture and History		Semester	
Dr. Ryan Plumley (ryan.plumley@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 1, 2	8	80	00LE62V-LAS-CH0001 00LE62S-LAS-CH0001
Module(s) StuPo 2015		Module(s) StuPo 2020	
Introduction to Culture and History		Introduction to Culture and History	
Prerequisites	none		
Format, Dates, Times and Rooms	Lecture Mon, 12-14h, AU HS 1 Workgroups WG 1: Thu, 8-10h, AU 01065 WG 2: Thu, 10-12h, AU 01065 WG 3: Thu, 14-16h, AU 01065		
Course Description	<p>“Culture and History” is an interdisciplinary approach to the humanities, the disciplines which produce systematic knowledge about the artifacts, practices, and events of human agency. Typical objects of study and research in the humanities include texts (literary, religious, philosophical, among others), visual culture (works of art, films, etc.), as well as customs or rituals. Humanists engage in interpretation: the attempt to extract meaning from or attribute meaning to cultural objects and their histories.</p> <p>We will approach the humanities as fundamentally interpretive sciences whose task is to sift, process, analyze, and understand human-made things in the world. Through careful analysis of objects of study, comparative synthesis with already acquired knowledge, and rational argumentation based in evidence, the humanist researcher seeks to produce interpretations or explanations of meaning. This holds true whether the objects of study are from the deep past or from the present, whether they are relatively static or ever-changing, whether they are familiar or quite alien to the researcher.</p> <p>In each Unit of the course, we will focus on a specific humanistic field (literary studies, visual art studies, cultural studies, anthropology, history). First learning methods appropriate to certain kinds of cultural objects, we will then practice these methods on a typical cultural object from that field. Then we will read and discuss an important, classic theoretical work relevant to that field. And finally we will return to practice interpretation one more time. By maintaining a tension between the practice and the theory of the humanities, you will learn to produce compelling interpretations of culture and history.</p> <p>The module is designed to encourage independent reflection about cultural objects undertaken in dialogue with peers. Hence, both substantial reading and work outside of class time and substantial discussion in class are required.</p>		
Examination	tba (last week of the semester)		

Freud and Psychoanalysis			
Culture and History		Semester	
Dr. Ryan Plumley (ryan.plumley@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2, 3, 4	6	18 (2 MKW)	00LE62S-LAS-CH0044
Module(s) StuPo 2015		Module(s) StuPo 2020	
Culture & History Since the Early Modern Period Advanced Culture & History I, II, or III Specialization Option C&H I or II		History: Modern or Contemporary Culture and History I, II, or III Specialization Option C&H I or II Senior Profile C&H	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Mon, 10-12h, AU 01065 Wed, 10-12h, AU 01036a		
Course Description	<p>The publication of Sigmund Freud's <i>The Interpretation of Dreams</i> in 1899 launched psychoanalysis. For the next century, every conceivable academic field—literary studies, philosophy, history, sociology, political science, feminist and gender studies, etc.—worked for, with, and against it. Beyond the academy too, Freudian psychoanalysis inspired artists and cultural producers from high to low. Yet, by the end of the 20th century, both Freud and psychoanalysis had fallen into disrepute and seemed irrelevant. But what was Freudian psychoanalysis? Was it a hermeneutic technique? A theory of mind? A scientific discipline? A therapeutic practice? Why did it offer insights to so many people in so many fields? Why was it such a generative thought system? Why did it fade away?</p> <p>We will pursue answers to these questions in two ways. First: by inhabiting the mode of thinking, practicing thinking and talking and working within the Freudian psychoanalytical universe. Second: by historically contextualizing psychoanalysis across its various iterations, seeing how elements of the system continued or fell away in new situations. Along the way, we will also have the opportunity to explore some important works and intellectuals of the 20th century on a global scale, including surrealism, Alfred Hitchcock, Ingeborg Bachmann, Herbert Marcuse, Franz Fanon, Shulamith Firestone, and others that students choose.</p> <p>The course is organized in four parts. First, we will read and explore the full range of Freud's works. Second, we will look at artists and works of art that explicitly took Freudianism as inspiration. Third, we will explore the mid-century efflorescence of cultural and political critique that built directly on Freud. And finally, we will look briefly at how Freudian psychoanalysis has impacted specific academic fields.</p>		
Remarks	Students are recommended to purchase <i>The Freud Reader</i> , edited by Peter Gay. However, PDF versions of the readings will be provided via ILIAS.		
Examination	26.07.2022		

Theory of Culture			
Culture and History only		Semester	
Fahra Noor (farhanoor3@gmail.com)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2, 3, 4	6	20	00LE62S-LAS-CH0011
Module(s) StuPo 2015		Module(s) StuPo 2020	
Culture as a Topic of Academic Inquiry		Theory of Culture	
Prerequisites	none		
Format, Dates, Times and Rooms	Online Seminar Tue, 12-14h, Ph R3 Thu, 12-14h, Ph R3		
Course Description	<p>Culture is central to several academic disciplines, especially in the humanities. Disciplinary questions are often built upon how culture is understood, debated, and questioned. This course offers a pluralistic understanding of the concept of culture through engagement with histories, definitions, contexts, and conflicts. It aims to enable students to appreciate and distinguish between various contending definitions of Culture, especially as used in varying academic fields and linguistic contexts. Another goal is to encourage students to have a critical understanding of theoretical vocabulary with regards to the study of Culture, so that they can identify and engage with various ways in which different disciplines discuss the study of Culture. Rather than arriving at definitions and results, Theory of Culture is designed to help students understand and raise theoretical questions regarding culture and trace the ways in which cultural practices are intertwined with systems of power based on ideology, class structure, race, gender, and sexuality.</p> <p>The course offers a range of theoretical perspectives, introducing students to thinkers like Antonio Gramsci, Theodor Adorno, Karl Marx, Walter Benjamin, Raymond Williams, Michel Foucault, Frantz Fanon, and Gayatri Spivak, among others. Rather than merely understanding culture as an object of study, it aims to incorporate theories of culture as methods of debate and analysis that would assist students in further academic investigations and help them relate to discussions in other modules and courses.</p>		
Examination	30.07.2022		

Word and Image			
Culture and History		Semester	
Benjamin Balint (benjamin.balint@gmail.com)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2, 3, 4	6	18 (2 MKW)	00LE62S-LAS-CH0067
Module(s) StuPo 2015		Module(s) StuPo 2020	
Art, Literature, Aesethtics, Or Music Advanced Culture & History I, II or III		Culture: Arts Culture & History I, II or III	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Mon, 18-20h, AU 01036a Wed, 18-20h, AU 01065		
Course Description	<p>We live in an increasingly visual culture. Images pervade our lives, mediate our social interactions, and enrich our range of making meanings. We take it for granted that words and images—two distinct forms of artistic expression and aesthetic interpretation—are intertwined, that language constructs images as much as images are immersed in language. Many claim that images do not require the interpretive effort demanded by literature. Others assert that language is a weak instrument compared with the wealth of meaning contained in a single image (“a picture is worth a thousand words”). This course offers an introduction to the fraught modern history of the word-image relationship and to the dichotomy between speaking and showing.</p> <p>To do so, the course will address the following questions:</p> <ul style="list-style-type: none">• How do visual and verbal modes of art combine (as two windows through which we see the world or two apertures through which we tell our own stories), and how do artists both accentuate and blur the boundaries between them?• In what ways can writing (poetry, fiction, captions, and titles) address itself to images?• When does a text act as commentary on an image, and when does an image act as a commentary on a text? <p>In exploring these questions, we will consult works drawn from a range of genres (film, fiction, graphic novels, illuminated manuscripts, maps, and contemporary art). Through student-centered discussions and practice-based creative projects, participants in the course will develop skills in both close reading and close looking, and will apply cross-disciplinary methods of interpretation to stories that are images, and images that are stories.</p>		
Remarks	Students should purchase The Writer’s Brush: Paintings, Drawings, and Sculpture by Writers by Donald Friedman (2007).		
Examination	29.07.2022		

3.3 Study Area: Earth and Environmental Sciences / Environmental and Sustainability Sciences

Foundational Year: Introduction to Environmental and Sustainability Sciences			
EES/ESS		semester	
Dr. Sabine Sané (sabine.sane@ucf.uni-freiburg.de) Dr. Unna Chokkalingam (unna.chokkalingam@ucf.uni-freiburg.de) MSc. Maiara Goncalves (goncalvesmai01@gmail.com)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 1	8	65	00LE62V/S-LAS-EE0001
Module(s) StuPo 2015		Module(s) StuPo 2020	
Introduction to Earth and Environmental Sciences		Introduction to Environmental and Sustainability Sciences	
Prerequisites	none		
Format, Dates, Times and Rooms	Lecture: Mon, 8-10h, HS 1 (exact dates tba) Workgroups WG 1: Tue, 13-16h, AU 01036a WG 2: Tue, 13-16h, AU 01065 WG 3: Wed, 9-12h, AU 01065		
Course Description	<p>The industrial and agricultural revolutions of the last centuries drastically transformed human society and our relationship with our planet. In this century, we enjoy the wide-ranging benefits of the past developments but grapple with the associated legacy of widespread and pervasive environmental destruction and decline. The generations of today face now the challenges and opportunities of restoring our environment and adopting sustainable development pathways to meet the living needs of present and future generations. If you are interested in being part of this transformation towards sustainable development, this course will introduce you to the basic concepts and wide range of issues you can become engaged in, while helping you develop some critical thinking, research and communication skills.</p> <p>In this course, we will explore our biophysical environment and how we humans (estimated 7.9 billion today) interact with, depend on and affect this environment. We will look at these interactions from a historical perspective up to the current time. We will investigate some of the major environmental sustainability challenges we face today such as food production for the large population, energy and mobility, resource exploitation, pollution, climate change, biodiversity loss, and social equity and justice.</p> <p>Environmental sustainability requires balancing social, economic and environmental objectives. We will therefore think holistically, and reflect on both the natural and socio-economic processes to better understand the challenges and possibilities for sustainable development. We will explore the needs, interests and perspectives of different stakeholders and how that affects possible solutions.</p> <p>After the course you will be able to</p> <ul style="list-style-type: none">• Understand basic structures and functions of the Earth’s natural environment.• Understand the range of interactions and interdependencies between human activities and the environment, and the link to contemporary environmental sustainability challenges.• Conduct basic scientific research/experiments.• Prepare scientific outputs, and information briefs for policy makers and the general public.		
Examination	1st assessment June 12 (30%), 2nd assessment July 28 (70%)		

Our Earth 101 – A Crash Course in Geosciences			
EES/ESS		Semester	
Dr. Lukas Gegg (lukas.gegg@geologie.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-EE0004
Module(s) StuPo 2015		Module(s) StuPo 2020	
Earth Sciences		Earth System	
Prerequisites	Introduction to Earth and Environmental Sciences / Introduction to Governance		
Format, Dates, Times and Rooms	Seminar, Practical Mon, 10-12h, AU 01 036a Wed, 10-12h, HH 6 HS 01 007 Field trips: 06.05., 03.06., 17.06.		
Course Description	<p>How did the Earth form? Which processes shape its appearance? How can our planet harm us on the one hand, and how can we learn and benefit from it on the other? And, finally, how do we treat it sustainably? These are some of the core questions that we will address during this course.</p> <p>Students will acquire a basic understanding of the system Earth, familiarize with its origin, its history and structure. They will get to know its landscapes, rocks, and sediments, and will learn how to read them and understand the underlying processes, from volcanic eruptions to glacier erosion. Following this fundamental overview, we will shift our focus more and more towards such tangible issues as geohazards, geogenic resources, and waste management.</p> <p>This course will start as an interactive lecture with practical exercises. However, we will soon go on excursions, and train our geoscientists' eyes and minds out in the field, before giving the stage to the students for a final, seminar-style block. We encourage you to get your fingers dirty...</p>		
Remarks	EES/ESS students have priority		
Examination	29.06. and 29.07.2022		
Recommended Reading	J. Erickson – Making of the Earth: Geologic Forces that Shape Our Planet R. J. Hugget – Fundamentals of Geomorphology		

Science and Practice of Sustainable Gardening			
EES/ESS		Semester	
Sabine Sané (sabine.sane@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	16	00LE62S-LAS-LSEE0005
Module(s) StuPo 2015		Module(s) StuPo 2020	
Methods of Observing Nature		Methods of Observing Nature	
Prerequisites	Introduction to Earth and Environmental Sciences		
Format, Dates, Times and Rooms	Online Seminar + Practical (1-2 excursions on Fridays, tbd) Tue, 8-12h Thu, 8-12h		
Course Description	<p>Have you ever wanted to experience what it means to “go sustainable” in the context of food supply? Are you interested in the scientific basis underlying different aspects of gardening? Do you want to grow your own organic fruit, herbs and vegetables?</p> <p>In this course we will view gardening through a scientific lens. Thereto, we will study the taxonomy, morphology, ecology and ecosystems of garden plants. What features do plants in this family share? Why should I grow potatoes in sunny spots and peas next to carrots? Equipped with scientific background and practical advice, we will explore together what it means to create our own sustainable garden.</p> <p>In a group with your peers, you will be provided with a small garden patch in which you are allowed to create and experiment with your own sustainable vegetable garden. Our main target is to achieve a high biodiversity and yield in our sustainable garden. We will investigate how different gardening practices influence the use of water and energy, and they affect the quality of the soil, biodiversity and yield. We want to avoid the use of artificial fertilizers, pesticides and chemicals.</p> <p>Upon successful completion of this course, you will be able to</p> <ul style="list-style-type: none">• Describe features and morphology of plants and thereby identify important plant families,• Understand and describe the relationship between the features of plants and their use of water, nutrients and light to evaluate where they will grow best,• Understand and describe different forms of plant propagation,• Describe, understand and evaluate the basics of different garden management technics,• Apply scientific knowledge of plant ecology and the ecosystem of a garden by creating your own sustainable garden plot,• Be able to identify, describe, analyze and evaluate your management technics and their relationship to the corresponding yield of your sustainable garden plot.		
Remarks	<p>EES/ESS students have priority.</p> <p>The garden will be about 6 km outside of Freiburg in Gundelfingen/Wildtal. You can get there by bike or public transport. We will meet online on 12.4. and 21.4. at 9h and in the garden on most Tuesdays an Thursdays 9:00-11:30h (26.4.-2.6.). For maintenance (watering, slug and weed collection etc.) and harvest you will need to go to the garden more frequently outside of the course sessions from 26.4. - End of July (but you can organize within your groups who will have to go at what times).</p> <p>For the module Observing nature a course is also planned as an intensive pre-semester course from 26.9.-7.10.2022.</p>		
Examination	Written assessments to be submitted on 24.04.2022 (30%) and 31.07.2022 (70%)		
Recommended Reading	Jones, P. (2011). The science of gardening: the hows and whys of successful gardening. S.L.: Crowood Press.		

The Earth in the Universe			
EES/ESS		Semester	
Dr. Rolf Schlichenmaier (schliche@kis.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-EE0006
Module(s) StuPo 2015		Module(s) StuPo 2020	
Evolution and Dynamics of the Planetary System		Elective Joker	
Prerequisites	Introduction to Earth and Environmental Sciences, Maths and Physics recommended		
Format, Dates, Times and Rooms	Seminar and Excursion Mon, 16-18h, ZfN HS 00006 Wed, 16-18h, ZfN HS 00006 Excursion: 24.-25.6.2022		
Course Description	<p>In this course, students will get an overview on the astrophysical perspectives of life on Earth complemented by an insight into current research and hands-on experience in observation methods. The basic understanding of our universe (first part) will set the scene to review how the Earth is embedded in the universe and in our solar system and how this influences natural processes and phenomena on Earth (second part).</p> <p>After reviewing the history of mankind's view of the world, we will learn about the observational findings that led to the Big Bang Theory, and reflect the arguments why this theory might not be the final 'truth'. We will further deal with evolutionary tracks of stars (brown dwarfs, main sequence stars, red giant, supernovae, white dwarfs, neutron stars, black holes).</p> <p>The second part focuses on the Sun, being the major external influence to the Earth, and on our planets orbiting the Sun. This includes the processes of planet and star formation, properties of planets and other objects in our Solar system, the solar structure and its atmosphere. The generation of magnetic fields in the solar interior leads to magnetic phenomena at the solar 'surface' that greatly influence processes and life on Earth. We will discuss interactions between solar activity and Earth in terms of observable phenomena, space weather and solar influences on the Earth's climate including findings from current research.</p> <p>In addition to the lecture contents, practical classes are method-oriented and will deal with:</p> <ul style="list-style-type: none">• Experiment to infer the distance between the Earth and the Sun (Astronomical Unit) by studying the characteristics of the solar rotation using public satellite data, and by means of a pinhole camera ('camera obscura').• Data analysis of spectroscopic data to study the plasma flow field on the solar surface: granulation & sunspots.• During a 1,5 day excursion to the solar observatory on the Schauinsland mountain (1240 m above sea level) operated by Kiepenheuer Institute of Solar Physics (www.kis.uni-freiburg.de) students will observe the sun during the day and stars at night by applying observation techniques learned in class and they will gather and analyze their own experimental data.		
Examination	27.07.2022		

3.4 Study Area: Governance

Foundational Year: Introduction to Governance			
Governance		Semester	
Mila Mikalay (mikalay@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 1-2	8	60	00LE62V/S-LAS-GO0001
Module(s) StuPo 2015		Module(s) StuPo 2020	
Introduction to Thought and Research in the Area of Governance		Introduction to Governance	
Prerequisites	none		
Format, Dates, Times and Rooms	<p>Presence/Online Lecture: Mon, 16-18h, AU HS1 Presence/Online Lecture: Tue, 16-18h, AU HS1</p> <p>WG 1: Thu, 12-14h, AU 01065 (exceptionally on Fri, 17.6., 14-16h) WG 2: Fri, 10-12h, AU 01036a</p> <p>WG 3: Fri, 12-14h, KG 1023 (or AU, check online)</p> <p>No WG sessions in July.</p>		
Course Description	<p>This course will acquaint you with central topics in the study of governance - processes through which human communities govern themselves; give you the appropriate vocabulary to discuss these processes, and prepare you to understand what ways of presentation, explanation and argumentation are accepted by governance scholars.</p> <p>In this course, the learning takes place in three formats: plenary sessions on the course readings, work in groups on exercises and a small project, and seminar sessions for discussion.</p> <p>The content of the course is organized around six major topics in the area of governance:</p> <ul style="list-style-type: none">• social contract: How and why do people come to delegate power to a central government (a state) in the first place, according to philosophers?• collective action: How do people behave in groups and why?• democracy: What are the types of democracy and which type is realized today?• politics and administration: What is the role of the trained state officials in a political system based on elections?• agenda-setting: How and why are some issues acted upon at the political level while other important topics are neglected?• forecasting: What can we know about the future of socio-political systems and issues? <p>Additionally to these governance topics, you will learn and apply analytical skills, such as interpreting the visuals, working with definitions, or understanding political humour. The work in small groups will let you apply these skills to the analysis and interpretation of governance topics.</p>		
Remarks	<p>Students intending to take the Major Governance or courses from this Major must take this Introduction in their first year.</p> <p>This course is the prerequisite for all advanced courses in Governance.</p>		
Examination	Short written analytical assignments and a written or take-home exam on 29.07.22		
Recommended Reading	We will provide you with a reader shortly before the course starts.		

Central and Eastern Europe in Focus			
Governance		Semester	
Malgorzata Hofmann (malgorzata_hoffmann@hotmail.com)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-GO0077
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Governance I or II, Regional Governance		Advanced Governance I or II, Regional and Area Studies	
Prerequisites	Introduction to Governance, a course on Central and Eastern Europe or proven knowledge on it		
Format, Dates, Times and Rooms	Seminar Mon, 10-12h, KG 1023 Wed, 10-12h, FMF HS 01 009		
Course Description	<p>This course focuses on current tensions in Central / Eastern European (CEE) und relations with Russia: we will examine main interests and political power games between Russia, Commonwealth of Independent States (CIS) and the CEE countries. We will analyze public opinion, individual criticism and narratives in media. We will look into the extent to which the ruling elites are representing the interest of societies in this region. In addition, we will pay attention to the role of women and regional art.</p> <p>Classes (2 meetings per week over 10 weeks) are based on discussions covering readings and most recent events, based on academic and mass media sources. The students will read / watch and hear stories of individuals to gain greater understanding on impact of actions of governments on their citizens. Students may direct their academic focus on a selected person or event from the region. There will be practical aspects of the course based on “hands on” experience of the instructor that students will be most likely able to apply in their later careers outside of the university.</p> <p>Students will complete this interdisciplinary course with solid knowledge of the influences, risk and threats in region.</p> <p>Students will address the above-mentioned topics using a Central and Eastern European lens. The instructor, Mrs. Malgorzata Hoffmann, grew up in the region and then studied it from North American perspective at the Carleton University in Canada and graduated with The Master of Arts (MA) in European, Russian and Eurasian Studies and with the Graduate Diploma in European Integration studies. She worked 7 years for the British Embassy in Warsaw dealing with trade, politics and immigration in the CEEs.</p>		
Examination	Examination format: oral presentation and written assignments.		

Comparative Government			
Governance		Semester	
Ermelinda Kanushi (ermelinda.kanushi@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	22	00LE62S-LAS-GO0014
Module(s) StuPo 2015		Module(s) StuPo 2020	
Political Science		Comparative Politics	
Prerequisites	Introduction to Governance		
Format, Dates, Times and Rooms	Seminar Mon, 16-18h, BT R 207 Wed, 16-18h, Ph R 4		
Course Description	<p>In this course, we learn about political systems around the world from a comparative political science perspective. The course is organized into four parts.</p> <p>1. In the first part of the course, we briefly discuss the methods of comparative political science.</p> <p>2. In the second part of the course we discuss the theoretical and empirical definitions of democracy, and ask questions such as: What is democracy? How can democracy be measured?</p> <p>3. The third part of the course focuses on authoritarian regimes. In particular, we study differences between the authoritarian countries regarding the ruling elite, cooptation and repression.</p> <p>4. In the fourth part of the course, we study democratic countries and discuss, for example, the separation of powers, electoral systems, political parties and party systems. The course has a strong emphasis on learning-by-doing, and the students will learn to use comparative datasets, read codebooks and conduct simple comparative studies.</p>		
Remarks	Priority to second-year students! See the recommended course choices on the Governance Wiki.		
Examination	Written assignments to be submitted by 07.08.2022.		
Recommended Reading	<p>Geddes, Barbara (1999): "What do we know about democratization after twenty years?" Annual Review of Political Science 2: 115-44.</p> <p>Schedler, Andreas (2002): "Elections without democracy: The menu of manipulation". Journal of Democracy 13(2): 36-50.</p> <p>Linz, Juan J. (1990): "The Perils of Presidentialism". Journal of Democracy 1(1): 51-69.</p>		

Field Research Methods from a Feminist and Decolonial Perspective			
Governance		Semester	
Dr Amya Agarwal (amyia.agarwal@politik.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-GO0083
Module(s) StuPo 2015		Module(s) StuPo 2020	
Qualitative and Quantitative Methods, Advanced Governance I or II		Methods (Governance), Advanced Governance I or II ESS: Methods II	
Prerequisites	Introduction to Governance		
Format, Dates, Times and Rooms	Seminar Mon, 14-16h, KG 1142 Wed, 12-14h, FMF HS 01 011		
Course Description	<p>This foundational module introduces students to qualitative research methods and standards of data gathering, organization, presentation and analysis used in field study for social and political sciences. Furthermore, it allows students to understand and apply these methods using a feminist and decolonial perspective.</p> <p>Learning Goals</p> <p>In terms of disciplinary knowledge, upon successful completion of the module, the students should be able to:</p> <ul style="list-style-type: none">• identify and give examples of common qualitative research methods used in the study of governance processes and institutions.• understand the scope of application, compare different methodological approaches in social and political sciences, and select appropriate methods for the study of socio-political reality.• examine the significance of feminist and decolonial perspectives in field research• explain the role of methods in academic inquiry and the research design of academic studies. <p>In terms of academic skills and social and personal competences, upon successful completion of the module, the students should be able to:</p> <ul style="list-style-type: none">• identify, summarize and differentiate between methodological approaches to data on socio-political reality in academic, as compared to non-academic contexts• reflect on the implications of different qualitative research tools on the validity and reliability of academic studies and on their impact;• understand benefits and limitations of using academic methods, discuss ethical dilemmas and improve self-reflexivity as a scholar of socio-political reality;• improve reading and writing skills by focusing on clarity, precision and conciseness in the presentation and discussion of qualitative methods of socio-political inquiry.		
Examination	<p>Students will submit four written assignments in this course: first, an ungraded version on which they will receive feedback, then a graded version with the feedback integrated. The final assignment deadline – 25 July 2022. All graded assignments will total max. 8000 words.</p> <p>The submission deadlines for the assignments (tbc): May 23 (ungraded), June 13 (graded), June 27 (ungraded), July 25 (graded).</p>		

Historical and Interpretative Social Science			
Governance		Semester	
Dr. Eric Heine (eric.heine@alumni.eui.eu)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	16	00LE62S-LAS-GO0080
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Governance III		Research in an Area of Governance, Specialization Option Governance	
Prerequisites	See Exam Regulations and Module Handbook.		
Format, Dates, Times and Rooms	Seminar, Tue, 14-16h, Wilhelmstraße 26 R 01016 Thu, 14-16h, KG 1234		
Course Description	<p>This course makes a systematic case for interpretive approaches in politics and IR. It offers a methodologically pluralist introduction to interpretive and historical methods for social scientists. Rather than taking any specific stance on what the valued terms 'interpretation', 'historical' and 'method' should mean, the course emphasises and examines the cleavages and contentions between methodologically diverse social scientists who all understand themselves to be doing 'interpretive' and 'historical' work. Debates in class and group projects will include systematic and critical discussion of a wide range of disciplinary as well as theoretical backgrounds such as hermeneutics, poststructuralist discourse theory, neo-pragmatism as well as neo-Aristotelianism.</p> <p>In many social science disciplines scholars working in an interpretive-qualitative tradition get little guidance for designing their research projects. In this course students will critically examine the concepts, methodological approaches and processes underlying the design of interpretive and historical research projects. If you are interested doing social science research that emphasises the centrality of context and meaning and that engages the past, this course will enable you to:</p> <ul style="list-style-type: none">• Situate your interest in, and approach to, interpretive and historical methods in relation to classic debates and alternative contemporary research programs.• Articulate and justify key methodological assumptions of your own approach to interpretation and the past.• Undertake interpretive and historical research with greater clarity and confidence as to what you are, and should, be doing. <p>Upon successful completion of the module, students should be able to:</p> <ul style="list-style-type: none">• Identify and compare the main theoretical and methodological approaches used in the field of interpretive and historical social sciences.• Apply a specific theoretical and methodological approach in individual/group project.• Produce a research paper corresponding to disciplinary standards including the justification and evaluation of the applied theoretical and methodological approach.• Plan, organize and complete an independent research project of limited scale.• Increase the ability to integrate knowledge from different disciplinary contexts.• Develop academic integrity and apply ethical guidelines in carrying out research.		
Remarks	Pay attention to the prerequisites for Research in an Area of Governance and Specialization Options (the restrictions are applied at the stage of the exam registration)		
Examination	Written assignments (up to 10,000 words) – 100% OR Oral presentation (up to 20 minutes) – 20% and written assignments (up to 8,000 words) – 80%, including a research paper (for at least 50% overall).		
Recommended Reading	Mark Bevir and Jason Blakely (2018) Interpretive Social Science. An Anti-Naturalist Approach. Oxford and New York: Oxford University Press.		

International Relations and Institutions			
Governance		Semester	
Dr. Mila Mikalay (mikalay@ucf.uni-freiburg.de), Kira Kurz			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	8	22	00LE62S-LAS-GO0034
Module(s) StuPo 2015		Module(s) StuPo 2020	
Global Governance		International Relations	
Prerequisites	Introduction to Governance		
Format, Dates, Times and Rooms	Seminar Tue, 9-12h, AU 01 036a Thu, 9-12h, KG 1142		
Course Description	<p>This course focuses on different conceptual approaches to the understanding and analysis of international relations (IR) and institutions. We focus on the level of theory and compare powerful “mythology” behind six IR theories: realism, idealism, constructivism, gender perspective, environmentalism, and globalization.</p> <p>The focus is therefore not on the “facts” of the international relations, but on the different ideological foundations of IR theories, seen as worldviews. The course is based on the textbook by Cynthia Weber “International Relations Theory. A Critical Introduction” and uses the method of artistic illustration to grasp the powerful beliefs about man, nature, society, politics, and the relationships between them undergirding IR theories. For each theory considered in the course we will watch a popular movie, which illustrates these fundamental beliefs behind theories. The course will therefore require analytic rigor, but also creativity and intellectual flexibility.</p> <p>Learning goals:</p> <ul style="list-style-type: none">• understand the post-positivist approach to social theory, namely, international relations theory;• understand and learn how to compare major IR theories and classical authors in their interpretation of international politics and institutions;• develop the vocabulary and analytical skills to be able to read, summarize, synthesize and debate academic texts on international relations, global politics and institutions;• connect theory, concepts, working methods and ideas from different Governance courses to achieve a deeper and more varied understanding of the course material, in a personally meaningful way;• move towards a reflective individual position on international issues and the role of international institutions.		
Remarks	Second-year students taking this course for the module International Relations will have priority and are strongly recommended to take this course; no priority for senior students!		
Examination	<p>To complete the pass/fail requirements (SL) in this course you need to attend class, actively participate in the discussion, which is key component of this course.</p> <p>The examination consists of a presentation (incl. a detailed handout), a review in writing of (an)other student/s presentation and an analytical paper on an IR topic of your choice. Deadline: 15.08.22</p> <p>Re-sit (100% of the grade) is in the form of a long analytical paper on a prescribed IR topic, due on October 1, 2022.</p>		
Recommended Reading	Robert G. Blanton (2013). “Zombies and International Relations: A Simple Guide for Bringing the Undead into Your Classroom”, International Studies Perspectives 14(1): 1-13, https://doi.org/10.1111/j.1528-3585.2012.00505.x		

Law-Making in Europe			
Governance only		Semester	
Dr. Sofiya Kartalova (s.kartalova@cs.l.mpg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	20	00LE62S-LAS-GO0079
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option Governance I, Option Governance II		Specialization Option Governance	
Prerequisites	Introduction to Governance, preferably – Principles of Law or a similar course		
Format, Dates, Times and Rooms	Seminar Tue 12-14h, KG 1021 Thu, 12-14h KG 1228		
Course Description	<p>How are laws made? How can we compare such processes across countries? How are conflicts that might arise in the process of making laws solved? When is the law-making process considered efficient? High-quality? Transparent?</p> <p>This course provides a comprehensive overview of the foundational principles, theory, and practice of law-making in Europe. The course focuses not only on the variety of law-making practices in European states, but also on the multi-level legislative process in the European Union.</p> <p>We will highlight the role of the judiciary branch (as distinct from the legislative, i.e. parliaments) in the interpretation and creation of legal rules.</p> <p>Finally, we will discuss the contemporary and future socio-political challenges as an opportunity for improving the efficiency and quality of the legislative process in Europe.</p> <p>By the end of this course, the students will have gained insight into the complexities of law-making in Europe. Further, they will have acquired the ability to characterise and critically examine the legislative process in a particular jurisdiction (written assignment), describe, analyse, and present case studies of legislative action within said jurisdiction (oral presentation), and debate and deliberate on a proposed bill of legislation (simulation).</p> <p>In terms of the format, the course will combine lectures, seminars, oral presentation and a simulation of parliamentary work.</p>		
Remarks	<p>Pay attention to the prerequisites for Specialization Options (the restrictions are applied at the stage of the exam registration).</p> <p>A more extensive course outline will be published on the Governance Wiki.</p>		
Examination	Examination format: 50% written assignment + 25% active participation in simulation + 25% oral presentation.		

Memory, Violence and Justice: Comparative Perspectives from Europe and Latin America			
Governance		Semester	
Dr. Eric Heine (eric.heine@alumni.eui.eu) Dr. Julieta Mira (julieta_mira@yahoo.com.ar)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	20	00LE62S-LAS-GO0067
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option Governance I or II		Specialization Option Governance	
Prerequisites	Introduction to Governance		
Format, Dates, Times and Rooms	Online Seminar Tue, 12-14h Thu, 12-14h		
Course Description	<p>Collective memories unite and divide - families, social groups and even nation states. Since Maurice Halbwachs (1925) defined collective memory in social terms many theories and concepts have been added to the debate and in recent years a vibrant interdisciplinary field of collective memory studies has emerged. This co-taught course will introduce you to current debates and research from a European and Latin American perspective.</p> <p>The course is divided into two parts. The first part will focus on developments, ruptures, and variations of European collective memories. Students will learn about central concepts and approaches in the field of collective memory studies and differentiate between social, political and cultural forms of collective memory. Case studies will include collective memories of (civil) war and violence in selected European countries. Finally, the effects of decolonization and the post-communist “recovery” of memory in Eastern Europe on the wider landscape of European memory will be highlighted.</p> <p>The second part of the course will focus particularly on the special expression of collective memories in the struggles and activism against serious human rights violations, such as the dictatorships in Latin America in the 1970s and 1980s. Case studies will include the disappearances and tortures that took place during the dictatorship in Argentina (1976-1983) and the social struggle for “Memoria, Verdad y Justicia”, state crimes and massacres in Brazil, the disappeared students from Ayotzinapa, and the massacre of women in Mexico in recent decades. This part of the course seeks to critically research what memory - or memories - means in the context of human rights violations, how it is constructed, what are its different moments, what are the strategies for inter-generational transmission, and what is proposed from the perspective of various actors - the victims and their families, the state, and international justice.</p>		
Remarks	Pay attention to the prerequisites for Specialization Options (the restrictions are applied at the stage of the exam registration)		
Examination	Each student will make one presentation; in addition, students will submit two short essays (2500-3500 words each) – one for each part of the seminar.		

Principles of Law			
Governance		Semester	
Stoyan Panov (stoyan.panov@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	8	22	00LE62S-LAS-GO0004
Module(s) StuPo 2015		Module(s) StuPo 2020	
Law		Law	
Prerequisites	Introduction to Governance		
Format, Dates, Times and Rooms	Seminar Tue, 14-16h, Universitätsstr. 5, R1 Thu, 14-16h, KG 1134		
Course Description	<p>The course introduces fundamental legal approaches and concepts. It looks at the interplay between law, society, governance and politics. It is not focused on narrow examination and analysis of domestic legal systems, but aims to provide an overview of legal principles that are applicable nationally and internationally.</p> <p>The course introduces most prominent theoretical and jurisprudential approaches: Natural Law, Legal Positivism, Feminism and modern Critical Theories. Students will critically reflect on the logic, structure, applicability, and language of law and topics such as rights, obligations, responsibility, and immunities.</p> <p>In the second part of the course, the focus is on the institutions and principles of law such as non-discrimination, the rule of law, equality, reasonable expectations, legal certainty, and legal interpretation techniques common among various legal orders.</p> <p>Finally, we will discover the practical applicability of the legal principles and theory in reality by examining the relationship between law and policy-making in the realms of human rights law, civil law, and criminal law, and by comparing diverse forms of law, systems of law, legality, and legal orders. The course readings include various legal cases dealing with freedom of expression, freedom of political association, the right to life, the prohibition of torture, marriage equality and nondiscrimination, affirmative action, criminal liability, data privacy, among others.</p> <p>Upon successful completion of this course, you will be able to:</p> <ul style="list-style-type: none">• paraphrase, summarize, compare and produce academic texts on the topics of the module with appropriate use of legal terminology;• analyse and interpret main principles of law and jurisprudential approaches in legal orders;• improve awareness about contemporary issues, debates, and controversies in legal studies;• become aware of theoretical and practical problems in understanding the law and its main principles and improve interdisciplinary thinking with integrity about their position as a scholar of law.		
	Remarks	Priority to second-year students!	
Examination	Submission of the final part of the examined material or the final exam will take place in the week of 25-29.07.2022.		
Recommended Reading	Introductory reading on jurisprudence: Raymond Wacks, Understanding Jurisprudence (4th ed, OUP 2016).		

Research on International Organizations and Foreign Policy			
Governance only		Semester	
Ermelinda Kanushi (ermelinda.kanushi@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	18	00LE62S-LAS-GO0081
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Governance III, Specialization Option I, Specialization Option II		Research in an Area of Governance, Specialization Option Governance	
Prerequisites	Introduction to Governance and 3 other compulsory modules		
Format, Dates, Times and Rooms	Seminar Mon, 10-12h, FMF HS 01 011 Wed, 10-12h, KG 1034		
Course Description	<p>The course aims at preparing students to understand, design, and conduct academic research in social and political sciences. The course will mainly focus on thematic related to international organizations and foreign policy. As a first step, the students will be able to identify a topic of preference and research question in these fields. In parallel, the students will receive thorough theoretical and empirical knowledge on topics such as; research methods and approaches, academic writing, literature review, research paper structures, research presentation etc.</p> <p>Designing and conducting academic research is mostly an individual undertaking. However – for this course - the student will be able to share the journey with the classmates that will play a crucial role in providing feedback to ameliorate the quality of the research.</p> <p>At the end of the process, with the support of the instructor and the feedback provided by their classmates, the students will be able to craft a research paper on the topic of their interest.</p> <p>Learning Objectives:</p> <p>After successfully completing the course, students should be able to:</p> <ul style="list-style-type: none">• design and conduct research in social and political science;• structure, analyze, support, and evaluate a research idea both orally and in writing;• demonstrate knowledge of the main methods, techniques, concepts of research in social and political sciences;• understand the shortcomings and strengths of common research methods, and identify the suitability of a research method to their research;• conduct small scale independent research with minimal supervision using the latest methods and approaches of research in social and political sciences.		
Remarks	Students are recommended to fill the Research in an Area of Governance module with this course.		
Examination	Graded Examination: Oral Presentation (20%), Written assignment(s) on group work and other written assignment(s), including a research paper (80%). The written assignments will be in total max. 8000 words.		

3.5 Study Area: Life Sciences

Foundational Year: Introduction to Life Sciences			
Life Sciences		Semester	
Dr. Simon Büchner (buechner@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s)	8	65	00LE62V-LAS-LS0001 00LE62S-LAS-LS0001
Module(s) StuPo 2015		Module(s) StuPo 2020	
Introduction to Life Sciences		Introduction to Life Sciences	
Prerequisites	none		
Format, Dates, Times and Rooms	<p>Lecture: 'Reflection and Questions' Tue, 09-10h, AU Max-Kade-Auditorium 1</p> <p>Workgroups</p> <p>WG 1: Thu, 10-12h, KG 1137 WG 2: Thu, 10-12h, FMF HS 01 011</p> <p>WG 3: Thu, 14-16h, FMF HS 01 009 WG 4: Thu, 14-16h, FMF HS 01 011</p> <p>WG 5: Thu, 16-18h, Ph R 3</p> <p>(only if all other WGs are fully booked)</p>		
Course Description	<p>In this course, students will learn about basic concepts in the Life Sciences. In particular, the course will focus on the biological and psychological systems that sustain a human being and allow him or her to deal with a complex environment. This includes interaction with the environment, sensation and cognition, physiological systems, and the functioning of cells. Besides the structures and processes that make up these systems, students will learn about methods from the Life Sciences that are employed to investigate these systems.</p> <p>The course is an introduction to the major and thus covers a broad range of fields. It is designed to provide an overview of topics and problems related to the field of Life Sciences. It emphasizes breadth over depth. In Work Groups, students will research, present and discuss challenges from the fields of Cell Biology, Physiology, Neurobiology and Psychology. We will employ the problem-based learning (PBL) method to encounter different challenges from the Life Sciences. In class, students work on problems or cases from the Life Sciences. In the pre-discussion the group discusses the problem; students share their knowledge they already have with respect to the topic in question and agree on what they still need to find out in order to assess the problem. In the post-discussion during the next meeting students bring together what they have researched and discuss the problem again in the context of the knowledge they have collected. More information on PBL will be provided during the first work group meeting.</p>		
Examination	Written Exam 26.07.2022		
Recommended Reading	<p>Fox (2011) Human Physiology, 12th ed., McGraw-Hill, New York (UCF: signature NT/Fox/1)</p> <p>Kandel, Schwartz, et al. (2012) (5th ed.) Principles of Neural Sciences, McGraw-Hill, New York (UCF: NT/Kan/1; UB: LS: Med 609/30; Lehrbuchsammlung II (Ernst Zermelo S</p>		

Basic Chemistry and Biochemistry			
Life Sciences		Semester	
Prof. Dr. Thorsten Friedrich (friedrich@bio.chemie.uni-freiburg.de) Dr. Daniel Wohlwend			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2,3	6	20	00LE62S-LAS-LS0002
Module(s) StuPo 2015		Module(s) StuPo 2020	
Biochemistry		Foundational Chemistry	
Prerequisites	Introduction to Life Sciences		
Format, Dates, Times and Rooms	Seminar Online lectures and bi-weekly class-meetings: Tue 14-16, Albertstr. 21, SR 09.020 starting on May 3		
Course Description	<p>Leaves change their color in autumn. Food is preserved in a refrigerator. A gecko has the ability to walk up walls and along ceilings. Have you ever asked yourself why this happens? The answer to all this is chemistry. Chemistry is the science dealing with the nature of substances and their interconversion. It plays a predominant role in our daily life including things as simple as lighting a match and as complex as the development of an anti-cancer drug. Chemistry pervades much into the life sciences. In fact, a biologist understands what is going on in a cell only based a profound knowledge in chemistry. Our body is a bag full of chemicals. The proteins that form our hair and muscle fibers are chemicals, our bones and teeth are made up of chemicals, what we eat and drink are chemicals. Everything that we see around us is chemistry in action, a collection of an unthinkable quantity of atoms. Chemistry tells us how atoms react with each other to form larger substances and how these substances in turn react to form new substances. There are a few basic principles behind the way, how the larger substances are made and how they behave.</p> <p>This lecture will deal with the fundamental topics of general, organic and biological chemistry. After a general introduction we will have a look at the structure of atoms and the arrangement of electrons in atoms. We will then discuss how bonds lead to the formation of molecules and how this influences the three-dimensional shape of molecules. This will be the basis for understanding the function of biochemical compounds. With that in mind we will move a step further and get a first glimpse on chemical reactions in order to describe a chemical equation. To fully understand whether a reaction can proceed, we will then discuss the energy of a chemical system and the rate of reactions. After a brief introduction into the acid/bases concepts the lecture will provide an overview of organic chemistry to define classes of substances, functional groups and general reactivity. In addition, the four major classes of molecules that are involved in the chemistry of a living cell will be discussed, namely carbohydrates, lipids, amino acids and their polymers, proteins, as well as nucleic acids and their polymers, DNA and RNA. Finally, the metabolic pathways that convert energy within our body will be introduced summarizing the relation between catabolic and anabolic pathways</p>		
Examination	Written Exam 26.07.2022		
Recommended Reading	Crowe, J., & Bradshaw, T. (2014). Chemistry for the biosciences: the essential concepts. Oxford University Press. Book is available in the reading room: NT/Cro/2		

Genetics and Epigenetics			
Life Sciences		Semester	
Dr. Nicola Iovino (iovino@ie-freiburg.mpg.de) and Fides Zenk			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	
Module(s) StuPo 2015		Module(s) StuPo 2020	
Computer Science, Data Processing and Modeling in the Sciences; Advanced Life Sciences I, II or III; Specialization Option I or II		Advanced Life Sciences I, II or III; Specialization Option I or II	
Prerequisites	Introduction to Life Sciences, Cell Biology		
Format, Dates, Times and Rooms	Seminar Tue, 9-12h, FMF HS 01 009 Thu, 9-12h, FMF HS 01 009		
Course Description	<p>How is my brother taller than my parents but I am not? If my parents have diabetes, will I also get this disease when I grow older? If you are curious about these questions, then read on.</p> <p>Whether you'd like to be a biologist, an epidemiologist or a public health professional, you must have a basic knowledge of genetics/ epigenetics and how it applies to human health. This course will get you familiar with the fundamentals of genetics. The following topics will be covered during the course in the form of assignments, group discussions, debates, lab visit or students' presentations.</p>		
	<ol style="list-style-type: none">1. Introduction to Genetics and Epigenetics2. Genes, coding and non coding RNA, and proteins3. Model organisms, in particular Drosophila4. Mouse genetics5. Genetic diseases and their molecular basis6. Revision7. Epigenetics: Phenotype vs genotype8. Epigenetic diseases and their molecular basis9. Sex determination and dosage compensation10. Epigenetic inheritance11. Epigenetic mechanisms in hematopoiesis12. Lab practical13. Lab practical14. Student Presentations15. Lab practical16. Revision17. Exam		
Examination	Oral Presentation during the class and a final exam (Probably 28.07.)		

Introduction to Computer Programming with Python			
Life Sciences, ESS		Semester	
Katharina Matulla (katharina.matulla@gmail.com)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-LS0035
Module(s) StuPo 2015		Module(s) StuPo 2020	
LS: Methods EES: Data Processing and Modelling in the Sciences		LS: Methods ESS Methods I or II	
Prerequisites	None		
Format, Dates, Times and Rooms	Seminar Mon, 8-10h, KG 1036 Wed 8-10h, KG 1134		
Course Description	<p>Python is one of the most popular programming languages in the world. While it can offer an easy entry to programming, it is a very powerful and extensible language with a growing open-source community. It is used anywhere from discovering drugs at AstraZeneca, manufacturing semiconductors at Philips to streaming your favorite shows on Netflix and YouTube. Course Objective Taking a hands-on, learning-by-doing approach, this class aims to cover the basics and fundamentals of programming with Python:</p> <ul style="list-style-type: none">• Programming basics• Functions• Data types and variables• Loops• Conditionals• Extracting and transforming data from different sources• Data analysis and visualization• Modeling natural phenomena <p>This is a rough plan. We can potentially tackle more topics upon interest and time availability.</p> <p>By the end of the course, you'll be comfortable reading and writing basic Python code. You'll also be ready to learn more advanced topics and use cases (e.g., Geographic Information Systems (GIS) or image processing and analysis in Biology). Additionally, the skills you acquire will greatly help you better collect and analyze data for your Bachelor Thesis.</p>		
Remarks	You must have a laptop available throughout the course. Working in pairs is fine. Also, you can make use of the computer labs at the university computer center: https://www.rz.uni-freiburg.de/services-en/pc-en/pcpools-en		
Examination	A final project that you build with Python and present to the class. Final submission (examination date): 19.08.2022		
Recommended Reading	Eric Matthes (2019) (2nd ed.) Python Crash Course, 2nd Edition: A Hands-On, Project-Based Introduction to Programming. San Francisco, No Starch Press.		

Introduction to Immunology			
Life Sciences		Semester	
JunProf. Priscilla Briquez (priscilla.briquez@uniklinik-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-LS0036
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Life Sciences I, II or III		Advanced Life Sciences I, II or III	
Prerequisites	Introduction to Life Sciences		
Format, Dates, Times and Rooms	Seminar Mon, 10-12h, Ph R 1 Wed, 10-12h, HH 9 R 01020a		
Course Description	<p>In this class, students will start to discover how the human immune system functions in health and disease. We will discuss the different immune components, their development and functions, including the various immune cell types and the immune complement system. We will explore how the immune system can discriminate between the self and the non-self to initiate immune reactions, and will describe some of the key mechanisms involved in the regulation of immune surveillance, activation, suppression and tolerance.</p> <p>We will additionally provide an overview of the innate and adaptive immune responses upon infection by pathogens, in wounding, allergies, cancer, transplantation, auto-immune diseases and immunodeficiencies. These examples aim at illustrating the complexity of immune responses while providing general knowledge in these topics. Importantly, these selected topics will highlight important current health challenges and ongoing research strategies to address them. In addition to ex-cathedra lectures, the students will meet a few researchers in immunology seminars and discuss scientific papers, to sharpen their critical scientific thinking. At the end of the course, the students will present a project (1-3 students/group) proposing a strategy or a technology that modulate the immune system, as a potential therapy to a particular current health challenge of their choice.</p>		
Examination	Project presentation (60%) during the class and formal written exam (40%) on 27.07.2022		

Neuroscience: From Brain to Behaviour			
Life Sciences		Semester	
Wilf Gardner (w.gardner@unistra.fr)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-LS0037
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Life Sciences I, II or III		Advanced Life Sciences I, II or III	
Prerequisites	Anatomy and Functions of the Brain (recommended)		
Format, Dates, Times and Rooms	Seminar Mon, 18-20h, Ph R 4 Wed, 18-20h, Ph R 2		
Course Description	<p>The brain is one of the most complex, interesting and poorly understood objects in the universe; and perhaps the only one capable of considering itself. Little more than a kilogram of grey and white matter, the brain contains an estimated 86 billion interconnected neuronal cells and a similar number of non-neuronal cells, along with the fundamentals which make up an individual: their personality and emotions, their perception of the external world, and the planning and execution of their response to it. Although references to the brain date as far back as 1600BC, and rapid advances in technology now allow us to collect a previously unimaginable quantity of data, the task of understanding the nervous system and its functions is far from complete.</p> <p>This course will introduce what we do know: from the cellular and molecular basis of neuronal transmission, via sensory input and motor output, to complex functions of the brain and big questions such as emotion, consciousness, and thought. From the level of individual neurons upwards, students will develop an understanding of how the form and function of the nervous system provides the biological basis of the phenomena which make us human. They will familiarise themselves with how we have arrived at our current understanding of the workings of the brain and what challenges remain for modern neuroscience - and how we might solve them.</p> <p>The course will provide students with a foundation in the fundamentals of modern neuroscience, encompassing elements of biology, psychology and philosophy, equipping them with a strong knowledge base for further study or progression into areas such as science communication.</p> <p>Classes will be in a blended format consisting of online lectures, exercises for guided individual research and in-presence discussions. The syllabus will cover neuroscience research methods, cellular and molecular neuroscience, micro- and macro-anatomy, sensory and motor systems, principles of plasticity and development, and complex brain functions.</p>		
Examination	15.08.2022		
Recommended Reading	Purves, Dale (2017) Neuroscience (6th Edition). Fith edition is available at the UB: TX 2020/566		

Pandemics 1 - Determinants and Management			
Electives		Semester	
Txema Calleja (txemacalleja@gmail.com), Dr. Simon J. Büchner (buechner@ucf.uni-freiburg.de) and Prof. Dr. Axel Kroeger			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	4	7 LAS students	00LE62S-LAS-LS0033
Module(s) StuPo 2015		Module(s) StuPo 2020	
Elective		Elective	
Prerequisites	Introduction to Life Sciences		
Format, Dates, Times and Rooms	Online Seminar 13.5., 16-20h, Kick-off event 16.5.-24.6. online group work and self-study with weekly meetings on Fridays (20.5., 27.5., 3.6., 10.6.) and final presentations on 21.-22.6., 9-12h		
Course Description	<p>As humans have spread across the world, so have infectious diseases. Even in this modern era, outbreaks are nearly constant, but not every outbreak reaches pandemic levels. There are some major pandemics that have afflicted humankind throughout history such as plague, cholera, influenza and coronavirus diseases, thus it is important to know the way they were controlled in the past and how these diseases are managed today. Infectious diseases still represent threats for human health as pathogens can spread rapidly through global trade and travels. Global surveillance programs are thus needed to detect and identify pathogens spillover from animals to humans as well as to control water-borne pathogens and vector-borne diseases. We have selected 4 pandemics that are still relevant: HIV/AIDS, malaria, tuberculosis and dengue fever, but will also discuss other examples such as Covid-19, SARS, Ebola and others.</p> <p>The overall objective of the proposed project is to train students in the prevention, early detection, management and monitoring of major contemporary pandemics. The specific learning objectives of this course are related to the following topics: Students will be able to understand and describe: i) Pandemics in history and in modern times; ii) How to measure the transmission dynamics and expansion of epidemics/pandemics; iii) Pathogens causing epidemics/pandemics and their routes of transmission; iv) Epidemiological indicators to measure the extent and burden of a pandemic; v) Social and cultural determinants driving a pandemic; vi) Response options to different pandemics; vii) Coping strategies in Health Services with the fast surge of cases; viii) Transmission prevention according to the route of transmission.</p>		
Remarks	Please send your application to Damaris Bockstahler, coordinator of the virtual course e-mail: damaris.martina.bockstahler@ucf.uni-freiburg.de Application deadline: 19.4.2022		
Examination	Presentation on 21./22.6.2022. Pass/fail only.		

Sensation and Perception			
Life Sciences		Semester	
Dr. Simon J. Büchner (buechner@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-LS0015
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Life Sciences I, II or III		Advanced Life Sciences I, II or III	
Prerequisites	Introduction to Life Sciences		
Format, Dates, Times and Rooms	Seminar Mon, 16-18h, FMF HS 01 011 Wed, 16-18h, FMF HS 01 009		
Course Description	<p>Our sensory organs are transition points between the world of our inner experiences and the world we are part of. This dualistic interpretation of an inside and an outside world often goes along with the assumption that sensation is a linear projection of characteristics of an externally existing object to an internally existing state of perception. In contrast, we will approach sensation and perception as a combination of bottom-up and top-down processes which shape sensory information based on contextual knowledge and memory giving rise to an empirically grounded, dynamic percept.</p> <p>We will trace the path from external stimuli through the sense organs to the interpretation of these stimuli as the world how we perceive it. For this, we will encounter the human senses from cognitive, neurological, psychophysical, but also philosophical points of view comparing different theories from these fields. We will cover visual, auditive, olfactory, gustatory, and tactile perception with an emphasis on the visual and auditive modality. The course will be a combination of lecture parts, reading-based discussions, student presentations, and in-class activities.</p>		
Examination	Presentation during the class and a final essay due on 31.08.2022 (final examination date)		
Recommended Reading	Wolfe, Jeremy (2015) Sensation & Perception. Available in the UB: FX 2017/68 and in the reading room: NT/Wol/2		

3.6 Study Area: Multiple

Beyond the Fossil Horizon? Environmental Justice and Renewable Energies			
EES/ESS, Governance		Semester	
Fabricio Rodriguez (fabricio.rodriguez@politik.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-GOEE0005
Module(s) StuPo 2015		Module(s) StuPo 2020	
EES: Specialization Option: EES I or II, Human and the Environment Advanced Governance I and II		ESS: Specialization Option: ESS I or II, Human and the Environment I or II Advanced Governance I and II	
Prerequisites	Introduction to EES/ESS and Introduction to Governance		
Format, Dates, Times and Rooms	Seminar Tue, 12-14h, KG 1142 Thu, 12-14h, KG 1142		
Course Description	<p>With the increasing complexity of socio-ecological challenges, the transition away from fossil towards renewable energy sources gains relevance as a precondition for life on the planet. But are renewable energies such as wind, solar, hydropower, biogas and/or bioelectricity automatically more environmentally friendly and socially just than their fossil counterparts oil, coal, and gas? In this seminar, we will take Environmental Justice (EJ) as the analytical lens to explore the relationship between climate change and energy transitions. In so doing, we will investigate the transregional interconnections as well as the global structures of inequality in which specific ‘technologies of change’ are embedded. These include for example the e-vehicle, the windmill, the dam, the biorefinery, and the photovoltaic cell. Despite their seemingly ‘green’ credentials, different aspects of these technologies and their mediating role between energy, nature, and society are the subject of intense contestation by EJ movements and critical scientists across the world. What seems to be socially just and sustainable in one place, may elicit injustices and environmental harm in another. Hence, energy transitions may reinforce instead of overcoming the social and environmental problems created by the fossil regime in the first place. Taking a historically informed and transregional approach to the study of energy, we aim to expose the way eco-modernizing paradigms in the industrial centers of the global economy may create new patterns of oppression over marginalized members of society. Among these are Indigenous peoples both in the Global North and in the Global South, whose alternative knowledge forms, ways of being, and counter-hegemonic actions become degraded, sidelined and even criminalized in policy thought and practice in the field of sustainable development.</p> <p>The course will strive towards a theoretical and empirically grounded understanding of the root problems and conflicts but also of the world-views, values, and alternatives, shaping as well as constraining just transitions in and across iconic areas of Latin America, Europe, and Asia, particularly China. The course is perfectly open to engage with cases from other cultural and geographic spheres, depending on student’s own regional expertise and/or interest.</p>		

	Throughout the course, students will learn how to make sense of different sources of data such as statistics, policy documents, video material, blogs, and newspaper articles. The instructor will provide methodological guidance and support during class and office hours regarding 1) interpretive analysis of quantitative data, 2) research design and case study research, 3) process tracing, and 4) discourse analysis.
Remarks	EES/ESS Students have priority
Examination	Oral presentation in class (25% of grade). Written assignment in the form of an essay (75% of grade): 13.08.2022.

Energy Transitions and Policy			
EES/ESS, Governance		Semester	
Dr. Sibylle Braungardt (S.Braungardt@oeko.de) Dr. Veit Bürger (V.Buerger@oeko.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-GOEE0006
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option: EES I or II, Human and the Environment Specialiation Option Governance I and II		Specialization Option: ESS I or II, Human and the Environment I or II Specialization Option Governance I and II	
Prerequisites	Introduction to Earth and Environmental Sciences / Introduction to Governance		
Format, Dates, Times and Rooms	Seminar Mon, 8-10h, AU 01036a Wed, 8-10h, AU 01036a		
Course Description	The transition towards an affordable, reliable and sustainable energy system is one of the key challenges the world is facing today. The course focuses on the dynamics of energy transitions and the role of public policy in shaping such processes. The content of the course is inherently interdisciplinary, focusing on the economic, social, technological and environmental challenges related to energy transitions. The students get familiar with the basic concepts and tools of energy analysis, focusing on the needs of energy policy decision-makers. The course covers a diverse set of policy instruments and strategies to support energy transition processes and discusses their effectiveness, efficiency and equitability.		
Remarks	EES/ESS students have priority. For Governance Specialization Option – pay attention to prerequisites (4 foundational modules. Restrictions apply at the exam registration stage).		
Examination	18.07.2022		

Ideology Critique in Critical Theory			
Culture and History, Governance		Semester	
Prof. Dr. Frieder Vogelmann (frieder.vogelmann@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-CHGO0009
Module(s) StuPo 2015		Module(s) StuPo 2020	
Philosophy, Advanced Culture & History I, II, or III		Philosophy, Culture & History I, II, or III Specialization Option Governance	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Wed, 16-18h, FMF HS 01011 Fri, 12-14h, Universitätsstr. 5, R 1		
Course Description	<p>“Ideology” is as central a concept in critical theory as it is contested. In many critical theories, it has been and still is a key concept because they understand themselves as practicing ideology critique. The debate about “ideology” therefore provides a keyhole through which we can understand the development of critical theories in general, as well as their fierce disagreement over conceptions of critique.</p> <p>We begin with easy questions that are hard to answer: Is ideology like bad breadth, namely something that only the other person has (Terry Eagleton), or are we all imprisoned in some ideology? Would there still be ideologies in a just society, whether we understand this as a class-less or a well-ordered society? Is “ideology” an inherently paternalistic concept because ideology critique positions the critic beyond an “epistemological break” that separates her from those still enthralled by ideology?</p> <p>In the seminar, we will investigate these and other questions by discussing texts on “ideology” and “ideology critique” from Karl Marx and Friedrich Engels via Theodor W. Adorno and Max Horkheimer to Rahel Jaeggi and Sally Haslanger. Yet the seminar is not limited to Frankfurt School critical theory: we will also look at the powerful intervention by Louis Althusser in the 1970s or the criticisms levelled against the concept of “ideology” by Michel Foucault, to name but two important contributions that continue to shape the current debate on “ideology.”</p>		
Remarks	For Governance Specialization Option – pay attention to prerequisites (4 foundational modules. Restrictions apply at the exam registration stage).		
Examination	20.07.2022		
Recommended Reading	Eagleton, Terry (1991): Ideology. An Introduction. London/New York: Verso. Žižek, Slavoj (ed.) (1994): Mapping Ideology. London/New York: Verso.		

Sustainable Cities			
EES/ESS, Governance		Semester	
Dr. Unna Chokkalingam (unna.chokkalingam@ucf.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-GOEE0012
Module(s) StuPo 2015		Module(s) StuPo 2020	
EES: Humans and the Environment		ESS: Humans and the Environment I or II Advanced Governance I or II	
Prerequisites	Introduction to EES/ESS or Introduction to Governance		
Format, Dates, Times and Rooms	Seminar (partly online) Mon, 16-18h, AU 01036a Wed, 16-18h, AU 01065		
Course Description	<p>Cities housed about 56% of the world's population in 2020 and contributed 40-70% of global GHGs already a decade ago. Thus, the sustainable development of cities is critical for providing a safe and healthy living environment for a bulk of the human population, and for meeting our global GHG emissions reduction and biodiversity conservation targets.</p> <p>In this course, we will explore what sustainable city development means. What features should a sustainable city strive for? We will look at different challenges and explore possible solutions. Experts on different city development issues will be invited to our course to share their knowledge and you will be able to talk with them directly.</p> <p>We will go on a virtual excursion to Copenhagen, often described as one of the most sustainable cities in the world and listen to experts from there. We will also explore other cities through the course examining specific sustainability features they have implemented. These could relate to city planning, green affordable housing and transport, energy efficiency and renewable energy, green spaces and biodiversity enhancement, and effective waste management among others.</p> <p>Equipped with this extensive background information and reflection, you will explore the sustainability of your city or a city of your choice, and compare your findings with what we have discussed in class. Where do you find sustainable developments in your city and where could sustainability still be improved? You will produce a virtual video tour of sustainability measures in your city. Thereby, we will be able to explore the video tours of different cities in the world together during the course and obtain first-hand insights into their sustainable development.</p> <p>After this course you will be able to</p> <ul style="list-style-type: none">• describe different possibilities and challenges for sustainable city development.• identify sustainable developments in different cities.• discuss sustainable city development with experts.• apply your knowledge by collecting and presenting information on your city's sustainability.• compare and evaluate the sustainability of different cities.		
	Remarks	EES/ESS Students have priority	
Examination	28.07.2022		

Writing Political Essays with Hannah Arendt			
Culture and History, Governance, EES/ESS		Semester	
Mir Ali Hosseini (mir.ali.hosseini@anglistik.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2, 3, 4	6	20	00LE62S-LAS-CHEEGO0002
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option C&H I or II Specialization Option EES I&II Advanced Governance I or II		Specialization Option C&H I or II, Senior Profile C&H Senior Profile ESS Advanced Governance I or II	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Tue, 10-12h, AU 01065 Thu, 10-12h, Ph R 3		
Course Description	<p>“Philosophers,” Hannah Arendt believed, “cannot be trusted with politics or a political philosophy.” In philosophy, “truth” is the product of the individual mind; its validity depends on a priori rules of logic. In politics, however, “truth” is essentially communicative; it always awaits the validation of others.</p> <p>But if we shouldn’t “philosophize” the political, how should we think and write about politics? In a way, Arendt’s whole methodology is a response to this problem. Instead of laying out a systematized theory of politics, Arendt preferred writing essays about politically significant concepts and topics. She preferred, in other words, a form of writing that is tentative and dialogical rather than conclusive and didactic. For Arendt, the essay as the medium of political thought is not an “objective” representation of a state of affairs but itself an intervention in the public realm, an attempt to persuade others and make a change in the world.</p> <p>In this course we will explore Hannah Arendt’s political thought and methodology, learn about the essay form as a means of political engagement, and write essays about topics that matter to us and to the world. Students who wish to publish their essays will be encouraged and supported.</p>		
Remarks	Students are recommended to purchase the Penguin edition of Hannah Arendt’s essay collection <i>Between Past and Future</i> , edited by Jerome Kohn. PDF versions of Arendt’s essays as well as additional readings will be provided via ILIAS.		
Examination	04.08.2022		

4 Courses of other Degree programs

4.1 Study Area: Culture and History

Theorien der digitalen Medien			
Culture and History		Semester	
Dr. Bettina Papenburg (bettina.papenburg@mkw.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	2 LAS	05LE54S-277
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option C&H I or II		Specialization Option C&H I or II Senior Profile C&H	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Thu, 12-14h, KG 1134		
Course Description	<p>Datenpraktiken wie die digitale Bildverarbeitung, das Teilen digitaler Bilder über das Internet und der Gebrauch mobiler Medien wie dem Smartphone, Sensor- und Rechnerstechniken wie maschinelles Sehen und maschinelles Lernen, mediale Ökologien wie etwa das Internet der Dinge, sowie Augmented- und Virtual-Reality-Anwendungen in der Unterhaltungsindustrie und Medizin verändern gegenwärtig unsere Lebenswelt. Bereits zu Beginn der 1990er-Jahre stellte der Gebrauch des Computers im Alltag, in der Arbeitswelt und in der Kunst die Kulturwissenschaften vor die Herausforderung, sich daraus ergebende Veränderungen medienkultureller Praktiken und damit verbundene übergreifende gesellschaftliche Transformationsprozesse mittels hermeneutischer und semiotischer Ansätze zu beschreiben und mithilfe systemtheoretischer und technikgeschichtlicher Ansätze zu reflektieren.</p> <p>Als eine Kardinalunterscheidung im bild-, film- und medienwissenschaftlichen Diskurs der 1990er-Jahre fungierte dabei die Differenz zwischen ‚analog‘ und ‚digital‘. Der Nutzen dieser Leitdifferenz wurde allerdings bereits wenige Jahre nach ihrer Etablierung in Frage gestellt. Seither wird das Leistungsvermögen dieses Begriffspaares immer wieder einer kritischen Revision unterzogen. Der US-amerikanische Medientheoretiker Alexander Galloway diagnostizierte etwa im laufenden Jahr: „[T]he golden age of analog is happening today, all around us, as evidenced by the proliferation of characteristically analog concerns: sensation, materiality, experience, affect, ethics, and aesthetics.“ (Alexander R. Galloway 2022, 211) Galloway konterkariert die Vorstellung einer linearen historischen Entwicklung, die häufig an dem Medienumbruch zwischen ‚dem Analogen‘ und ‚dem Digitalen‘ festgemacht wird und die seit einigen Jahren ‚das Post-Digitale‘ in das begriffliche Instrumentarium einreicht. Aus Galloways Beobachtung ergeben sich einige Schlüsselfragen, die den gegenwärtigen Theoriediskurs zu digitalen Medien leiten und denen wir im Seminar gemeinsam nachgehen wollen: Wie verändern digitale Medien unsere Wahrnehmung und unser Verhältnis zur Welt? Wie verändern digitale Medien ältere Medien wie den Film und die Fotografie? Wie formen Algorithmen unsere Identität? Wie werden diskriminierende Strukturen in Algorithmen fortgeschrieben und mit welchen Konsequenzen?</p> <p>Um diese Fragen zu verhandeln, werden wir uns im Seminar mit einigen ausgewählten neueren Positionen zu digitalen, mobilen und vernetzten Medien befassen. Unsere gemeinsame Textarbeit soll darauf abzielen, theoretische Positionen zu beschreiben und zu analysieren, sie in historische und gegenwärtige Debatten einzuordnen und auf diese Weise Diskurse und ihre Dynamiken zu konturieren. Dazu richten wir das Augenmerk auf das Verständnis von Schlüsselbegriffen, die Analyse von Argumentationsstrategien und auf Fragen der Rezeption.</p>		

Transmedia Auteurs - Regisseur/innen im Zeitalter hybrider Netzwerke			
Culture and History		Semester	
Dr. habil. Andreas Rauscher (andreas.rauscher@misc.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	2 LAS	05LE54S-280
Module(s) StuPo 2015		Module(s) StuPo 2020	
Sociocultural Anthropology or Area Studies Advanced Culture & History I, II, or III		Culture: Peoples and Practices Culture & History I, II, or III	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Thu, 10-12h, KG 1134		
Course Description	<p>In der Hochphase des internationalen Autorenkinos in den 1960er und 1970er Jahren galt die persönliche Vision und eine eigene stilistische Handschrift als wesentlicher Maßstab für die künstlerische Umsetzung eines Films. Die Regisseur/innen der Neuen Wellen, von der französischen Nouvelle Vague, über deren osteuropäische Äquivalente bis hin zum New Hollywood und dem darauf aufbauenden Independent-Kino kultivierten den individuellen Ausdruck als Gegenstrategie zum kommerziellen Event-Spektakel.</p> <p>Doch nicht erst seit den Chancen und Herausforderungen der Digitalisierung, die ganz neue Formen der Verbreitung ermöglicht, aber zugleich auch die klassische Kulturinstitution Kino neu definiert, haben sich die Parameter des Cinema des Auteurs entscheidend verändert. Filmemacher/innen operieren heute innerhalb weit verzweigter Netzwerke aus kulturellen Kontexten und medienübergreifenden Verknüpfungen.</p> <p>Ausgehend von zwei exemplarischen Studien zu den Kult-Auteurs Jim Jarmusch und David Lynch werden im Seminar die Aktualität der Politique des Auteurs und die Möglichkeiten der Kartographie zu ihrer Erschließung im digitalen Zeitalter erprobt. Im Seminar werden ausgewählte Beispiele der Regisseur/innen David Fincher, Kelly Reichardt, Kathryn Bigelow, Joel und Ethan Coen und Quentin Tarantino behandelt.</p>		

4.2 Study Area: Earth and Environmental Sciences / Environmental and Sustainability Sciences

Design and Monitoring of Large Infrastructures			
EES /ESS		Semester	
Prof. Dr. Alexander Reiterer Prof. Dr.-Ing. Mark Alexander Stolz			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	n.a.	11LE68Ü-9020
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option: EES I or II		Specialization Option: ESS I or II	
Prerequisites	Introduction to EES/ESS		
Format, Dates, Times and Rooms	Seminar Wed, 10-12h, G.-Köhler-Allee 101, SR 01-016/18		
Course Description	<p>The growing world population, the ongoing urbanization, the ever-increasing size, height and complexity of large scale built infrastructure lead to higher risks with respect to natural and manmade threats. Therefore smart designs and monitoring of large infrastructures are required.</p> <p>Within this context the lecture provides insights in the basic requirements for a safe, secure and resilient design of construction and monitoring of those large urban infrastructures.</p> <p>In detail students will learn about</p> <ul style="list-style-type: none">• Key concepts and ideas to design and monitor a large urban infrastructure safe, secure and resilient• Design concepts for sensor application and structural health monitoring• Data analysis methods for interoperating and visualizing measurements• Software aided assessment of infrastructures <p>Smart and reinforced building elements, to measure the actual building condition combined with an increased bearing capacity and resistance.</p>		
Remarks	<p>This course is offered in cooperation with the Master of Sustainable Systems Engineering. Course and exam registration needs to be according to the regulations of the Technical Faculty.</p> <p>Course registration starts March 30, 2022.</p> <p>More information via email to sabine.sane@ucf.uni-freiburg.de.</p> <p>Only advanced students can participate.</p>		
Examination	Written supervised examination at the end of the semester covering both the content of the lecture (50%) and the content of the exercises (50%), duration: 90 min.		

Energy in Buildings			
EES/ESS		Semester	
Prof. Dr. Hans-Martin Henning, Dr. Manuel Lämmle, Rebekka Eberle, Beatrice Rodenbücher			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6 (with integrated internship)	n.a.	11LE68Ü-4112
Module(s) StuPo 2015		Module(s) StuPo 2020	
Elective Joker		Elective Joker	
Prerequisites	Introduction to EES/ESS, Solar Energy (!)		
Format, Dates, Times and Rooms	Lecture Mon, 14-16h, G.-Köhler-Allee 101, SR 01-009/13 Workgroup Wed, 10-12h, G.-Köhler-Allee 101, SR 01-009/13		
Course Description	<p>The students know the influencing factors on the energy demand of buildings. They know about the requirements and prerequisites for low energy and passive houses. They are familiar with methods for setting up energy balances for buildings and the relevant technical indoor equipment. Students are able to judge under which circumstances zero-energy or plus-energy buildings (with respect to the annual primary energy balance) are attainable. They know the requirements and criteria for indoor comfort in buildings and they are able to estimate the influence of different renovation and retrofit measures on the energy demand and indoor comfort. They know use cases and limits of different heat transfer systems for heating and cooling of indoor environments and are familiar with low exergy concepts for building energy system</p> <p>Selected chapters of building physics regarding energy demand of buildings for heating and cooling</p> <ul style="list-style-type: none">• Indoor comfort in buildings• Ventilation demand and ventilation concepts• The passive house concept• Passive use of solar energy in buildings; physics of transparent building components• Passive systems / concepts for cooling of buildings• Exergetic evaluation of building systems• Heat transfer systems to rooms for heating and cooling• Efficient energy conversion chains, „low-ex“ systems		
Remarks	<p>This course is offered in cooperation with the Master of Sustainable Systems Engineering. Course and exam registration needs to be according to the regulations of the Technical Faculty.</p> <p>Course registration starts March 30, 2022.</p> <p>More information via email to sabine.sane@ucf.uni-freiburg.de.</p> <p>Only advanced students can participate.</p>		
Examination	Written supervised exam, duration: 120 min.		
Recommended Reading	Energy Performance of Buildings - Energy Efficiency and Built Environment in Temperate Climates. Editors: Boemi, Sofia-Natalia, Irulegi, Olatz, Santamouris, Mattheos (Eds.). Springer.		

Photovoltaic Lab			
EES/ESS		Semester	
Prof. Dr. Stefan Glunz, Rebekka Eberle			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	max. 2	11LE68P-4108
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option: EES I or II		Specialization Option: ESS I or II	
Prerequisites	Introduction to EES/ESS, Solar Energy		
Format, Dates, Times and Rooms	Seminar Fri, 10-12h, R 01 007 (G.-Köhler-Allee 106)		
Course Description	The Photovoltaic Laboratory provides an opportunity for hands-on experience with the PV-related topics introduced in the Solar Energy course. Students will get to know solar cells from a practical view and gain experience in interconnection and operation of solar cells, including evaluation of their performance. Students will understand the electrical properties of solar cells e.g. the IV-curve and related parameters; they will experience the influence of environmental conditions such as temperature, intensity of the incoming light and the angle of incidence. The examination of solar cells as a component part in electrical circuits will enable students to solve typical problems, e.g. how to connect a couple of single cells reasonably to build up a module or how to avoid problems caused by shading. Knowledge about the behaviour and performance on load when used as power source is very important for the application of solar cells. Off-Grid systems will also be investigated as a practical application scenario for photovoltaic. This will bring students in contact with electrical components such as load-regulators, storage etc. These are elementary topics for solid knowledge of solar cells and crucial for ongoing research of a more application-oriented use of solar cells.		
Remarks	This course is offered in cooperation with the Master of Sustainable Systems Engineering. Course and exam registration needs to be according to the regulations of the Technical Faculty. Course registration starts March 30, 2022. More information via email to sabine.sane@ucf.uni-freiburg.de . Only advanced students can participate.		
Examination	Written protocols of performed laboratory experiments and an oral presentation of the experimental results within a poster conference. Approx. 10 min. presentation + 5 min. questions = 15 min in total.		
Recommended Reading	A. Smets, Solar Energy, UIT Cambridge 2016 M. A. Green, Solar Cells, University of New South Wales 1982		

Resilienz und Kollaps ökologisch-ökonomischer Systeme			
EES/ESS		Semester	
Prof. Dr. Baumgärtner (stefan.baumgaertner@ere.uni-freiburg.de)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	7 LAS	00LE62S-LAS-EE0014
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option: Earth and Environmental Sciences I or II, Human and the Environment		Specialization Option: Environmental and Sustainability Sciences I or II, Human and the Environment I or II	
Prerequisites	Introduction to EES/ESS		
Format, Dates, Times and Rooms	Seminar 28.04.2022, 14:15-17:45h 05.05.2022, 14:15-16:45h 21.07.2022, 14h - 23.07.2022, 13h Rooms tbc		
Course Description	<p>Resilienz bezeichnet die Fähigkeit eines Systems, seine wesentlichen Strukturen und Funktionen auch unter Störungen und Stress aufrecht zu erhalten. Für die nachhaltige Entwicklung ökologisch-ökonomischer Systeme unter Bedingungen großer Unsicherheit und dynamischen Wandels ist die Erhaltung ihrer Resilienz eine Schlüsselvoraussetzung: Wie können wirtschaftlich genutzte Ökosysteme so gemanagt werden, dass die heutige Nutzung ihrer Funktionen und Leistungen nicht die Möglichkeit zukünftiger Nutzung gefährdet?</p> <p>In diesem Seminar wollen wir uns interdisziplinär – gestützt auf grundlegende Beiträge aus Ökologie, Ökonomie und Systemwissenschaften – mit der Frage auseinandersetzen, welche Erklärungskraft das wissenschaftliche Konzept der Resilienz für die Analyse und das Verständnis der Beständigkeit, oder umgekehrt des Kollapses, von Staaten und Gesellschaften hat, die ökologische Ressourcen (un)wirtschaftlich nutzen. Was genau kann man unter Resilienz verstehen? Von welchen determinierenden Faktoren hängt die Resilienz eines ökologisch-ökonomischen Systems ab? Wie kann man ökologisch-ökonomische Systeme auf ihre Resilienz hin analysieren, und welche Indikatoren für Resilienz gibt es? Wie gestaltet und managt man ein System so, dass es resilient ist?</p>		
Remarks	<p>Please register via: sabine.sane@ucf.uni-freiburg.de with your matriculation number. EES/ESS students have priority.</p> <p>Einführung in den ersten beiden Wochen mit (Präsenz-)Sitzungen am Donnerstag 28. April 14:15-17:45 und am Donnerstag 5. Mai 14:15-16:45 Uhr.</p> <p>Danach individuelles Selbststudium mit tutorieller Unterstützung.</p> <p>Der eigentliche Seminarteil des Moduls findet statt als (Präsenz-)Blockveranstaltung von Donnerstag 21. Juli 14:00 Uhr bis Samstag 23. Juli 13:00 Uhr.</p> <p>Referatsthemen Die Referatsthemen werden in der Einführung in der ersten Woche vorgestellt und in der zweiten Woche vergeben</p>		
Recommended Reading	Biggs, R., M. Schlüter, D. Biggs, E. L. Bohensky, S. BurnSilver, G. Cundill, V. Dakos, T. M. Daw, L. S. Evans, K. Kotschy, et al. (2012), Toward principles for enhancing the resilience of ecosystem services, Annual Review of Environment and Resources 37:		

4.3 Study Area: Wissenschaft, Technologie, Gesellschaft

Terraforming Planet Earth			
EES/ESS		Semester	
Dr. Nicholas Buchanan (nicholas.buchanan@ucf.uni-freiburg.de) Anton Schulte-Fischedick and Jonathan Fipper			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	3-10	10	tba
Module(s) StuPo 2015		Module(s) StuPo 2020	
Human and Environment		Human and Environment I or II	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Thu, 12-14h, KG 3117		
Course Description	<p>Originally, the science fiction term terraforming was dedicated to the question of how planets or celestial bodies can be transformed into habitable places by the active use of human technologies. However, while the terraforming of other planets remains primarily the fantasy of a few billionaires, the large-scale, deliberate use of technologies to alter Earth systems and living conditions on Earth is drawing ever closer. Indeed, such technologies may be necessary in order to achieve ever more illusive goals for mitigating and slowing climate change.</p> <p>This seminar will explore the technical and social aspects of geoengineering, focusing on different approaches for deliberately alteration of the environment on the large and smaller scales. How do these proposed technologies work, what knowledge about the earth system is required to design and implement them, what uncertainties are present, and what political, social, and cultural considerations are implicated in their planning, implementation, and aftermath.</p> <p>The course will focus primarily on the technologies themselves and the intertwined social aspects of them. A basic familiarity with earth systems from a natural/earth sciences perspective is helpful but not required to register for the course. Students without this familiarity will be provided with resources to independently gain the necessary knowledge.</p> <p>Note on the language of instruction: Language of instruction will be primarily German. However, assigned readings may be in German or English. Students may complete SL and PL tasks in either German or English.</p>		
Remarks	This course is part of the Wissenschaft-Technologie-Gesellschaft program in cooperation with the Professorship in Science and Technology Studies and the Zentrum für Schlüsselqualifikationen.		
Examination	<p>3 ECTS: Studienleistung only. Preparation of readings for discussion, in-class presentation(s) of readings, participation in in-class exercises, and attendance at end of the semester student conference on 22.07.2022.</p> <p>6 ECTS: requirements for 3 ECTS, plus additional Prüfungsleistung consisting of a poster presentation at end of the semester student conference.</p> <p>10 ECTS: requirements for 6 ECTS, plus an additional 3000 word paper. Registration for 10 ECTS is intended primarily for Masters students. LAS students interested in this option must have major coordinator approval and consent of instructor.</p>		

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