

universität freiburg



# Course Catalog

BA/BSc Program  
Liberal Arts and Sciences  
Winter Semester 2023-24



UNIVERSITY  
COLLEGE  
FREIBURG

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## I General Information

For detailed information on all topics listed below, please consult the [LAS Info Board](#) on ILIAS.

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	25 September – 6 October
Block I	16 October – 8 December
Block II	11 December – 16 February
University Semester	16 October – 9 February (semester-long LAS courses run according the university semester)
Re-sit Period	2 – 28 October 2023 (re-sit 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 LAS Academic Calendar

Date	Important Dates and Deadlines
<b>September 2023</b>	
Fri 01.09	<b>Deadline: Application for Admission of Bachelor thesis</b> (4 <sup>th</sup> year students) <a href="#">on ILIAS</a>
Starting 16.9	<b>Course Registration</b> with consecutive registration periods (see <a href="#">Course Registration</a> )
<b>October 2023</b>	
Fri 04.10	<b>Start: Registration for SLI language courses</b> (individual courses paid by UCF, <a href="#">registration guidelines</a> are on the Info Board)
09.-13.10.	LAS Welcome Week
Thu 12.10.	<b>Deadline: Application for courses with graded examinations of other degree programs</b> at the University of Freiburg ( <a href="#">application form and guidelines</a> are available on the Info Board)
Fri 14.10.	LAS Graduation Ceremony
Mon 16.10.	<b>University semester and Block I</b> begin <b>Event:</b> Exam Registration Information (12-13h, AU HS 1)
Fri 20.10.	<b>Deadline: Application for Non-LAS University of Freiburg Courses to be recognized as Elective</b> (for graded examinations only) Please note that incomplete applications will not be considered.

Date		Important Dates and Deadlines
Fri	27.10.	<b>Deadline: Exam Registration</b> for Block I and semester long courses
<b>November 2023</b>		
Wed	01.11	Public Holiday: All Saint's Day (no teaching)
Wed	15.11	<b>Deadline: Round One Application UCF Exchange Programs</b> for the Academic Year 2023/24. Details on the Application procedure will be announced by Email.
		<b>Deadline: Application credit recognition for study abroad</b> ( <a href="#">application forms and guidelines</a> are available on the Info Board)
<b>December 2023</b>		
Fri	01.12.	<b>Deadline: Application for Admission of Bachelor thesis</b> (4 <sup>th</sup> year students) <a href="#">on ILIAS</a>
Mon	11.12.	Block II begins
		<b>Event:</b> Bachelor Thesis Information (12-14h, AU HS 1)
Fri	22.12.	<b>Deadline: Exam Registration and withdrawal</b> for Block II and non-LAS courses
23.12.-07.01.		University Christmas Break (no teaching)
<b>January 2024</b>		
Mon	15.01.	<b>Deadline: Round Two Applications for UCF Exchange Programs</b> for the Academic Year 2023/24. Details on the Application procedure will be announced via Email
Mon	29.01.	<b>Event:</b> Foundational Year: Second Semester Info (12-14h)
Tue	31.01	<b>Deadline: Declaration of Major</b> in HISinOne (to be taken into account for the upcoming course registration)
		<b>Deadline: Application for Graduation WS 2023-24</b> <a href="#">on ILIAS</a>
<b>February 2024</b>		
Thu	15.02.	<b>Deadline: Application for Admission of Bachelor Thesis</b> (4 <sup>th</sup> year students) <a href="#">on ILIAS</a> (recommended date for students graduating at the end of SS 2024)
Mon	15.01.	<b>Deadline: Round Two Applications for UCF Exchange Programs</b> for the Academic Year 2023/24. Details on the Application procedure will be announced via Email
<b>March 2024</b>		
Beginning of March	of	Publication of the LAS Course Catalog SS 2024 on the <a href="#">UCF website</a>

### 3 EPICUR – The European University

Uni Freiburg and UCF are part of [EPICUR](#), a pilot European University of the future. 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 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 II and in registration period III.
- 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. Please check the registration periods on the [EPICUR website](#).** 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.

#### EUCOR Info Stand: November 9, Thursday, 11:00- 13:00

UCF offers an info stand for students to explore the University of Freiburg's EUCOR opportunities, the course offerings from the other EUCOR universities as well as EUCOR's aims to facilitate mobility and international connectivity among its partner institutions.

### 4 Course Registration

The LAS course registration procedure ensures that LAS 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.

This procedure applies to all courses offered by UCF that appear in the LAS Course Catalog (unless stated otherwise in the remarks section of 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](#).

#### 4.1 When to Register for Courses?

- [LAS students](#) register during the three consecutive registration periods as outlined below. Please note that you 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. Additionally, please contact UCF well in advance: [las.consultation@ucf.uni-freiburg.de](mailto:las.consultation@ucf.uni-freiburg.de).

Registration Period I: Sat, 16.09. – Tue, 19.09. (12:00h, noon)		
Who can register	For what	Comments
<ul style="list-style-type: none"> <li>▪ LAS students who have formally declared their Major by 31 July</li> </ul>	LAS courses to be recognized as Major courses only (not as Elective or Core courses!)	LAS students can register for a maximum of 5 courses in total (pre-block or language courses not included). Students who register for more than 5 courses will be removed from the most popular courses.
Places are assigned after the registration period. Students from higher years will get priority unless otherwise noted in the course description. You can check your registration status on Wednesday evening. Students whose registration requests were declined or altered can register for alternative courses on <b>Thu, 21.09., 14:00h to 18:00h</b> in HISinOne. Please de-register from courses that you do not want to take immediately.		

Registration Period II: Sat, 23.09. – Tue, 26.09. (12:00h, noon)		
Who can register	For what	Comments
<ul style="list-style-type: none"> <li>▪ LAS students</li> <li>▪ LAS exchange students</li> </ul>	All courses listed in the LAS Course Catalog.	LAS students and LAS exchange students can register for a maximum of 5 courses in total (pre-block or language courses not included).
<p>Places are assigned after the registration period. Students from higher years will get priority unless otherwise noted in the course description. You can check your registration status on Wednesday evening.</p> <p>Students whose registration requests were declined or altered can register for alternative courses on <b>Thu, 28.09., 14:00h to 18:00h</b> in HISinOne.</p> <p>Please de-register from courses that you do not want to take immediately.</p>		

Registration Period III: Sat, 30.09 – Wed, 04.10. (12:00h, noon)		
Who can register	For what	Comments
<ul style="list-style-type: none"> <li>▪ All students of the University of Freiburg</li> </ul>	All courses listed in the LAS Course Catalog	<p>Students can register for courses that still have places available.</p> <p>Students are allowed to register for a maximum of 6 courses in total.</p>
<p>Places will be assigned throughout the registration period. Regularly check your registration status in HISinOne. In some cases, priority will be given to students of partner degree programs.</p> <p>Please de-register from courses that you do not want to take immediately.</p>		

## 4.2 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.

## 4.3 Participant Lists

Course participant lists will be finalized **on Friday, 6 October, 2023** and passed on to the instructors. Later admissions to courses by the LAS program coordination are not possible.

The final decision about participation lies 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.

## 4.4 Problems with Course Registration?

If course registration in HISinOne does not work, please immediately contact LAS program coordination: [las.consultation@ucf.uni-freiburg.de](mailto:las.consultation@ucf.uni-freiburg.de). Requests after the given deadline are not 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 whenever possible.

## 5 Exam Registration

### 5.1 Who Needs to Register for Examination?

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

### 5.2 When to Register for Examination?

Period	Dates	Exam Registration and Withdrawal
I	Various dates; tba in class	Registration Pre-block
II	16.10. – 27.10.2023	Registration Block I and semester long courses
	30.10. – 03.11.2023	Withdrawal semester long courses
III	11.12. – 22.12.2023	Registration Block II and non-LAS 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.**

### 5.3 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 outlined on the [LAS Info Board](#) on ILIAS.

### 5.4 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. Rather, this 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.

### 5.5 Was the exam registration 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.

## 6 Problems with Exam Registration

See [Problems with Course Registration](#).

## II Course Descriptions

### 1 Pre-Block Courses

#### 1.1 Study Area: Core

Rhetoric and Techniques of Presentation			
Core		Pre-Block	
Holger Witzenleiter ( <a href="mailto:kontakt@holger-witzenleiter.de">kontakt@holger-witzenleiter.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	2	20	00LE62S-LAS-CO0061
Module(s) StuPo 2015		Module(s) StuPo 2020	
Elective Joker		Advanced Academic Skills	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar/Workshop 2. and 6.10., 9-17h, AU 01036a		
Course Description	<p>Powerful rhetoric and a precise, convincing argumentation will enhance your speeches or presentations. It is not only the way you structure your argument but also the different layers of delivery that can take your talks to another level. In this class we will focus on</p> <ul style="list-style-type: none"> <li>▪ short speeches and brief addresses</li> <li>▪ body language, facial expressions and gestures</li> <li>▪ voice pitch, articulation, emphasizing through rhythmic speaking</li> <li>▪ dealing with nervousness and fears for public speaking</li> <li>▪ presenting: Standard phrases, five picture method, Pecha Kucha method</li> <li>▪ killer phrases and quick-wittedness</li> <li>▪ argumentation</li> </ul> <p>In this course we will see, what we find impressive, exercise what we will have learnt and pattern drill what helps us the most. Even if we start with differing previous knowledge, each student will have the chance to build a stronger and broader competence in these core skills.</p>		
Remarks	Students of PO20 have priority.		
Examination	SL only		

Social Entrepreneurship			
Core		Pre-Block	
Dr. Markus Strauch ( <a href="mailto:markus.strauch@zv.uni-freiburg.de">markus.strauch@zv.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-CO0016
Module(s) StuPo 2015		Module(s) StuPo 2020	
Responsibility and Leadership 2		Responsibility and Leadership 2	
Format, Dates, Times and Rooms	Intensive Seminar 25.9.-6.10., 9-17h, AU 01065 (morning) and Co-Creation Room (afternoon)		
Course Description	<p>According to Schumpeter, entrepreneurship is essentially characterized by combining existing resources (in a new way). In this definition, entrepreneurship is neither about completely new inventions nor does it limit entrepreneurship to the economic field of action alone.</p> <p>The aim of this course is, on the one hand, the development of a fundamental and independent understanding of entrepreneurship/entrepreneurship, which can show itself in many social spheres. On the other hand, its direct and own practical application through the development of own enterprise models is in the foreground.</p> <p>The Regionalwert AG and its partner companies serve as a case study. It operates as a citizens' joint stock company and entrepreneurial association in the Freiburg/South Baden region. In this course, we have the opportunity to enter into direct exchange with 'regional entrepreneurs' who combine economic, ecological and social aspects in their own companies and who develop such values and effects in the Freiburg region.</p> <p>In the course, we approach the topic of entrepreneurship in a consistently transdisciplinary way. We refer to and look at entrepreneurship from a number of academic disciplines, such as economics, social and cultural sciences, psychology, history.</p>		
Examination	tba		

## 1.2 Study Area: Life Sciences

Drug Development and Regulation			
Life Sciences		Pre-Block	
Dr. Petra Lachmann ( <a href="mailto:lachmannpge@gmail.com">lachmannpge@gmail.com</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	7	00LE62S-LAS-LS0019
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Life Sciences I or II, Specialization Option I or II: Life Sciences		Advanced Life Sciences I, II, or III, Specialization I or II: Life Sciences	
Prerequisites	Introduction to Life Sciences (required)		
Format, Dates, Times and Rooms	Intensive Seminar 25.09., 9-11h, KG 1137 26.09., 9-14h, KG 1137 27.09.-30.09. (Saturday!), 9-15h, Lab at BIOS S Schänzlestraße 18, 79104 Freiburg 05.10., 9-14h, KG 1137 06.10., 9-12h, KG 1137		
Course Description	<p>What is a drug? What is an active substance? What are biologics? What is an orphan drug? How are drugs discovered? What are the potential starting points? Who decides which drug /treatment/disease to follow up? What regulations have to be fulfilled to get pharmaceuticals approved? Who are the stakeholders involved?</p> <p>In this interdisciplinary course, we are going to investigate different areas of drug development. Starting point will be a disease and how it affects the body. The molecules – receptors, enzymes, genes – that might play a role in the disease will be discussed. Then we will talk about active substances, how to identify them and how they react with the target. The active substance – a chemical-synthetic substance or a biopharmaceutical – has to be produced in a larger scale and has to be tested in cell cultures, animals and finally in humans (GLP, GMP, GCP). We will take a closer look at preclinical development and at clinical trials. We will talk about the Committee of Animal Experimentation as well as the Ethics Commission and discuss the history behind it.</p> <p>Emphasis will also be put on legal requirements for drug approval in different countries – Europe, USA – and the agencies involved. We will spend five days in the lab to learn more about requirements and the importance of SOPs (Standard Operating Procedures): how to write them and why they are important; what they should include.</p> <p>At the end of the course students will...</p> <ul style="list-style-type: none"> <li>▪ have a basic knowledge about the different steps in drug development</li> <li>▪ understand the regulations for clinical trials including the history behind animal tests and clinical trials</li> <li>▪ know about the legal requirements and the agencies involved in the approval of drugs</li> <li>▪ have an understanding of the stakeholders involved</li> <li>▪ write/discuss an SOP</li> </ul>		
Remarks	Priority for students with Life Sciences major and priority for advanced students.		
Examination	Write a Standard Operating Procedure (SOP) for the experiments conducted. Due on Nov 5, 2023		

KG Kollegiengebäude  
 AU Alte Universität  
 HS Hörsaal  
 BT Breisacher Tor

Ph Peterhof  
 HH Hermann-Herder-Straße  
 FMF Stefan-Meier-Str. 21

## 1.3 Study Area: Multiple

Pre-Course Maths & Physics			
Life Sciences, EES/ESS		Pre-Block (Oct 10-12, 2023)	
Dr. Benoit Louvel ( <a href="mailto:benoit.louvel@ucf.uni-freiburg.de">benoit.louvel@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	none (course optional)	20	00LE62S-LAS-LSEE0006
Module(s) StuPo 2015		Module(s) StuPo 2020	
none		none	
Prerequisites	Introduction to Earth and Environmental Sciences and/or Introduction to Life Sciences		
Format, Dates, Times and Rooms	Intensive Seminar Tue, 10-12h, AU 01065 Wed, 10-12h, AU 01065 Thu, 10-12h, AU 01065		
Course Description	Optional preparatory course for the semester-long course Maths and Physics providing a refresher on, arithmetic operations, fractions, exponents, geometry, equations and functions, and trigonometry. We collected a number of tasks which you should be able to solve before starting the semester-long course Maths and Physics. You can use them for self-study before, during and after this pre-course. They will be available on <a href="#">kosmic</a> , a part of ILIAS. You can log in and join the class with your ILIAS account.		
Examination	none		

Worldmaking in Freiburg			
Culture & History, EES/ESS		Pre-Block	
Nathalie Kornet ( <a href="mailto:nathaliekornet@gmail.com">nathaliekornet@gmail.com</a> ), Rosa-Lena Lange ( <a href="mailto:rosa.lena@t-online.de">rosa.lena@t-online.de</a> ), Johanna Oesinghaus ( <a href="mailto:johanna_oesinghaus@yahoo.de">johanna_oesinghaus@yahoo.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	3 SL	20	00LE62S-LAS-CHEE0003
Module(s) StuPo 2015		Module(s) StuPo 2020	
---		Senior Profile Culture & History Senior Profile EES/ESS	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar 25.-29.9. Mon-Fri, 10-15h, Ph HS 4		
Course Description	<p>Worldmaking can be understood as a practice and a philosophical project that explores the way our social worlds are reproduced and aims for alternative imaginaries of existing and becoming in the world. Over the last years, the concept of worldmaking has gained relevance as an analytical tool to make the impact of the social otherwise visible. Originally developed from critical and feminist theory, worldmaking (implicitly) aims to question dominant social structures that excluded the marginalized and challenges them by inhabiting the world in different ways.</p> <p>In this seminar, students will get acquainted with worldmaking both as a theoretical approach and as an analytical tool to understand social projects and movements. Together, we will explore sites of worldmaking in Freiburg. Throughout the theoretical part, the students will learn to distinguish between the different dimensions of worldmaking such as its historical embeddedness and its "worldliness" as well as its political element. In the subsequent, practical, on-site part, the students will be able to explore these worldmaking characteristics in selected Freiburg-based project spaces. Thereby, the following questions will be addressed: which anticolonial, feminist and anticapitalistic perspectives do we know and what do they tell us about worldmaking? Which sites of worldmaking exist in Freiburg, and what difference does it make to acknowledge their political dimension? Understanding worldmaking as a political practice of the everyday enables us, then, to apprehend our own worldmaking ability, allowing us to inhabit the world in new ways.</p> <p>By the end of the course, students will be able to</p> <ul style="list-style-type: none"> <li>▪ Identify social structures that marginalize people in different ways</li> <li>▪ Question their own positionality in social hierarchies</li> <li>▪ Approach concepts and sites of worldmaking</li> </ul>		
Remarks	Students are expected to write two short reflective texts of 600-700 words each. The first text offers the opportunity to elaborate on the student's reading experiences of two to three of the compulsory texts; this task ensures the quality of the class discussions. In addition, students write a second text guided by questions to reflect upon worldmaking, and specifically on the sites of worldmaking that we visit in Freiburg.		

## 2 Block I Courses

### 2.1 Study Area: Core

Foundational Year: Research and Presentation											
Core		Block I									
Dr. Simon Büchner ( <a href="mailto:buechner@ucf.uni-freiburg.de">buechner@ucf.uni-freiburg.de</a> ), Dr. Mila Mikalay ( <a href="mailto:mikalayeva@ucf.uni-freiburg.de">mikalayeva@ucf.uni-freiburg.de</a> ), Dr. Sabine Sané ( <a href="mailto:sabine.sane@ucf.uni-freiburg.de">sabine.sane@ucf.uni-freiburg.de</a> ), MSc. Maiara Gonçalves ( <a href="mailto:maiara.goncalves@ucf.uni-freiburg.de">maiara.goncalves@ucf.uni-freiburg.de</a> ), Dr. Ryan Plumley ( <a href="mailto:ryan.plumley@ucf.uni-freiburg.de">ryan.plumley@ucf.uni-freiburg.de</a> )											
Open to Students	Credit Points	Max. Enrollment	Course Number								
Year(s) 1	6	80	00LE62S-LAS-CO0008								
Module(s) StuPo 2015		Module(s) StuPo 2020									
---		Research and Presentation									
Prerequisites	none										
Format, Dates, Times and Rooms	<p>Lecture Mon, 14-16h, AU HS 1</p> <p>Seminars</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Group Tue and Thu, 8-10h, AU 01036a</td> <td style="width: 10%; text-align: center;">1:</td> <td style="width: 30%;">Group Tue and Thu, 10-12h, AU 01036a</td> <td style="width: 10%; text-align: center;">2:</td> </tr> <tr> <td>Group Tue and Thu, 10-12h, AU 01065</td> <td style="text-align: center;">3:</td> <td>Group Tue, 16-18, Ph 3, Thu, 16-18h, Ph 1</td> <td style="text-align: center;">4:</td> </tr> </table> <p>Final Conference (for each workgroup) Thu, Dec 7, 14-18h and Fri, Dec 8, 9-13h</p>			Group Tue and Thu, 8-10h, AU 01036a	1:	Group Tue and Thu, 10-12h, AU 01036a	2:	Group Tue and Thu, 10-12h, AU 01065	3:	Group Tue, 16-18, Ph 3, Thu, 16-18h, Ph 1	4:
Group Tue and Thu, 8-10h, AU 01036a	1:	Group Tue and Thu, 10-12h, AU 01036a	2:								
Group Tue and Thu, 10-12h, AU 01065	3:	Group Tue, 16-18, Ph 3, Thu, 16-18h, Ph 1	4:								
Course Description	<p>Course Outline</p> <p>“The world has problems while universities have disciplines.” Gordon Wilson (The Open University, Milton Keynes, UK)</p> <p>Complex problems require profound thinking from different points of view, sometimes a combination of methods, and always educated sagacity. This course will introduce students to different approaches of dealing with complex problems, not only different scholarly disciplines, but also with respect to the methods used in and across these disciplines. It will face students with questions on different forms of knowledge and will discuss in particular what scholarly knowledge is and how it differs from other forms of knowledge.</p> <p>At the same time students will acquire skills of scholarly work such as finding relevant literature from different sources, reading and understanding scholarly texts, and managing references. In addition, they will practice the presentation of a topic in a limited amount of time to a specific audience. It will also provide the starting point for the training in academic writing, which will be complemented by the course “English Academic Writing”.</p>										
Remarks	This course is part of the Foundational Year. First year students register for this course during the Welcome Week. Registration is required for one of the seminars only.										
Examination	Annotated bibliography (due date as announced in the seminar) and final presentation on Dec 7 or 8, 2023 (latest examination date).										

## 2.2 Study Area: Life Sciences

Laboratory Methods in Cell and Molecular Biology			
Life Sciences		Block I	
Dr. Juncal Fernandez Orth ( <a href="mailto:juncal.fernandez.orth@uniklinik-freiburg.de">juncal.fernandez.orth@uniklinik-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	8	00LE62S-LAS-LS0039
Module(s) StuPo 2015		Module(s) StuPo 2020	
Methods (Life Sciences) Specialization I or II: Life Sciences		Methods I or II (Life Sciences) Specialization I or II: Life Sciences	
Prerequisites	Basic Chemistry and Biochemistry and Cell Biology (required)		
Format, Dates, Times and Rooms	Seminar: Thu, 12-14h, KG 1224 Lab: Fri, 13:30-17:00 (ZTZ-Zentrum für Translationale Zellforschung, Laboratory 2 OG. 017, Breisacher Str 115, 79106 Freiburg)		
Course Description	In this course, students will have the opportunity to learn and perform essential cell and molecular biological laboratory techniques in a world-renowned research institute within the Medical Center – University of Freiburg. In small groups of two or three, students will be able to learn and subsequently execute essential current techniques extensively used in research and diagnostics, including bacterial cloning, genomic and plasmid DNA isolation, PCR, restriction digest, gel electrophoresis, protein isolation, as well as mammalian cell culture. All practical lessons will be preceded by a theoretical lecture, in which underlying fundamentals will be explained and suitable protocols will be provided. After having performed the experiments, the students will learn how to properly analyze the acquired data which will allow them to critically examine their results and discuss troubleshooting aspects of the experiments. At the end of the course, the students will learn not only how to design and perform their own experiments, but also how to critically evaluate the results obtained.		
Remarks	Priority for students with Life Sciences major.		
Examination	Lab-book (35%) to be submitted on Feb 18, 2024, plus a formal written exam (35%) at the end of the class and a presentation during class (30%). Details will be announced in the first course session.		
Recommended Reading	Wilson and Walker's "Principles and Techniques of Biochemistry and Molecular Biology", 8th edition (6th edition available in the university library: TM 2020/1186)		

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 AU Alte Universität  
 HS Hörsaal  
 BT Breisacher Tor

Ph Peterhof  
 HH Hermann-Herder-Straße  
 FMF Stefan-Meier-Str. 21

**2.3 Study Area: Multiple**

Qualitative Research Methods			
Governance, EES/ESS, Life Sciences		Block I	
Ermelinda Kanushi ( <a href="mailto:ermelinda.kanushi@ucf.uni-freiburg.de">ermelinda.kanushi@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	24	00LE62S-LAS-CHEEGO0003
Module(s) StuPo 2015		Module(s) StuPo 2020	
Quantitative and Qualitative Methods		Methods (Governance) Methods II (EES/ESS) Methods (Life Sciences)	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Tue, 8-12h, KG 1236 Thu, 8-12h, KG 1140		
Course Description	<p>Qualitative Research Methods is a course provided to students from different majors for the Block I. In this dynamic and comprehensive course, students will delve into the world of qualitative methods in political and social sciences, exploring the fundamental tools and techniques employed in qualitative research.</p> <p>This course aims to equip students with the knowledge and skills necessary to conduct in-depth investigations, analyze complex social phenomena, and gain valuable insights into political and social processes. During this course students will be able to design effective research projects using qualitative research methods principles.</p> <p>Furthermore, we will explore selected data collection methods such as interviews, focus groups, participant observation and document analysis. Our general research design approach will be case studies.</p> <p>Additionally, we will address ethical challenges and principles involved in qualitative research emphasizing the importance of informed consent, confidentiality, and the protection of research subjects.</p>		
Remarks	Governance and EES/ESS students get priority.		
Examination	<p>The exact examination format depends on the module/Major.</p> <p>Written Assignments (incl. final paper) and a presentation or a written presentation summary.</p> <p>Final Assignment deadline: 05.03.2024.</p>		
Recommended Reading	Hennink, M., Hutter, I., & Bailey, A. (2020). Qualitative Research Methods. Sage.		

### 3 Block II Courses

#### 3.1 Study Area: Multiple

Being Human: Investigations in Ethical Naturalism			
Elective		Block II	
Gerad Gentry ( <a href="mailto:gerad.gentry@gmail.com">gerad.gentry@gmail.com</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 1-2	6	20	00LE62S-LAS-CO0085
Module(s) StuPo 2015		Module(s) StuPo 2020	
Elective Joker		Elective Joker	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Fri, 8-12h, KG 1137		
Course Description	<p>The aim of this course is to foster an understanding of the long tradition of naturalism in metaphysical questions about what it is to be human. We will ethical questions about the normativity of human actions and what it might mean to flourish as human beings.</p> <p>The course will focus on the ethical naturalism of Aristotle and its reception in contemporary forms of naturalist ethics as articulated by some of the most influential ethicists of the twentieth and twenty-first centuries, such as Philippa Foot, Rosalind Hursthouse, Martha Nussbaum, and Cora Diamond.</p>		
Remarks	First year students have priority.		
Examination	<p>SL – Pass/Fail: regular attendance and regular active participation in discussion.</p> <p>Presentations: Students will prepare a 15-minute presentation on a topic of their choosing from the course readings.</p> <p>Final Papers of 5,000 words.</p>		

Climate Change and Biodiversity			
EES/ESS, Governance		Block II	
Dr. Benoit Sittler ( <a href="mailto:benoit.sittler@nature.uni-freiburg.de">benoit.sittler@nature.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-GOEE0004
Module(s) StuPo 2015		Module(s) StuPo 2020	
Human and the Environment Specialization Option I or II: EES/ESS Specialization Option: Governance I or II		Human and the Environment I or II, Specialization Option I or II: EES/ESS, Specialization Option: Governance,	
Prerequisites	Introduction to Environmental and Sustainability Sciences, Introduction to Earth and Environmental Sciences or Introduction to Governance		
Format, Dates, Times and Rooms	Seminar Tue, 8-12h, AU 01036a Thu, 8-12h, AU 01036a		
Course Description	<p>Climate change and biodiversity are among the major environmental issues modern societies face. They call for governance solutions both on global and local levels.</p> <p>In this course, you will first discover methodological approaches (such as proxies) to the monitoring and assessment of past and present changes in biodiversity. We will consider in detail examples illustrating these approaches looking into, namely, an ongoing long-term project in Greenland, which will provide you with unique insights into effects of climate change on biodiversity. You will understand the basic principles and dynamics behind the climate variability and the link to biodiversity.</p> <p>In the second part of the course we will focus on governance. We will discuss how issues like climate change and loss of biodiversity find their way onto political agendas. We will explore standard-setting mechanisms, especially in respect to the measurement of climate change and its effect on the biodiversity. Furthermore, we will analyze regulatory policies introduced and implemented on the international, national, and local levels.</p>		
Examination	tba		

Humans of Freiburg			
Elective		Block II	
Janet Bean, PhD ( <a href="mailto:jbean@uakron.edu">jbean@uakron.edu</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 1-2	6	20	00LE62S-LAS-CO0084
Module(s) StuPo 2015		Module(s) StuPo 2020	
Elective Joker		Elective Joker	
Prerequisites			
Format, Dates, Times and Rooms	Seminar Tue, 9-12h, AU 01065 Thu, 9-12h, AU 01065		
Course Description	This seminar is designed for first-year students who want to further develop their skills in qualitative research, critical reading, and writing in English. This course invites students to explore the intersection of academic research and public writing. How can popular media forms such as podcasts, videos, and blogs bring academically researched topics to public audiences? How might methodological pluralism—including visual arts and storytelling—deepen and enhance academic research? Using the photo blog “Humans of New York” as a starting point, students will develop their own digital research projects that engage themes and issues relevant to the people of Freiburg. This project will involve interviewing and working with academic sources from multiple disciplines. Students can expect to complete short weekly assignments and create digital content for a website. (Note: We will be working with website templates, so no prior technology experience is necessary.)		
Remarks	First year students have priority.		
Examination	tba		

Population, Society & Politics: Introduction to Political Demography			
Governance, EES/ESS		Block II	
Kira Renee Kurz ( <a href="mailto:kira.kurz@politik.uni-freiburg.de">kira.kurz@politik.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-GO0078
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Governance I and II		Advanced Governance I and II, Humans and the Environment I or II	
Prerequisites	Introduction to Governance/Introduction to ESS		
Format, Dates, Times and Rooms	Seminar Tue, 8-12h, KG 1019 Thu, 8-12h, KG 1019		
Course Description	<p>This course is a seminar, based on weekly readings, discussions, group work and individual research. The term Political Demography denotes the intersection of political science and population studies. It is thus the study of the relationships between politics and population change. Population change itself is driven by classic demographic mechanisms such as mortality, fertility and migration.</p> <p>The course consists of three thematic blocks:</p> <ol style="list-style-type: none"> <li>1. The first block consists of demographic basics, methodological aspects and theoretical perspectives. We will especially focus on demographic concepts such as fertility, mortality, migration and the demographic transition.</li> <li>2. The second block takes a relatively “static” perspective by focusing on policies &amp; conflicts, but not on long-term developments. We will concentrate on: <ul style="list-style-type: none"> <li>▪ the intersection of reproduction and politics,</li> <li>▪ demography, conflicts and violence,</li> <li>▪ the effect of migration on public opinion and voting behavior and</li> <li>▪ migration governance.</li> </ul> </li> <li>3. The third block focuses on more long-term developments: we will look at: <ul style="list-style-type: none"> <li>▪ the relationships between democracy and demography,</li> <li>▪ ageing societies (welfare states, climate change policies and generational cleavages) and</li> <li>▪ demography as a politicized discipline (the meta-perspective).</li> </ul> </li> </ol>		
Examination	<p>Requirements: Active and regular course participation.</p> <p>Pass/fail: Preparation of the literature, group-work based presentation on a country case.</p> <p>Graded examination: Review Essay by 28.01.24, midnight and Argumentative Essay by 25.02.24. midnight</p>		
Recommended Reading	<p>Goerres/Vanhuyse (2021): Global Political Demography (Open Access): <a href="https://link.springer.com/book/10.1007/978-3-030-73065-9">https://link.springer.com/book/10.1007/978-3-030-73065-9</a></p> <p>Financial Times (2023): Baby bust: Italy faces a ‘demographic winter’: <a href="https://www.ft.com/content/44ccfd0c-b2bc-4912-bc90-26c6c95a9ba0">https://www.ft.com/content/44ccfd0c-b2bc-4912-bc90-26c6c95a9ba0</a></p>		

## 4 Semester long Courses

### 4.1 Study Area: Core

Foundational Year: English Academic Writing			
Core		Semester	
Dr. Sebastian Gehart ( <a href="mailto:sebastian.gehart@ucf.uni-freiburg.de">sebastian.gehart@ucf.uni-freiburg.de</a> ), Dr. Steven Randall ( <a href="mailto:steven.randall@ucf.uni-freiburg.de">steven.randall@ucf.uni-freiburg.de</a> ) and colleagues			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 1	6	80	00LE62S-LAS-CO0013
Module(s) StuPo 2015		Module(s) StuPo 2020	
--		English Academic Writing	
Prerequisites	none		
Format, Dates, Times and Rooms	Lecture Mon, 8-10h, AU HS 1 Seminar WG 1: Tue and Thu, 12-14h, hybrid (SR)                      WG 2: Tue and Thu, 12-14h, online (EPI-CUR) WG 3: Tue, 14-16h, AU 01036a                      WG 4: Tue and Thu, 16-18h, KG 1134 Thu, 12-14h, AU 01065 (SG)                      (SG) WG 5: online (tba EPICUR)		
Course Description	<p>English for Academic Writing (EAW) is designed to introduce students to the essentials of English academic writing culture. The objective of this course is to support students in a regular practice of critically reading and writing academic texts across genres. One overarching goal of the module is to explore how writing is not a passive medium of communication, but a social activity that involves many actors and has multiple effects in the world.</p> <p>In Block I of this course, we will identify academic discourse and the features of academic writing. Students will learn how to write structured paragraphs and how to present their research — in the form of summary, paraphrase, and quotation — with academic integrity.</p> <p>In Block II, we will explore critical reading and writing with a focus on the genres review and essay. Students will extend their recognition of argumentation by examining the specific anatomy of the persuasive essay. Building on the skills and contents developed in Research and Presentation, each student will craft an essay aimed at compellingly convincing the reader of the merits of its claims.</p> <p>Upon successful completion of this course, students should be able to:</p> <ul style="list-style-type: none"> <li>▪ Write persuasively and critically</li> <li>▪ Identify, analyse, and evaluate academic texts</li> <li>▪ Use outside sources with academic integrity</li> <li>▪ Successfully proofread and edit their seminar papers</li> </ul>		
Remarks	This course is part of the Foundational Year. First year students register for this course during the Welcome Week.		
Examination	Student will compose several pieces of writing; the final assignment will be due on: tba.		

Foundational Year: Principles of Responsible Leadership			
Core		Semester	
Dr. Simone Kraiss ( <a href="mailto:simone.kraiss@sli.uni-freiburg.de">simone.kraiss@sli.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 1-2	6	80	00LE62VS-LAS-CO0026
Module(s) StuPo 2015		Module(s) StuPo 2020	
---		Responsibility and Leadership I	
Prerequisites	none		
Format, Dates, Times and Rooms	Plenary Mon, 12-14h, AU HS 1 or Wed, 8-10h, AU HS 1 Workgroups: WG1: Wed, 8-10h, AU 01036a                      WG2: Wed, 8-10h, AU 01065 WG3: Wed, 10-12h, AU 01036a                      WG4: Wed, 10-12h, AU 01065		
Course Description	<p>We experience an increasing dynamic and complexity of daily life, a variety of lifestyles and beliefs about what is right or wrong which make the task of leading responsibly more difficult, complex, and uncertain. In addition to this, grand challenges like global warming, rising inequality and global migration put pressure on every one of us to contribute to a sustainable future for people and the planet.</p> <p>This foundational course introduces essential principles of responsible leadership, understood broadly as a multifaceted approach to constructive action in professional life and beyond. Our comprehensive treatment of the term is reflected in different parts, each presenting responsibility and leadership from a different angle.</p> <p>At the same time, this course will introduce a foundation and practical guideline for working dynamically and efficiently in groups.</p> <p>Based on this input, students will develop their own project which will be presented at the end of this first semester.</p>		
Remarks	This course is part of the Foundational Year. First year students register for this course during the Welcome Week.		
Examination	Regular attendance and active work in the project groups. Students will organize the presentation of the projects at the end of the semester.		





Organizational Psychology			
Core		Semester	
Luke Brooks-Shesler, Ph.D. ( <a href="mailto:lshesler@colby.edu">lshesler@colby.edu</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-CO0083
Module(s) StuPo 2015		Module(s) StuPo 2020	
Responsibility and Leadership II		Responsibility and Leadership II	
Prerequisites			
Format, Dates, Times and Rooms	Seminar Mon, 8-10h, AU 01036a Wed, 8-10h, KG 1142		
Course Description	<p>This course gives you an overview of the field of Industrial / Organizational Psychology, which is psychology applied to the world of work. It explores the assessment of individual differences in cognitive, physical and interpersonal abilities as they relate to measurement of work performance, employee selection, training and development methods, and development of organizational methods for improved motivation, job satisfaction, leadership and organizational effectiveness.</p> <p>The course content is organized around the following six questions:</p> <ol style="list-style-type: none"> <li>1. How do I/O psychologists know what they know?</li> <li>2. How do we hire the right people for the job?</li> <li>3. How do we know whether people are doing the job well and how do we use that information to improve their performance over time?</li> <li>4. Once people are hired, how do we train them to do the job well?</li> <li>5. How do we ensure that our best employees stay?</li> <li>6. How do we get groups and teams to work well?</li> </ol> <p>Learning Objectives</p> <ul style="list-style-type: none"> <li>▪ Obtain a basic understanding and knowledge of the conceptual and methodological issues involved in Industrial / Organizational Psychology.</li> <li>▪ Obtain a basic understanding and knowledge of the specific content areas, such as Motivation, Performance, Selection, Training and others.</li> <li>▪ Describe the ways in which Psychologists conduct research in Industrial / Organizational Psychology.</li> </ul>		
Examination	tba		
Recommended Reading	P. Levy (2020), Industrial/Organizational Psychology: Understanding the Workplace (6th Edition), Worth Publishers.		

Who Am I? A Multidisciplinary Expedition of Human Identity			
Core		Semester	
Dr. Simone Kraiss ( <a href="mailto:simone.kraiss@sli.uni-freiburg.de">simone.kraiss@sli.uni-freiburg.de</a> )			
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 II		Responsibility and Leadership II	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Tue, 8-12h, KG 1442		
Course Description	<p>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?</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	Written assignment due in the last week of the semester.		

**4.2 Study Area: Culture and History**

From Eurovision to the Fall of the Berlin Wall: a European Media History of Everyday Life in the Post-1945 World Order			
Culture & History		Semester	
Dr. Richard Legay ( <a href="mailto:richard.legay@outlook.com">richard.legay@outlook.com</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-CH0072
Module(s) StuPo 2015		Module(s) StuPo 2020	
Culture & History Since the Early Modern Period Advanced Culture & History I or II or III		History: Modern or Contemporary Culture & History I or II or III	
Prerequisites	Introduction to Culture and History		
Format, Dates, Times and Rooms	Seminar Tue, 10-12h, KG 1227 Thu, 10-12h, Wilhelmst. 26, R 01014 (on 01.02.2024 in KG 1140)		
Course Description	<p>How did people in Europe live their everyday life during the global changes and tensions that followed 1945? How were the Cold War, the decolonisation period, and European construction lived and perceived at home? What was the impact of media in reporting and shaping daily life and major events throughout the period? How are they remembered today?</p> <p>By following this course at the crossroads of history and media studies – with a hint of memory and cultural studies – students will learn about contemporary history, the Cold War, the decolonisation period, and European construction, as well as daily life in Europe after 1945. We will approach and discuss a wide-range of topics, including popular culture, propaganda, gender, media events, entertainment, identity and memory. Throughout the course we will alternate between theoretical sessions, where we discuss key theories and texts written by historians as well as media and cultural scholars, with practical ones, where we discover and apply various methods (taken from history, media studies, etc.) to analyse a wide-range of historical, audiovisual, and digital-born sources. We will move through the course sessions in a thematic and chronological order which will give us the opportunity to approach many different periods, topics, up to the ways our current societies remember the past</p>		
Examination	tbd		

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 BT Breisacher Tor

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 HH Hermann-Herder-Straße  
 FMF Stefan-Meier-Str. 21

Historical Slavery and the Freedom of Species: Is Animal Liberation the Next Logical Step?			
Culture & History		Semester	
Dr. Javier Francisco ( <a href="mailto:javier.francisco@grk2571.uni-freiburg.de">javier.francisco@grk2571.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-CH0071
Module(s) StuPo 2015		Module(s) StuPo 2020	
Culture & History Up to the Early Modern Period Advanced Culture & History I or II or III		History: Ancient, Medieval, or Early Modern Culture & History I or II or III	
Prerequisites	Introduction to Culture and History		
Format, Dates, Times and Rooms	Seminar Tue, 12-14h, KG 1142 Thu, 12-14h, KG 1140		
Course Description	<p>The belief in “moral progress” is a recurrent theme in our society. There are only few historical developments that are seen as moral watersheds moments in human history, such as the abolition of slavery in the 19th century. But have we really overcome the structures of oppression or have we merely redrawn the line between different groups – humans and non-humans?</p> <p>This is where our course comes in: We examine slavery since the 16<sup>th</sup> century while focusing on the European colonies in the Americas. Why did Europeans (re)introduce slavery on such a massive scale, how did they argue and justify their actions and why did most people accept this new socio-economic reality? We analyze the particular abolitionism (led by the Spanish in the 16th century) and the universal abolitionism (spear-headed by the British in the late 18th and early 19th century) while accounting for local, colonial actors. We will discuss the reasoning for abolishing slavery and focus on “moral”, religious/philosophical, legal, political and economic factors. Herein, we will focus on the rationalization of violence, and the objectification of life forms and their place within capitalist economies.</p> <p>Based on our discussions and historical knowledge, we will take our course to the next level by comparing our current treatment of non-human animals, particularly in factories, with structural thinking and the application of violence of slavery. Depending on the interests of our group, we might also discuss the following topics: black veganism, feminism and references to slavery, legal personhood for non-humans (such as apes and dolphins), how concepts/words influence our debates (e.g., the artificial distinction between humans and animals) and clean meat as a technological alternative.</p> <p>The course is therefore designed to encourage critical reflection on the structural thinking of slavery, applying historical knowledge to our current situation and to stimulate intellectual out-of-the-box thinking.</p>		
Remarks	<p>Expectations: reading load of ca. 40 pages/week (including historical sources, newspapers, sociological and psychological studies, as well as legal texts), active participation in our discussions and willingness to question one’s own world view.</p> <p>Although mostly in presence, the course also includes asynchronous e-learning activities via ILIAS. We will also watch documentaries and movies and have in-depth discussions based on our reader.</p>		
Examination	tbd		

Theory of History			
Culture & History		Semester	
Dr. Ryan Plumley ( <a href="mailto:ryan.plumley@ucf.uni-freiburg.de">ryan.plumley@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-CH0002
Module(s) StuPo 2015		Module(s) StuPo 2020	
History as a Topic of Academic Inquiry		Theory of History	
Prerequisites	Introduction to Culture and History		
Format, Dates, Times and Rooms	Seminar Mon, 8-10h, KG 1019 Wed, 8-10h, KG 1019		
Course Description	<p>All human groups engage with the past, with their history. The past is used to sustain identities, to legitimate institutions, and to justify action in the present and future. Through the informal mechanisms of individual and collective memory and through the formal memorialization of states, churches and other authorities, the past is selectively appropriated for social, political, and cultural needs.</p> <p>Some human groups have also dedicated effort to systematic study of the past and to recording it in historiography, written texts about the past. Amongst the ancient Greeks, Herodotus and Thucydides initiated a genre of writing called "historia", by which they meant "inquiry" or "investigation," an accounting of the past using verifiable information. Since then, ancient Roman historians, the chroniclers of monarchical dynasties around the world, and other expert groups have written texts that served as authoritative knowledge of the past in various contexts.</p> <p>In the modern world this specialized field of study is undertaken by a professionalized academic discipline: History. Beginning in the 19th century, especially in Germany, the scholarly or scientific (wissenschaftlich) study of the past coalesced around the attempt to provide reliable and verifiable knowledge about the past according to the standards of logic, proof, and secular ontology that guided other fields of inquiry. Since then, the academic discipline of History has spread around the world and professional historians enjoy considerable authority in deciding how the past will be understood and appropriated by others: through their books, through their guidance of school curricula, and through their social status as experts of the past.</p> <p>The primary goal of this course is to explore modern History understood as methodologically rigorous research and judiciously selective reconstruction of the past in writing. The course is designed to develop students' specifically theoretical thinking about history and historiography, that is, in reference to problems and questions in historical research that cannot be resolved empirically or methodologically.</p>		
Examination	tbd		

The Right (Not) to Know			
Culture and History		Semester	
Dr. Melanie Altanian ( <a href="mailto:melanie.altanian@ucf.uni-freiburg.de">melanie.altanian@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s)	6	20	00LE62S-LAS-CH0070
Module(s) StuPo 2015		Module(s) StuPo 2020	
Philosophy Advanced Culture & History I, II or III		Philosophy Culture & History I, II or III	
Format, Dates, Times and Rooms	Seminar Mon, 16-18h, AU 01065 Wed, 16-18h, KG 1036		
Course Description	<p>Every people has a right to know the truth about past events concerning the perpetration of heinous crimes and about the circumstances and reasons that led, through massive or systematic violations, to the perpetration of those crimes. Children have a right to know who their (biological) parents are. Patients have a right to know the results of their medical tests and the right to be informed about the risks and benefits of a treatment or intervention; but also, a conditional right not to know their genetic makeup and hence refuse access to their genetic information. How do we make sense of this tension between the right to know and the right not to know? What is the normative justification of these rights and what do they entail?</p> <p>In her recent book, <i>The Right to Know: Epistemic Rights and Why We Need Them</i>, Lani Watson introduces the framework of “epistemic rights” to account for a distinct class of rights to goods such as knowledge, information and truth. Even though such rights abound, we usually do not frame them in terms of epistemic rights. In this seminar, we critically explore the potential of Watson’s rights-based framework and discuss epistemic rights in relation to case studies across medical, political and legal contexts.</p> <p>We will start with a close reading of <i>The Right to Know: Epistemic Rights and Why We Need Them</i> to get a basic understanding of the central terms involved, namely epistemic rights, epistemic duties and epistemic harms resulting from epistemic rights violations. We will then compare and contrast Watson’s framework with interdisciplinary work on the right to ignore particularly prevalent in medical contexts, as well as critical work in social epistemology on ignorance, epistemic vices and epistemic injustice, bringing epistemic rights into conversation with the ethics of knowledge and ignorance.</p>		
Examination	The final assessment is a term paper (3.000–4.000 words) due electronically by 15 March 2024. Please discuss the topic with me before you start writing; a paper exposé will be due by February 16 (the last week of the term will be dedicated to this).		

The World as Sound			
Culture & History		Semester	
Dr. Johanna Gampe ( <a href="mailto:johanna.gampe@ucf.uni-freiburg.de">johanna.gampe@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-CH0056
Module(s) StuPo 2015		Module(s) StuPo 2020	
Art, Literature, Aesthetics, or Music Advanced Culture & History I or II or III		Culture: Arts Culture & History I or II or III	
Prerequisites	Introduction to Culture and History		
Format, Dates, Times and Rooms	Seminar Mon, 10-12h, Ph HS 2 Wed, 10-12h,		
Course Description	<p>Shifting the perspective from the visual focus to the sonic side of life allows us a different understanding of our world in its complexity, volatility, and ambiguity. Moreover, the features of mediated sound deepen our understanding of both human perception and digitality. "Think with your ears. Make listening your culture." These are the slogans of the relatively new Master's degree in Sound Studies at the UDK Berlin. Likewise, in this course we will look at the world through sound and listening.</p> <p>In the arts, the so-called Sonic Turn reflects a wider cultural awareness of contemporary reality. The spectrum reveals fascinating artistic genres in their own right, such as contemporary musical composition and sound installations, but also science topics such as sonification or sound pollution.</p> <p>On the practical side, we will learn to produce our own sonic creations by means of simple audio tools and equipment. No matter your previous knowledge, we gradually built up creative and technical competencies starting with soundscapes and the sonification of a chosen poem, editing music, noises and loop samples, producing a radio teasers and creating an audio drama as a group work.</p> <p>In addition to instructed peer feedback in the course, each participant receives a coaching session about their practical and creative work. The latter won't be graded in order to provide freedom and flexibility. Instead a presentation in class is graded, together with a written reflexion at the end of the term.</p> <p>The seminar pursues a truly interdisciplinary approach to the world of sound through arts, science, and the humanities. The study of both theoretical approaches and practical examples will be at the center of this course, including presentations, discussions and peer-feedback. In summary, both academic and practical methods structure the course, aiming for advanced media competence, creative self-confidence and cultural horizons.</p>		
Examination	tbd		

**4.3 Study Area: Earth and Environmental Sciences / Environmental and Sustainability Sciences**

<b>Wicked Problems in Socio-Economic Systems – An Introduction to System Dynamic Modelling</b>			
EES/ESS, Governance		Semester	
Stefanie Klose ( <a href="mailto:stefanie.klose@ucf.uni-freiburg.de">stefanie.klose@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-EE0033-E011
Module(s) StuPo 2015		Module(s) StuPo 2020	
Global Cycles of Matter and Materials, Advanced Governance I or II		Sustainability Sciences, Advanced Governance I or II	
Prerequisites	Introduction to Earth and Environmental Sciences/Introduction to Environmental and Sustainability Sciences or Introduction to Governance		
Format, Dates, Times and Rooms	Seminar Tue, 12-14h, KG 1134 Thu, 12-14h, KG 1134		
Course Description	<p>Problems that cannot be solved with existing modes of inquiry and decision-making are often called "wicked problems". They usually represent complex issues for which no final solution exists, since any resolution generates further issues. In the first part of this course, we will explore why many sustainability issues are wicked problems and look into some examples of resource use and the associated challenges. You will get to know methods used for system thinking and how these methods can help us to understand the underlying issues. In the final phase of this course you will apply these methods on sustainability problems of your choice and try to find solutions while exploring the strength and shortages of these solutions.</p> <p>Learning goals:</p> <ol style="list-style-type: none"> <li>1. Students understand stock and flow dynamics and apply them in socio-economic systems</li> <li>2. Students analyze different sustainability problems and the underlying conflicting dilemmas</li> <li>3. Students explore different aspects of sustainable consumption and production</li> <li>4. Students understand the basic principles of causal loop diagrams and can apply the concept to real-world sustainability problems</li> </ol>		
Remarks	Students majoring in EES/ESS have priority.		
Examination	Form of assessment: The final grade will be based on the mid-term assignment and the final essay due on 23.02.2024.		

4.4 Study Area: Governance

Economic Behavior and Strategic Decisions			
Governance		Semester	
Dr. Steffen Minter ( <a href="mailto:steffen.minter@vwl.uni-freiburg.de">steffen.minter@vwl.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-GO0078
Module(s) StuPo 2015		Module(s) StuPo 2020	
Economics, Advanced Governance I and II		Economics, Advanced Governance I and II	
Prerequisites	Introduction to Governance, DNI		
Format, Dates, Times and Rooms	Lecture: Wed, 10-12h, KG 1119 Tutorial (from October 24): Tue, 14-16h, HS 3118		
Course Description	<p>This course introduces you to tools for rational and strategic thinking to improve your decision-making. It alerts you to fallacies, biases, and cognitive illusions we are prey to. In this course, we explore the characteristics of economic behavior and tools for making better decisions in different environments. In the first part of the course, we learn about three normative models of decision-making (expected utility theory, game theory, Bayesian inference). The second part then looks at misconceptions and deviations from the normative models that occur in actual decisions – such as those caused by cognitive biases that speed up the decision process and reduce cognitive load. We also look at the criticism of behavioral economics and how it is affected by the replication crisis in the empirical and experimental sciences.</p> <p>Some central questions that you can expect to answer upon completing the course are:</p> <ul style="list-style-type: none"> <li>▪ When can we expect humans to behave rationally and when do we see systematic deviations from rationality?</li> <li>▪ How can opinions, policies and practices be made more rational?</li> <li>▪ How does the existence of uncertainty and risk affect a rational decision?</li> <li>▪ How to act when individual decisions are interrelated and when there are strategic interactions?</li> </ul> <p>This course offers one lecture per week and one tutorial. The lecture introduces the conceptual content. In tutorials, students present examples of real-word decision-making against the background of the concepts. Examples and case studies come from the books "Freakonomics" and "Superfreakonomics" among others.</p>		
Examination	Written examination (70%) and a case study presentation (30%).		
Recommended Reading	The war on rationality   Steven Pinker: <a href="https://youtu.be/qdzNKQwkp-Y">https://youtu.be/qdzNKQwkp-Y</a> How do smart people make smart decisions?   Gerd Gigerenzer   TEDxNorrköping: <a href="https://youtu.be/Lg7G8TMe_A">https://youtu.be/Lg7G8TMe_A</a> Daniel Kahneman: Thinking Fast vs. Thinking Slow   Inc. Magazine: <a href="https://youtu.be/PirFrDVRBo4">https://youtu.be/PirFrDVRBo4</a> The Economist: Prison breakthrough: <a href="https://www.economist.com/schools-brief/2016/08/20/prison-breakthrough">https://www.economist.com/schools-brief/2016/08/20/prison-breakthrough</a> Normative Theories of Rational Choice: Expected Utility: <a href="https://plato.stanford.edu/entries/rationality-normative-utility">https://plato.stanford.edu/entries/rationality-normative-utility</a> Elementary Bayesian Inference: <a href="https://www.anesi.com/bayes.htm">https://www.anesi.com/bayes.htm</a>		

European Union: Policies and Legal Framework			
Governance		Semester	
Dr. Stoyan Panov ( <a href="mailto:stoyan.panov@ucf.uni-freiburg.de">stoyan.panov@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-GO0084
Module(s) StuPo 2015		Module(s) StuPo 2020	
Regional Governance		Regional and Area Studies	
Prerequisites	Introduction to Governance		
Format, Dates, Times and Rooms	Seminar Mon, 16-18h, AU 01036a Wed, 16-18h, AU 01036a		
Course Description	<p>The course focuses on contemporary challenges that the European Union is facing and offers an overview of the competences of the EU and current developments.</p> <p>Some questions that we will address:</p> <ul style="list-style-type: none"> <li>▪ How do the EU institutions such as the Commission, the Council, the European Council, and the European Parliament function and make policies?</li> <li>▪ Is there an alleged democratic deficit of the EU institutions?</li> <li>▪ Will there be an EU of "two speeds"?</li> <li>▪ What is the chance of further enlargement of the EU in the Western Balkans, Ukraine, or Turkey in light of the recent rise of populist parties in the EU?</li> <li>▪ Is the EU a harbinger in data privacy protection on international level?</li> <li>▪ What is the role of the EU in responding to climate change?</li> <li>▪ What can the EU do in terms of energy security and common foreign and security policy in light of the war in Ukraine?</li> <li>▪ What are the latest developments in the Area of Freedom, Security and Justice with respect to migration policies?</li> </ul> <p>This is a sample of issues that we will address in the course.</p> <p>Students may be divided into small groups and may be required to deliver short analytical presentations or outlines on written material and media sources related to the topics covered in the course. Group activities and presentations are to be expected as the course will be highly interactive. Simulations of the proceedings in EU institutions may take place in the course. A study visit is also possible (dates tba).</p>		
Remarks	The course is highly recommended to 2nd-year Governance students, who have priority in registering.		
Examination	<p>Form of assessment: The final grade will be based on analytical or research paper(s)/ policy paper(s) and presentation(s).</p> <p>Final component of the examination is planned to be due on 23.02.2024.</p>		
Recommended Reading	<p>For an overview of EU policies: "Europe in 12 Lessons".</p> <p>For the latest news from Brussels and current events and developments in the EU, you can check the free-access Politico as well as the daily newsletter Brussels Playbook.</p> <p>An introductory academic text on the topic of the functioning of the EU: D. Kenealy, J. Peterson, and R. Corbett, <i>The European Union: How Does It Work?</i> (OUP, 5th edition)</p>		

International Law and International Security			
Governance only		Semester	
Dr. Stoyan Panov ( <a href="mailto:stoyan.panov@ucf.uni-freiburg.de">stoyan.panov@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3,4	6	18	00LE62S-LAS-GO0008
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option I and II: Governance, Advanced Governance III		Specialization Option: Governance, Research in an Area of Governance	
Prerequisites	Introduction to Governance, see also the requirements for senior Governance courses in the STUPO		
Format, Dates, Times and Rooms	Seminar Mon, 10-12h, Ph HS 1 Wed, 10-12h, KG 1032		
Course Description	<p>The course introduces students to an interdisciplinary exploration of International Law and International Security. While it provides students with the opportunity to develop knowledge and understanding of fundamental principles of International Law, the course also examines how international actors coexist, interact and make law and apply the principles governing international legal relations and international security. The thread of international security in the fields of human rights, the law of armed conflict (war), terrorism and cybersecurity among other relevant topics is examined. Essential topics of International Law such as the identification and function of actors in the international legal order and their role in security system (States, Statehood, International Organizations), the creation of international law (Sources of International Law such as treaties, custom, and general principles), and the consequences of breaches of International Law are analyzed. Related to the concept of International Security, discussions will focus on recent developments such as international interventions in armed conflicts, Responsibility to Protect, migration, law enforcement mechanisms against terrorism, collective security, the legal aspects of the threat or use of force, function of human rights law, nuclear proliferation regime, among others. The emphasis is on dealing with classical debates on International Law as well as novel approaches to the topic through the prism of International Security. By examining materials and their interaction with current security-related issues such as the war in Ukraine, students shall gain competences in analyzing contemporary developments. In order to appropriately examine the topics of International Law and security studies, the material includes general introduction to fundamental techniques and methods of legal and security studies research and interpretation.</p> <p>The course will employ concrete examples, case studies and interactive exercises in order to contextualize the approaches and tools, and highlight linkages between theory and practice in the areas of International Law and International Security. The participants will gain skills to analyze fact problem sets and apply acquired knowledge in various case scenarios. Students may be required to participate in group activities and presentation projects.</p>		
Examination	Form of Assessment: Written assignments, research paper/research design analysis, and/or presentations. Last component of the grade is planned to be due on 28.02.2024.		
Recommended Reading	B. Buzan (1997), Security: A New Framework for Analysis.		

Western Political Theory			
Governance		Semester	
Ermelinda Kanushi ( <a href="mailto:ermelinda.kanushi@ucf.uni-freiburg.de">ermelinda.kanushi@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-3	8	26	00LE62S-LAS-GO0013
Module(s) StuPo 2015		Module(s) StuPo 2020	
none		Political Theory	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Mon, 10-12h, KG 1134 Wed, 10-12h, FMF HS 01011		
Course Description	<p>Should there be limits to free speech? Is affirmative action good for equality? Is progressive taxation fair? Come and debate these and similar question during the WS in the course Western Political Theory.</p> <p>In this course, we will study some core ideas of Western political theory, and get familiar with the work of the brightest minds of the Western political thought. The aim of the course is to discuss politically controversial topics, and approach these from different theoretical perspectives.</p> <p>This course uses problem based learning as a method of instruction. In other words, the students are expected to discuss the course material intensively and actively in groups of 4-5 students. The discussions are based on assigned readings.</p>		
Remarks	Second-year Governance students should take this course. This course has no senior priority, second-year students get accepted first.		
Examination	Written assignments to be submitted throughout the semester. Final deadline: 05.03.2024.		
Recommended Reading	Mill, John Stuart. 1859. On Liberty. Marx, Karl, and Friedrich Engels. 1848. Manifesto of the Communist Party. Malatesta, Errico.1987-1922. At the Café (dialogues). <a href="https://theanarchistlibrary.org/library/errico-malatesta-at-the-cafe">https://theanarchistlibrary.org/library/errico-malatesta-at-the-cafe</a>		

## 4.5 Study Area: Life Sciences

Anatomy and Functions of the Brain			
Life Sciences		Semester	
Dr. Janina Kirsch ( <a href="mailto:janina.kirsch@biologie.uni-freiburg.de">janina.kirsch@biologie.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-LS0007
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 (required)		
Format, Dates, Times and Rooms	<p>Online Seminar</p> <p>Optional Practice Sessions:</p> <p>Fri, Dec 1, 2023, 10-12h, Biologie II/III SR 00 043</p> <p>Fri, Jan 12, 2024, 14-16h, Biologie II/III SR 00 043</p> <p>Fri, Feb 2, 2024, 14-16h, Biologie II/III SR 00 043</p> <p>Final Exam: Fr, Feb 9, 2024, 14-16h, Biologie II/III Computerpool</p>		
Course Description	<p>Self-paced online studying with recorded videos and a script. For each topic, students complete learning units in ILIAS and model the brain structures at home using plasticine (yes, your hands will get dirty!). These plasticine models will help you to understand the relative location of different parts of the brain. Feedback is provided through video files and during the optional check-in meetings in person.</p> <p>In this course different components of the vertebrate brain and associated functions are presented one by one. In particular these are</p> <ul style="list-style-type: none"> <li>▪ General structure of the vertebrate brain</li> <li>▪ Spinal cord</li> <li>▪ Medulla oblongata</li> <li>▪ Cerebellum</li> <li>▪ Midbrain</li> <li>▪ Thalamus</li> <li>▪ Hypothalamus</li> <li>▪ Basal ganglia</li> <li>▪ Limbic system</li> <li>▪ Cerebral cortex</li> </ul>		
Remarks	This class is a self-paced online class. Students complete learning modules in ILIAS throughout the semester and build plasticine models of different parts of the brain.		
Examination	Final Exam: Fri, 09.02.2024, 14-16h, Biologie II/III Computerpool		
Recommended Reading	<p>Two SOMSO Brain models as well as the script (English and German) are available in the reading room for self-study!</p> <p>Kandel, Schwartz, et al. (2012) Principles of neural science. (Reading Room: NT/Kan/1)</p>		

Basic Chemistry and Biochemistry			
Life Sciences		Semester	
Dr. Christoph Howe (C.Howe@gmx.net)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-LS0002
Module(s) StuPo 2015		Module(s) StuPo 2020	
Biochemistry		Foundational Chemistry	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Tue, 10-12h, Ph HS 3 Thu, 10-12h, Ph HS 3		
Course Description	<p>In this course the students will learn the basics in structural chemistry and how to address questions in molecular chemistry: How to read the periodic table?; how to draw chemical structures (LEWIS structure) and what are their respective 3D structures (VSEPR) based on their elemental formula?; how do I prepare solutions from chemical compounds and how to calculate dilution series for experiments?; what is the principle of absorption spectroscopy (IR, UV-Vis, NMR)?, chromatography (HPLC, GC and IC) and mass spectrometry (MS)?; what are the common hazards in a chemical laboratory?</p> <p>The chemical concepts of this lecture will be trained by solving exercise sheets during the sessions and additionally outside class room. By the end of the course the students show their course training by handing in an informative report that targets questions from the above described course content in regards to a self-chosen chemical molecule.</p>		
Examination	Midterm exam (50% of final grade) and final exam (50%) and an ungraded presentation during the class.		
Recommended Reading	T.E. Brown, H.E. LeMay, B.E. Bursten & C. Murphy (2017): Chemistry: The Central Science (Mastering Chemistry), 14 <sup>th</sup> edition, Pearson. Crowe & Bradshaw (2010) Chemistry for the Biosciences. (Reading room: NT/Cro/2,a )		

Biotechnology			
Life Sciences, EES/ESS		Semester	
Dr. Christoph Howe (C.Howe@gmx.net)			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	20	00LE62S-LAS-LSEE0008
Module(s) StuPo 2015		Module(s) StuPo 2020	
Advanced Life Sciences I, II or III, Specialization Option I or II: Life Sciences, Specialization Option I or II: EES/ESS, Elective module (Joker),		Advanced Life Sciences I, II or III, Specialization I or II: Life Sciences, Specialization I or II: EES/ESS Elective module (Joker)	
Prerequisites	"Basic Chemistry and Biochemistry" or "Environmental Chemistry" (one required)		
Format, Dates, Times and Rooms	Advanced Seminar Mon, 10-12h, AU 01065 Wed, 10-12h, Ph HS 3		
Course Description	<p>Within the field of Biotechnology researchers as well as engineers find biological solutions for a wide variety of processes, products or challenges that human mankind faces. The subfields of Biotechnology are often categorized by a specific colour code in which red refers to medical or pharmaceutical products that often are produced by genetically engineered yeast or bacterial cells; green biotechnology utilizes photosynthetic cells such as plants, algae or even cyanobacteria to generate a range of products such as colorants or feedstock; brown biotechnology is dedicated to environmental protection and the restoration of habitats that suffer from chemical disasters or pollution; etc.</p> <p>Many biotechnological successes such as large-scale production of citric acid as a food preservative, insulin for diabetes treatment or the taste flavour glutamate originate from the expanding knowledge in genetic engineering, thorough biological observation and technical innovation. Undoubtedly, our nowadays life is strongly impacted by biotechnological advances whenever we are washing our clothes, buying groceries or go to see a doctor.</p> <p>The course contains a short repetition of microbiological and biochemical knowledge, an in-depth overview of red (pharmaceutical), blue (marine), brown (environmental), green (photosynthetic organisms) and white (industrial, enzyme-based) biotechnology as well as multiple excursions to a biotechnological sites in and around Freiburg (planned is sewage plant, brewery and eleva gmbH).</p>		
Examination	Oral presentation (30% of final grade) during the class and written report (70% of final grade) on a biotechnological process due on March 8, 2024.		
Recommended Reading	Renneberg, Berkling, Loroach & Sussbier (2017) Biotechnology for Beginners (2nd ed.) Electronically available through the UB: <a href="https://www.redi-bw.de/start/unifr/EBooks-elsevier/9780128012246">https://www.redi-bw.de/start/unifr/EBooks-elsevier/9780128012246</a>		

Computational Genomics			
Life Sciences		Semester	
Dr. Senthilkumar Ramamoorthy ( <a href="mailto:senthilkumar.ramamoorthy@uniklinik-freiburg.de">senthilkumar.ramamoorthy@uniklinik-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	15	00LE62S-LAS-LSEE0001
Module(s) StuPo 2015		Module(s) StuPo 2020	
Computer Science, Data Processing and Modeling in the Sciences, LS: Methods, Specialization Option I or II: Life Sciences		LS: Methods I or II (quantitative), Specialization I or II: Life Sciences	
Prerequisites	Introduction to Life Sciences (required). Prior knowledge of computer programming is not required, but an advantage.		
Format, Dates, Times and Rooms	Seminar Mon, 10-12h, KG 1140 Wed, 10-12h, KG 1140		
Course Description	<p>The code of life is written with a combination of 4 letters (A, T, G, C). The ~3 billion characters containing text is stored in the form of ~2-meter-long DNA in every cell (~10-100 µm size) of our body. This complex genetic information is decoded by several molecular machineries of the cell to establish its function. The advancement of next-generation technologies helped scientists to sequence the genome, transcriptome, proteome and metabolomes of various model organisms. In the post-genomics era, computational methodologies are extensively used for analyzing and interpreting such complex biological data. It is essential for a biologist to have adequate knowledge of bioinformatics to explore and interpret data-intensive genome research.</p> <p>The following topics will be covered during the course in the form of lectures, lab exercises, group discussions, and assignments.</p> <ul style="list-style-type: none"> <li>▪ Genome organization and regulation; Genome evolution; Gene structure and regulatory modules; Next generation sequencing technologies.</li> <li>▪ Primary and secondary data resources for genome information; Functional annotations of the genome; Techniques for genome analysis; Algorithms for sequence analysis;</li> <li>▪ Computational methods for comparative genomics; Phylogenomics.</li> <li>▪ Epigenomics; Gene expression regulation; Transcriptomics.</li> <li>▪ Clinical genomics; Population genomics; Genome-wide association studies.</li> <li>▪ Genomics at single cell level; Methods for studying the 3D architecture of the genome.</li> <li>▪ The course participants will be trained to use genome analysis software in a problem-based learning approach.</li> </ul>		
Remarks	<p>You need to bring your personal laptop for the exercise sessions. Also, you can make use of the computer labs at the university computer center: <a href="https://www.rz.uni-freiburg.de/services-en/pc-en/pcpools-en">https://www.rz.uni-freiburg.de/services-en/pc-en/pcpools-en</a></p> <p>The study materials will be provided during the course for each topic.</p>		
Examination	Two write-up assignments (70%) , last one due on Feb 29, 2024 and a presentation during class (30%).		
Recommended Reading	"Bioinformatics – Sequence and Genome analysis" by David W. Mount and "Bioinformatics" by Andreas D. Baxevanis, Gary D. Bader and David S. Wishart		

Human Physiology			
Life Sciences		Semester	
Prof. Dr. Dieter Kunz ( <a href="mailto:dieter.kunz@unibas.ch">dieter.kunz@unibas.ch</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	20	00LE62S-LAS-LS0010
Module(s) StuPo 2015		Module(s) StuPo 2020	
Physiology		Physiology	
Prerequisites	Introduction to Life Sciences, Basic Chemistry and Biochemistry, and Cell Biology (all required)		
Format, Dates, Times and Rooms	Seminar Mon, 8-10h, AU 01065 Thu, 8-10h, online		
Course Description	<p>Physiology is the science of life aiming to understand the mechanisms of living things, from the basis of cell function at the ionic and molecular level to the integrated behaviour of the whole body and the influence of the external environment. Research in physiology helps us to understand how the body works in health and how it responds and adapts to the challenges of everyday life. It advances our understanding of the detailed mechanisms that control and regulate the behaviour of living things. We continue to learn more about fundamental processes, such as the control of heart rate or the sense of vision, through comprehensive exploration of the multiple processes involved.</p> <p>We will have a look at the most basic level, molecular interactions and how the collection of molecules in living organisms' forms cells. We will learn about cells forming tissues and organs, and how groups of organs integrate their functions to create organ systems, that allow us to create energy by food consumption, to store and transfer this energy, to perceive our environment with various senses and how our body protects itself.</p> <p>The course will include presentations of the participants. Tandems will present patients suffering from exemplary and most common diseases. Students will explain the underlying physiology, but also present some data to the pathophysiology of the diseases. (<a href="https://www.physoc.org/explore-physiology/what-is-physiology/">https://www.physoc.org/explore-physiology/what-is-physiology/</a>)</p>		
Examination	Final exam in the last week of the semester		
Recommended Reading	Silverthorn (2016) Human Physiology: An Integrated Approach (Reading Room: NT/Sil/1) Brandes, Lang & Schmidt (2019) Physiologie des Menschen: mit Pathophysiologie (electronic license through the university library)		

Introduction to Cancer Biology			
Life Sciences		Semester	
Jun.-Prof. Priscilla Briquez ( <a href="mailto:priscilla.briquez@uniklinik-freiburg.de">priscilla.briquez@uniklinik-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	15	00LE62S-LAS-LS0035
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option I or II		Specialization I or II	
Prerequisites	Modules "Foundational Chemistry" and "Cell Biology" (required) and Human Physiology (can be taken in parallel)		
Format, Dates, Times and Rooms	Advanced Seminar Mon, 16-18h, KG 1224 Wed, 16-18h, KG 1134		
Course Description	<p>In this class, students will be introduced to key mechanisms of cancer biology, including cancer development, host response and therapeutic perspectives, via ex cathedra lectures and critical discussion of journal articles. We will explore the transformations that healthy cells undergo to become malignant, and how the host response participates in the development of the tumor microenvironment. We will additionally detail the mechanisms by which primary tumor cells modify their phenotype to further form metastasis. Lastly, we will discuss how cancer cells develop strategies to evade the host immune system, and the different types of cancer therapies that exist to fight cancer, including newly developed immunotherapies. During the course, students will have to present research papers selected in the relevant topics, to promote critical thinking and communication skills.</p> <p>Upon successful completion of this course, students will:</p> <ol style="list-style-type: none"> <li>1. Acquire general knowledges on cancer biology</li> <li>2. Understand current challenges for the development of effective and safe cancer therapies</li> <li>3. Present a research paper to develop critical thinking and communication skills</li> </ol> <p>The course will include the following topics:</p> <ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Oncogenes and Signal Transduction</li> <li>3. Tumor Suppressor Genes and Cell Fate Control</li> <li>4. Multi-step Tumorigenesis and Genome Instability</li> <li>5. Cancer Genomics</li> <li>6. Cancer Epigenomics</li> <li>7. Aging and Cancer</li> <li>8. Tumor Microenvironment</li> <li>9. Metastasis and Cachexia</li> <li>10. Cancer Immunity</li> <li>11. Cancer Therapies</li> </ol>		
Examination	Paper presentation during class (30% of the final grade) and formal written exam on Feb 7, 2024 (70% of the final grade).		

**4.6 Study Area: Multiple**

Bachelor Projects – Student Conference			
Senior Profile/Core		Conference	
Dr. Simon Büchner ( <a href="mailto:buechner@ucf.uni-freiburg.de">buechner@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 4	See remarks	n.a.	
Module(s) StuPo 2015		Module(s) StuPo 2020	
Research Design Across Disciplines		Senior Profile in any major	
Format, Dates, Times and Rooms	12.02.2024, 10-16h, Peterhof HS2, 3, 4 13.02.2024, 10-16h, Peterhof HS2, 3, 4		
Course Description	In this student-organized conference, you will be able to present your thesis project at whatever stage it is and receive valuable feedback. Many students start working on their thesis mid-February, so for them it is an opportunity to get feedback right before they start working intensely on it. Others are invited to present early ideas for their project or projects that have already been started or even completed. Based on an abstract you will be able to present your project in a talk or as a poster to an audience of peer and other fellow students as well as staff and supervisors.		
Remarks	Part of the classes "Planning and Doing Research" as well as "Research Design".		
Examination	Pass/fail (SL) only. Active participation in the organization of the conference and in the conference as well as a presentation at the conference.		

Confronting the Shadows: Political Transition, Justice and Human Rights			
Governance, Culture & History		Semester	
Dr. Elisabeth Wingerter ( <a href="mailto:ew1304@nyu.edu">ew1304@nyu.edu</a> ), Prof. Dr. Julieta Mira ( <a href="mailto:julieta_mira@yahoo.com.ar">julieta_mira@yahoo.com.ar</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	20	00LE62S-LAS-CHGO0011
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option I and II (Gov) Specialization I: Culture and History Specialization Option Culture & History II		Specialization Option Governance Senior Profile Governance Specialization Option Culture & History I or II Senior Profile Culture and History	
Prerequisites	Introduction to Governance, other prerequisites for a senior module see STUPO		
Format, Dates, Times and Rooms	Advanced Seminar Mon, 16-18h, KG 1142 Wed, 16-18h, KG 1140		
Course Description	<p>After an enemy occupation has ended or a repressive regime has fallen, the population has to pick up the pieces. How to re-establish the rule of law? How to move forward as a society? How to make reparations to the victims of human rights violations? What to do with the "collaborators"? Political transitions of any kind leave behind open questions and traumatic memories. Whether in the aftermath of a World War or after the fall of a dictatorial regime, different legal and social "coping mechanisms" have been developed to process violence.</p> <p>The different approaches to dealing with and "working through" these issues can be generally summarized by the term transitional justice. From courts of law and reparations to art and poetry, societies all over the world have found various ways of investigating, adjudicating and processing human rights violations during political transitions.</p> <p>The course aims at exploring moments of transitional justice in different world regions and at various points of human history with a special focus on Latin America and Europe during the last century.</p> <p>Learning outcomes:</p> <ul style="list-style-type: none"> <li>▪ Critical analysis of theoretical concepts dealing with post-conflict societies, such as transitional justice and collective memory.</li> <li>▪ Sensibilization to the ethical aspects of studying human rights violations and traumatic experiences.</li> <li>▪ Expansion of the research skillset by working on a specific case study in the final paper.</li> <li>▪ Ability to discuss and compare international case studies.</li> </ul>		
Remarks	This course is offered in a hybrid format. The second part of the semester (with Prof. Mira) will have mostly online classes, with a few hybrid sessions.		
Examination	Written assignments in the form of research essays. Final submission date – end of semester (tba).		
Recommended Reading	Ruti Teitel, <i>Transitional Justice</i> (Oxford: Oxford University Press 2000). Kathryn Sikkink, <i>The Justice Cascade: How Human Rights Prosecutions Are Changing World Politics</i> (New York: Norton 2011).		

Data and Modelling			
EES/ESS, Life Sciences, Governance		Semester	
Sibylle Braungardt ( <a href="mailto:S.Braungardt@oeko.de">S.Braungardt@oeko.de</a> ), Carmen Loschke ( <a href="mailto:C.Loschke@oeko.de">C.Loschke@oeko.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	20	00LE62S-LAS-GOLSEE0003
Module(s) StuPo 2015		Module(s) StuPo 2020	
Life Sciences: Computer Science, Data Processing and Modeling in the Sciences		ESS Methods I or II, Specialization Option I or II: EES/ESS Life Sciences: Methods I or II (quantitative)	
Prerequisites	Introduction to Earth and Environmental Sciences /Introduction to Environmental and Sustainability Sciences		
Format, Dates, Times and Rooms	Seminar Mon, 8-10h, Ph HS 3 Wed, 8-10h, Ph HS 3		
Course Description	<p>The course provides an overview of different applications of data analysis and modelling with a focus on environmental- and energy-related research. The methods are however also relevant in other disciplines. Following a set of introductory lectures on the role of data in environmental and energy research as well as different data sets and analysis methodologies, the course focuses on a project-based approach. In a hands-on group work project, students take a deep-dive into one of the data-based analysis techniques covered in the course, where they can choose from the following options: 1) Analysis of text data with natural language processing techniques (in different levels of complexity ranging from wordcounts to machine learning) using python, 2) Analysis of spatial data using QGIS, 3) Energy modelling using excel. Within the course, students gain an understanding of the role of data and modelling for environmental and energy research and are able conduct independent research using one of the methodologies covered in the course.</p>		
Remarks	<p>Basic knowledge in python or QGIS is an advantage, but an introduction and a usable script will be provided. Basic knowledge in excel and a problem-solving approach is expected.</p> <p>Students majoring in EES/ESS or Life Sciences have priority</p>		
Examination	tba		

Environment Risks and Us			
EES/ESS, Life Sciences		Semester	
Dipl.-Chem. Ismene Jäger ( <a href="mailto:info@oekologischesetze.de">info@oekologischesetze.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-LAS-LSEE0002
Module(s) StuPo 2015		Module(s) StuPo 2020	
Human and the Environment Specialization Option I or II: EES Advanced Life Sciences I, II or III		Human and the Environment I or II, Advanced Life Sciences I, II or III	
Prerequisites	Introduction to Earth and Environmental Sciences/Environmental and Sustainability Sciences and Introduction to Life Sciences		
Format, Dates, Times and Rooms	Seminar Mon, 16-18h, Ph HS 3 Wed, 16-18h, HHS 9, R00003B		
Course Description	<p>In this course students explore the manifold impacts of human activities on the environment and resulting risks – for human health as well as for the environment. The course aims to create an understanding of present sources for environmental pollution, alternative options to act as well on regulatory and voluntary steps for abatement. Based on examples from everyday life products, several groups of pollutants and their sources will be introduced. Examples are given to show the environmental fate of chemicals and mechanisms how chemicals can interfere with organisms. . In addition, students develop basic skills in environmental risk assessment and management strategies. The course will include topics such as properties of eco-labels, assessment of chemicals e.g. chemicals in products from your everyday life, ecotoxicology, assessment of contaminants in surface/drinking waters and their effects on human health, environmental pollutants and their effect on animals, their regulation and their substitution.</p> <p>The course also includes 2 excursions and several practical examples</p>		
Remarks	Excursion on one or two Fridays possible		
Examination	tba		

Environmental Psychology			
EES/ESS, Life Sciences, Governance		Semester	
Nathalie Niekisch ( <a href="mailto:nathalie.niekisch@wandel-werk.org">nathalie.niekisch@wandel-werk.org</a> )			
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	
Specialization Option: EES I or II, Human and the Environment, Advanced Life Sciences I or II, Advanced Governance I and II		Specialization Option: ESS I or II, Human and the Environment I or II, Advanced Life Sciences I or II or III, Advanced Governance I and II	
Prerequisites	Introduction to Earth and Environmental Sciences /Introduction to Environmental and Sustainability Sciences and Introduction to Governance		
Format, Dates, Times and Rooms	Seminar Tue, 16-19h, HHS. R 00 003a		
Course Description	<p>A profound change towards a more sustainable world is no longer just about producing more efficiently. In addition, holistic ecological and social sustainability requires a reduction in consumption and a rapid change in human lifestyles in industrialized societies. It's about individual and collective behavioral change – and thus about psychology.</p> <p>Several important questions arise: What motivates each of us to behave in a way that is – or is not – environmental-friendly? Why are we sometimes unsuccessful in being sustainable within our actions – despite good intentions? And how can we address the important issue of sustainable development to motivate more and more people to act?</p> <p>One puzzle piece to successful environmental and climate protection lies in understanding human experience and behavior. Psychological research makes an essential contribution to this. In this course we will get to know the field of environmental psychology, its theories as well as practical implementations such as helpful climate communication skills.</p> <p>The students will receive weekly readings which form the base for group presentations during the classes. In a group the students will create, conduct and evaluate a sustainability project themselves based on the psychological learnings of the course. Additionally, the students receive weekly assignments which they will work on individually.</p> <p>Especially students who are politically active in the sustainability domain will benefit from this course since the focus of the application lies in the planning of small projects and large campaigns, however the course is of course open to everybody.</p>		
Remarks	Students majoring in Earth and Environmental Sciences/Environmental and Sustainability Sciences have priority		
Examination	tba		

EPIC Team Mission			
All		Semester	
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	50	IN0026-E013
Module(s) StuPo 2015		Module(s) StuPo 2020	
Elective Joker		Senior Profile Culture &History Senior Profile Life Sciences Senior Profile ESS Senior Profile Governance	
Prerequisites	none		
Format, Dates, Times and Rooms	Hybrid Seminar Kick-off at Adam Mickiewicz University, 28.-31.08. Regular online meetings Final presentations: 3rd week of January 2024		
Course Description	<p>EPIC Team Missions are small-team projects in which students from across Europe come together physically and virtually to solve real-world problems set by real-world stakeholders with the academic support of Mission Guides. Mission challenges align with EPICUR priority areas (e.g., European Values, Sustainable Transformation, Global Health, Future Intelligences).</p> <p>Upon completing the team mission, students will be able to...</p> <ul style="list-style-type: none"> <li>▪ actively engage in finding profound solutions to real-world problems</li> <li>▪ collaborate in interdisciplinary, virtual teams, including collaborating with actors from different fields of practice across cultures and borders</li> <li>▪ identify and apply appropriate research methods connected to the topic of their respective mission</li> <li>▪ apply project management and design thinking skills in ambiguous and complex projects</li> <li>▪ successfully communicate and present relevant information</li> <li>▪ demonstrate understanding of theories, concepts and methods relevant to solving a given problem in the field of their respective mission</li> </ul>		
Remarks	Registration is already closed. Details about the 8 missions for 2023/24 (titles below) can be found on the <a href="#">EPIC Missions Page</a> .		
Examination	Reflections, Team reports (submitted to mission guides and stakeholders), Final presentation to stakeholder and other mission teams		

Foucault Today: History, Politics, Philosophy			
Culture & History, Governance		Semester	
Prof. Dr. Frieder Vogelmann ( <a href="mailto:frieder.vogelmann@ucf.uni-freiburg.de">frieder.vogelmann@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s)	6	25	00LE62S-LAS-IN0032
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Culture and History I or II		Specialization Culture and History I or II Senior Profile: Culture and History, Specialization Option Governance	
Format, Dates, Times and Rooms	Seminar Tue, 14-16h, AU 01065 Thu, 14-16h, AU 01065		
Course Description	<p>Almost forty years after his early death, Michel Foucault is still one of the towering figures of the 20th century in the humanities and social sciences. A controversial thinker, his works continue to polarise scholars. The seminar offers an in-depth introduction to his unique way of intertwining wide-ranging philosophical ideas with detailed histories which un-earth “subjugated knowledge” in the service of sharp political critique.</p> <p>For two reasons, Foucault’s book <i>The History of Sexuality, Volume 1: An Introduction</i> from 1976 will be at the centre of our seminar discussion. First, it contains his philosophical conception of power in its mature form and his historical diagnosis of an epochal change of the nature of power: from sovereign power to disciplinary power and further to bio-politics. Second, it also contains the influential and politically provocative thesis that sexuality is not naturally given but politically repressed in our societies. On the contrary, sexuality is a historically constructed phenomenon that has been fostered by politics to exert power. Struggles for sexual liberation are therefore unwittingly complicit with the very powers they try to oppose.</p> <p>In addition to a close reading of <i>The History of Sexuality, Volume 1</i>, we will look at Foucault’s methodology when it comes to analysing discourses and practices as well as his development of the political diagnosis in the so-called “governmentality lectures.” Of course, we will discuss criticisms of his views, too, specifically from feminist and post-colonial perspectives.</p>		
Examination	The final assessment is a term paper (3.000–4.000 words) due by 15 March 2024 (as an electronic copy and in print). Please discuss the topic with me before you start writing.		
Recommended Reading	<p>Allen, Amy: <i>The Power of Feminist Theory. Domination, Resistance, Solidarity</i>. Boulder: Westview Press 1999.</p> <p>Foucault, Michel: <i>The History of Sexuality. Volume I: An Introduction</i>. Translated by Robert Hurley. New York 1978 [1976]. <b>You will need to buy this book!</b></p> <p>Gutting, Garry: <i>Foucault. A Very Short Introduction</i>. Oxford 2005.</p> <p>Kelly, Mark G. E.: <i>Foucault and Politics. A Critical Introduction</i>. Edinburgh 2014.</p> <p>Vogelmann, Frieder: Critique as a Practice of Prefigurative Emancipation. In: <i>Distinktion</i> 18.2 (2017), 196–214.</p>		

Introduction to Computer Programming with Python			
Life Sciences, EES/ESS, Electives		Semester	
Katharina Matulla ( <a href="mailto:katharina@matulla.net">katharina@matulla.net</a> ), Rebekka Rupprecht ( <a href="mailto:rebekka.rupprecht@gmx.de">rebekka.rupprecht@gmx.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	18	00LE62S-LAS-LSEE0011
Module(s) StuPo 2015		Module(s) StuPo 2020	
Computer Science, Data Processing and Modeling in the Sciences (LS and EES) LS: Methods, EES: Analytical Methods		LS: Methods I or II (quantitative) ESS: Methods I or II (quantitative)	
Format, Dates, Times and Rooms	Mon, 18-20h, HH9 HS 00 003a Wed, 18-20h, Wilhelmstraße 26 R00006		
Course Description	<p>Welcome to the exciting world of computer programming with Python! Python is one of the most popular programming languages in the world and it is not only beginner-friendly, but also widely used in various domains such as data analysis, artificial intelligence, web development and more.</p> <p>Course Objective: Taking a hands-on, learning-by-doing approach, this class aims to cover the basics and fundamentals of programming with Python.</p> <p>Content</p> <ul style="list-style-type: none"> <li>▪ Programming basics</li> <li>▪ Variables and data types</li> <li>▪ Functions</li> <li>▪ Loops</li> <li>▪ Conditionals</li> <li>▪ Object-oriented programming principles</li> <li>▪ Extracting and transforming data from different sources</li> <li>▪ Data analysis and visualization</li> <li>▪ Using OpenAI APIs (e.g., ChatGPT)</li> </ul> <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 have acquired the knowledge and skills necessary to write Python programs independently. Whether you aspire to automate small tasks, delve deeper into advanced topics and use cases (e.g., Geographic Information Systems (GIS) or image processing and analysis in Biology) or use Python to collect and analyze data for your Bachelor Thesis, this course will provide you with a solid foundation to start your journey.</p>		
Remarks	<p>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: <a href="https://www.rz.uni-freiburg.de/services-en/pc-en/pcpools-en">https://www.rz.uni-freiburg.de/services-en/pc-en/pcpools-en</a></p>		
Examination	<p>A final project (70%) that you build with Python and present (30%) to the class. Project report due Feb 25, 2024.</p>		
Recommended Reading	<p>Eric Matthes (2019) (2nd ed.) Python Crash Course, 2nd Edition: A Hands-On, Project-Based Introduction to Programming. San Francisco, No Starch Press.</p>		

Journalism			
All		Semester	
Prof. Sabine Rollberg ( <a href="mailto:srollberg@t-online.de">srollberg@t-online.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	20	00LE62S-LAS-CHEEGOLS0003
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option Culture and History I or II Specialization Option Earth and Environmental Sciences I or II		Senior Profile Culture & History Senior Profile Life Sciences Senior Profile Environmental and Sustainability Sciences Senior Profile Governance	
Prerequisites	C&H: Introduction to Culture and History + Theory of Culture/Theory of History LS: Introduction to Life Sciences and all Advanced Life Sciences modules.		
Format, Dates, Times and Rooms	Seminar Mon, 14-16h, Medienzentrum Tue, 14-16h, Medienzentrum		
Course Description	<p>Independent investigative journalism has never been more important than today, when the world is more and more complex.</p> <p>Yet the threats against it are widespread. Many groups target “the media” as enemy, the slogan "fake news" has more and more entered the daily language and the erosion of traditional media business models makes it difficult to finance independent journalism.</p> <p>This course pushes back against these trends by introducing a new generation into journalistic thinking, working and writing.</p> <p>Students eager to test this professional world will learn to distinguish between academic and journalistic language, will examine journalistic principles, will explore journalistic genres (political, cultural, science, PR) and will practice production in different media (print, radio, TV, online) We start with basics like writing news and then explore other forms like reportage, portraits, etc.</p> <p>The final project will be a video “Magazine” as a group project, with contributions from each student drawn from their research interest in whatever field. This course includes training in camera and editing work in preparation for the final project.</p> <p>Experts from print, radio and television, working as investigative reporters, war journalists or cultural experts will be invited to share their theoretical knowledge and practical experiences. Students will help prepare these visits and evaluate what they learn from journalistic experts.</p>		
Remarks	<p>This course mixes seminar style learning with project based learning. Students will be encouraged to write their own blog. These articles can also be written in German.</p> <p>Some literature will be in German, so reading knowledge of German is recommended.</p>		
Examination	tba		

Kaleidoskop: Denkraum für alternative Erkenntnistheorie			
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Prof. Dr. Frieder Vogelmann ( <a href="mailto:frieder.vogelmann@ucf.uni-freiburg.de">frieder.vogelmann@ucf.uni-freiburg.de</a> ) and Prof. Dr. Nadja Germann ( <a href="mailto:nadja.germann@philosophie.uni-freiburg.de">nadja.germann@philosophie.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	none	--	06LE32T-08FK
Module(s) StuPo 2015		Module(s) StuPo 2020	
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Prerequisites	none		
Format, Dates, Times and Rooms	Colloquium Tue, 18-20h, KG 1132		
Course Description	Ziel des Kolloquiums ist es, Erkenntnistheorien jenseits der ausgetretenen Pfade der europäischen Philosophie zu erkunden. Das bedeutet nicht, Überlegungen der klassischen ‚westlichen‘ Erkenntnistheorie in Bausch und Bogen zu verwerfen, sondern sie ins gleichberechtigte Gespräch mit erkenntnistheoretischen Argumenten aus anderen Denktraditionen zu bringen. Dafür muss sich die Philosophie nicht nur für Texte und Autor*innen öffnen, die häufig nicht im Kanon zu finden sind oder nur an den Rändern gelesen werden, sie muss auch den Austausch mit anderen Disziplinen suchen. Das Kolloquium stellt dafür einen Raum zur Verfügung – was darin geschieht, liegt an allen Teilnehmer*innen gemeinsam.		
Remarks	This is a colloquium in cooperation with the Department of Philosophy. Important: Please email Frieder Vogelmann if you want to join the colloquium to get more information about our upcoming meetings!		

KG Kollegiengebäude  
 AU Alte Universität  
 HS Hörsaal  
 BT Breisacher Tor

Ph Peterhof  
 HH Hermann-Herder-Straße  
 FMF Stefan-Meier-Str. 21

Maths and Physics			
Life Sciences, EES/ESS		Semester	
Dr. Benoit Louvel ( <a href="mailto:benoit.louvel@ucf.uni-freiburg.de">benoit.louvel@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	45	00LE62VS-LAS-LSEE0003
Module(s) StuPo 2015		Module(s) StuPo 2020	
Maths and Physics for the Liberal Arts and Sciences		Mathematics for the Sciences	
Prerequisites	Introduction to Earth and Environmental Sciences and/or Introduction to Life Sciences		
Format, Dates, Times and Rooms	Lecture Mon, 8-10h, Wilhelmstr. 26, HS 01006 Wed, 8-10h, Wilhelmstr. 26, HS 01006 Tutorial WG1: Fri, 10-12h, AU 1036a WG2: Fri, 12-14h, KG 1019		
Course Description	In this course, Mathematics will be introduced from two points of view: Mathematics as a tool in Science, and Mathematics in the context of Number Theory. The first part of the course will present Mathematics as a necessary tool in the formalism of any scientific approach. In the second part, basic concepts of Classical Mechanics necessary for the understanding of nature will be introduced as an application of the first part. In the third part, fundamental concepts in Number Theory – from ancient maths to most challenging problems not yet resolved – will be addressed in order to put the student in contact with the abstraction of pure Mathematics.		
Examination	Mid-term and final exam		

KG Kollegiengebäude  
 AU Alte Universität  
 HS Hörsaal  
 BT Breisacher Tor

Ph Peterhof  
 HH Hermann-Herder-Straße  
 FMF Stefan-Meier-Str. 21

Planning and Doing Research			
Senior Profile/Core		Semester	
Dr. Simon Büchner ( <a href="mailto:buechner@ucf.uni-freiburg.de">buechner@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 4	6	20	00LE62S-LAS-CO0042
Module(s) StuPo 2015		Module(s) StuPo 2020	
Research Design Across Disciplines		Senior Profile in any major	
Prerequisites	Fourth-year students only.		
Format, Dates, Times and Rooms	Seminar Wed, 14-16h, AU 01036a 25.10., 15.11. and 29.11, 14-16h, Co-Creation-Room		
Course Description	<p>In the fourth year of LAS studies it is time to take stock of your knowledge on how to plan and conduct an independent research project which you may or may not turn into your bachelor thesis. The course 'Planning and Doing Research' exposes you to the expectations to high quality research and encourages discussion on the differences and similarities across the areas of intellectual interests that you and other students will bring to the course. We will summarize, analyze and improve your ability to plan and manage a small-scale research project. The goal is to come up with a proposal including a research plan which you can then discuss with a (potential) supervisor.</p> <p>For this, we will run through all phases of a research project and discuss and practice related activities involved in each step. This includes, finding an interesting and feasible research topic, developing a manageable research question, ethical considerations when doing research, selecting an appropriate method or approach, coming up with a suitable research design, approaching a potential supervisor, collecting, analyzing, and interpreting data (written, verbal, and numerical), drawing conclusions, critically discussing your own work, and presenting your plans and results effectively.</p> <p>The course will be a mix of instructor presentations, reading-based discussions, individual and group exercises, and student presentations. The starting point will be content from previous courses in order to extend your skills and knowledge, so that you can apply them to your research project and eventually turn it into a thesis. There is no topical focus in this course and students from all majors are warmly invited as a large diversity of students from different majors will improve the learning of every member of the class.</p>		
Remarks	<p>The course is open to all Majors and is not content-oriented. Instead students prepare a potential bachelor or other research project. Intellectual openness is both, a prerequisite and a desired outcome.</p> <p>Active participation in the bachelor project student conference in February is required to obtain full credits.</p>		
Examination	tba		
Recommended Reading	<p>Booth, W., Colomb, G. &amp; Williams, J. (2008). <i>The Craft of Research</i>. 3rd edition. Chicago and London: University of Chicago Press (Reading room: EDU/Boo/1)</p> <p>Snieder, R., &amp; Lerner, K. (2009). <i>The Art of Being a Scientist: A Guide for Graduate Students and Their Mentors</i>. Cambridge University Press. (UB: NA/2018/84)</p>		

Research Design			
Senior Profile in all Majors		Semester	
Mila Mikalay ( <a href="mailto:mikalay@ucf.uni-freiburg.de">mikalay@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 4	8	0	00LE62S-LAS-CO0012
Module(s) StuPo 2015		Module(s) StuPo 2020	
none		Senior Profile	
Prerequisites	Prerequisites for Senior Profile apply (check your Major specifics)		
Format, Dates, Times and Rooms	Seminar and small group collaboration: Tue, 12-14h, AU 01036a Thu, 12-14h, AU 01036a		
Course Description	<p>The course exposes you to the expectations to high quality research in different disciplines and encourages discussion on the differences and similarities across the areas of intellectual interest that you and other students will bring to the course.</p> <p>Upon completing this course, you should be able to understand the principles of developing a viable research project, following the criteria of solid research design, including:</p> <ul style="list-style-type: none"> <li>▪ formulating and refining a research goal / research question,</li> <li>▪ formulating a convincing relevance statement by contextualizing your research as an informed position in an existing academic debate,</li> <li>▪ understanding the principles of selecting a suitable theory and method for answering your research question,</li> <li>▪ knowing how to define the data necessary to answer the research question, how to gather, systematize and analyze it,</li> <li>▪ improving the capacity to efficiently and correctly use sources to construct a clear and convincing argument,</li> <li>▪ improving the ability to clearly and convincingly communicate your research, both in writing and oral presentations;</li> <li>▪ improving the ability to provide constructive feedback on the research of other scholars.</li> </ul> <p>Iff you are not a Governance Major, you are very welcome to this course and please read this attentively: The course is offered for any Major, relies on materials from all disciplines and has in the past been very successfully completed by students from all Majors. I am able to guide you in your project in terms of research design. Still, I cannot overcome the fact that I am a political scientist by training and experience. Thus, I will start from the conceptual framework of social sciences and will expect you to bear with me as differences in vocabulary, procedural details and research philosophy will be part of our discussions. In return, I will bear with your respective disciplinary backgrounds and accept topics far outside of my normal expertise.</p>		
Remarks	<p>This course includes organization and participation in a final Student Conference, together with the students from the Planning and Doing Research course.</p> <p>Please note that this is an <b>8 ECTS</b> course and comes with a corresponding workload.</p>		
Examination	<p>Graded: Research Outline due mid-January, Research Proposal due end February.</p> <p>Pass/fail: Research diary due mid-January, setting up and participating in the student conference, report on academic talks due mid-February.</p>		

Sustainable Cities			
EES/ESS, Governance		Semester	
Sabine Sané ( <a href="mailto:sabine.sane@ucf.uni-freiburg.de">sabine.sane@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	16	00LE62S-LAS-GOEE0012
Module(s) StuPo 2015		Module(s) StuPo 2020	
Humans and the Environment		Humans and the Environment I or II Specialization Option ESS I or II Advanced Governance I or II	
Prerequisites	Introduction to Earth and Environmental Sciences/Introduction to Environmental and Sustainability Sciences		
Format, Dates, Times and Rooms	Seminar Mon, 10-12h, AU 01036a Wed, 10-12h, Wilhelmstr. 26, HS R00006		
Course Description	<p>Cities were estimated to house about 56% of the world's population in 2020 and to contribute 40-70% of global GHGs already a decade ago. Thus, the sustainable development of cities is crucial for providing a safe and healthy living environment for a bulk of the human population, and for meeting the idea of a sustainable development.</p> <p>In this course, we will explore what sustainable city development means. What features and developments should a sustainable city strive for? We will explore different challenges, problem scenarios and possible solutions. Experts of different city development issues will be invited to our course to share their knowledge and experience, and you will be able to talk with them directly.</p> <p>We will explore how certain cities have achieved goals that many cities are still dreaming about? What makes them so sustainable? We will also explore critically what seems to be sustainable, but could be questioned.</p> <p>Equipped with this extensive background information and reflection, you will explore the sustainability of your city of choice, and compare your findings with what we have discussed in class. Where do you find sustainable developments in your city? Where could the sustainability of your city still be improved? You will create a virtual tour on sustainability measures in your city by producing a video. Thereby, we will all be able to explore the video tours of different cities together during the course and obtain first-hand insights into the sustainable development of different cities in the world.</p> <p>After this course you will be able to</p> <ul style="list-style-type: none"> <li>▪ Describe different possibilities and challenges for sustainable city development</li> <li>▪ Identify sustainable developments in different cities</li> <li>▪ Discuss sustainable city development with experts</li> <li>▪ Apply your knowledge by collecting and presenting information on your city's sustainability</li> <li>▪ Compare and evaluate the sustainability of different cities</li> </ul>		
Remarks	Students majoring in Earth and Environmental Sciences/Environmental and Sustainability Sciences have priority		
Examination	Video of your city choice (can be included in the grade by 30%) and written assignment due date 28.2.2024		

## 5 Courses of Other (Degree) Programs

### 5.1 Study Area: Culture and History

Geschichte, Ästhetik und Praxis des Dokumentarfilms			
Culture & History		Semester	
Prof. Dr. Franz Leithold			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6 / 8 for Senior Profile	n.a.	05LE54S-331
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option Culture & History I or II Specialization Option EES I or II		Senior Profile Culture &History Senior Profile Life Sciences Senior Profile ESS Senior Profile Governance	
Prerequisites	C&H: Introduction to Culture and History + Theory of Culture/Theory of History LS: Introduction to Life Sciences and all Advanced Life Sciences modules.		
Format, Dates, Times and Rooms	Seminar Mon, 16-18h, rooms tba		
Course Description	<p>Schon früh bildeten sich in der Filmgeschichte neben fiktionalen Formen auch filmische Verfahren heraus, die die Wirklichkeit in unterschiedlichen Perspektiven vermeintlich objektiv abzubilden versuchten, aber auch politisch Stellung zu beziehen oder propagandistisch einzusetzen.</p> <p>Wir befassen uns in unserem Kurs mit den thematischen und ästhetischen Tendenzen in der Geschichte des Dokumentarfilms. Dabei berücksichtigen wir auch die jeweilige gesellschaftspolitische Intention der Filme und die weltanschaulichen Dispositionen der Regisseur*innen.</p> <p>In Arbeitsgruppen werden wir aktuelle Themen in dokumentarischer Form filmpraktisch beleuchten.</p>		
Remarks	This is a course from Medienkulturwissenschaft in German.		
Examination	See HISinOne (Medienkulturwissenschaft)		

Growing Hope: Narratives of Food Justice			
Culture & History, EES/ESS		Semester	
Prof. Dr. Alexa Weik von Mossner			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	n.a.	05LE54S-329
Module(s) StuPo 2015		Module(s) StuPo 2020	
Sociocultural Anthrology or Area Studies Advanced Culture & History I, II or III ESS: Human and the Environment		Culture: Peoples and Practices Culture & History I or II or III Humans and Environment I or II	
Prerequisites	Introduction to Culture and History		
Format, Dates, Times and Rooms	Thu, 16-20h, KG 1032 (bi-weekly, course starts on 26.10.)		
Course Description	<p>Dieses Seminar wirft einen genaueren Blick darauf, wie nichtfiktionale Narrative über Food Justice angesichts der oft düsteren Realitäten das Versprechen einer besseren Zukunft in sich tragen. Theoretisch verortet in der kognitiven Narratologie und den Critical Food Studies und mit Fokus auf den amerikanischen kulturellen Kontext werden wir uns dabei mit zwei Arten von Storytelling über Ernährungsgerechtigkeit auseinandersetzen, die selten zusammen betrachtet werden: Geschichten über Gemeinschaftsgartenprojekte und Geschichten über vegane Ernährungsgerechtigkeit. Obwohl sicherlich nicht alle Gemeinschaftsgärtner Veganer sind und nicht alle Veganer Gärtner, gibt es viele Gemeinsamkeiten zwischen diesen beiden Bewegungen und ihre Erzählungen sind Teil eines größeren Narrativs über die Schaffung einer besseren, nachhaltigeren und gerechteren Zukunft. In den USA gilt dies insbesondere für People of Color und ihren sozial und wirtschaftlich marginalisierten communities, denen historisch und institutionell die Ernährungssicherheit systemisch verweigert worden ist (Murphy und Mook 2022). Wir werden eine Auswahl von Texten untersuchen über Menschen, die gegen diese strukturellen Ungerechtigkeiten und die sie tragenden rassistischen Ideologien kämpfen: Geschichten über defiant gardening und culinary self-empowerment in einer Vielzahl von Medien, die von persönlichen Reflexionen über kritische Essays, Autobiografien, und Kochbücher bis hin zu Blogs, TikTok-Videos und Dokumentarfilmen reichen. Da wir alle Texte im englischen Original lesen, werden entsprechende Sprachkenntnisse vorausgesetzt.</p>		
Remarks	This is a course from Medienkulturwissenschaft in German.		
Examination	See HISinOne (Medienkulturwissenschaft)		

**5.2 Study Area: Earth and Environmental Sciences / Environmental and Sustainability Sciences**

Fundamentals of Resilience			
EES/ESS only		Semester	
Prof. Dr. Stefan Hiermaier, Dr. Georg Clemens Ganzenmüller			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	left-over places (max. 5)	11LE68V-8020
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option: EES I or II		Specialization I or II: ESS	
Prerequisites	Advanced EES/ESS students.		
Format, Dates, and Rooms	see HISinOne		
Course Description	<p>Introduction and motivation energy storage (electric, thermal, PtG): Large-scale integration of renewable energies and the role of energy storage; Technical requirements of power grids; Overview energy storage options and applications; Key parameter of energy storage systems; Technical requirements of storage systems; Economic analyses for storage systems</p> <p>Basics of energy storage systems: Mechanical (pumped hydro etc.); Electric (Super-Caps); Electrochemical (Lead-acid etc.); thermal storage systems; chemical storage and PtG systems</p> <p>Design of battery systems (focus on Lithium-ion): Test and characterization of cells; Battery module and system design; Safety issues; Battery management; Thermal management; System integration; Peripheral components.</p> <p>Design of thermal storage systems: Description of technologies: sensible heat storage, latent heat storage, thermochemical storage. technical applications: long term storage, short term storage, from cold storage to high temperature storage.</p> <p>Design of hydrogen storage and PtG systems: different system layouts and main components of hydrogen and PtG storage systems, water electrolysis as core component, advantages and drawbacks for repowering in fuel cells and thermal engines, examples of PtG installations, intersectoral extension to further Power-to-X technologies.</p>		
Remarks	<p>LAS students register for the course and the exam in HISinOne. It is necessary to register for lectures AND workgroups if applicable. You can find the course in your Planner of Studies in the Electives area (Courses of other degree programs – Modules Technical Faculty). For this course, LAS students do NOT need to apply for credit recognition for courses of other degree programs at the University of Freiburg. Students need to ask the lecturers at the beginning of the course if extra work is required to receive 6 instead of 5 ECTS (which is necessary for the recognition as a major course).</p> <p>LAS students who wish to have the course recognised in one of the major modules, must apply for change of module after the course (once the grades have been entered to HISinOne). The application form for change of module is available in the examination office.</p> <p><b>!!!! For course registration, dates of the technical faculty apply !!!!</b></p> <p>Belegphasen und weitere Termine: <a href="http://www.tf.uni-freiburg.de/de/studium-lehre/termine">http://www.tf.uni-freiburg.de/de/studium-lehre/termine</a></p> <p>Termine und Fristen rund um Prüfungen an der TF: <a href="http://www.tf.uni-freiburg.de/de/studium-lehre/a-bis-z-studium/abmeldung-von-pruefungen">http://www.tf.uni-freiburg.de/de/studium-lehre/a-bis-z-studium/abmeldung-von-pruefungen</a></p>		

Energy Systems Operations			
EES/ESS only		Semester	
Prof. Dr. Anke Weidlich			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	left-over places (max. 5)	11LE68V-8090
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option: EES I or II Electives (Courses of other degree programs)		Specialization I or II: ESS Electives (Courses of other degree programs)	
Prerequisites	Advanced EES/ESS students-a high affinity to maths, physics and engineering is required!		
Format, Dates, Times and Rooms	see HISinOne		
Course Description	<p>Contents:</p> <ul style="list-style-type: none"> <li>▪ Energy system overview – generation, transmission, distribution, consumption</li> <li>▪ Energy transport; power and energy definition</li> <li>▪ Power generation analysis</li> <li>▪ Transition of the energy systems; renewable energy grid integration</li> <li>▪ Power plants, storage, inverters</li> <li>▪ Grid theory; DC, AC circuits; system theory</li> <li>▪ System components: lines; transformers; generators</li> <li>▪ Grid calculation; reactive and active power flow</li> <li>▪ Grid codes, grid regulation</li> <li>▪ Operation and control of electricity grids; primary, secondary and tertiary control; voltage control</li> <li>▪ Economic dispatch problem</li> </ul>		
Remarks	See specific remarks of the course Fundamentals of Resilience on page 57.		

Material Life Cycles			
EES/ESS only		Semester	
Prof. Dr. Stefan Hiermaier, Dr. Sebastian Kilchert, Georg Clemens Ganzenmüller			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	left-over places (max. 5)	11LE68V-8030 11LE68Ü-8030
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option: EES I or II Electives (Courses of other degree programs)		Specialization I or II: ESS Electives (Courses of other degree programs)	
Prerequisites	Advanced EES/ESS students		
Format, Dates, Times and Rooms	see HISinOne		
Course Description	<p>Der Inhalt der Vorlesung teilt sich in drei Themengebiete. Im ersten Teil werden die gesellschaftlichen Rahmenbedingungen betrachtet, die in den letzten Jahren zu der immer größer werdenden Bedeutung des Themas Nachhaltigkeit geführt haben. Dabei befassen sich die Studenten mit der geschichtliche Entwicklung, Materialabhängigkeit, Ressourcen und Ressourcenverbrauch, kritische Ressourcen. Im zweiten Teil werden Definitionen von nachhaltiger Entwicklung und die verschiedenen Methoden zur Bewertung behandelt. Mit Fokus auf Materialien/Produkte werden Lebenszyklus, Lebensende, Kostenabschätzung, legislative Rahmenbedingungen besprochen. Im dritten Teil wird die Anwendung der gelernten Methoden an verschiedenen Fallbeispielen demonstriert.</p> <p>Übungen – see HISinOne</p>		
Remarks	See specific remarks of the course Fundamentals of Resilience on page 57.		

Solar Energy			
EES/ESS only		Semester	
Prof. Dr. Stefan Glunz, Dr. Anna Heimsath, Dr. Peter Schossig, Dr. Manuel Lämmle			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 3-4	6	left-over places (max. 5)	11LE68V-8060
Module(s) StuPo 2015		Module(s) StuPo 2020	
Specialization Option: EES I or II Electives (Courses of other degree programs)		Specialization I or II: ESS Electives (Courses of other degree programs)	
Prerequisites	Advanced EES/ESS students-a high affinity to maths, physics and engineering is required!		
Format, Dates, Times and Rooms	see HISinOne		
Course Description	<p>Contents</p> <ul style="list-style-type: none"> <li>▪ Solar Energy – Theoretical and Technical Energy Potential (black body radiation, Carnot cycle, maximum efficiencies,</li> <li>▪ Solar Energy Technologies – Tapping the sun’s energy (overview of conversion technologies, system boundaries, seasonal fluctuation, ...)</li> <li>▪ Photovoltaics – Physics of Solar Cells (introduction to semiconductors, Fermi levels, IV curves, conversion efficiency, quantum efficiency ...)</li> <li>▪ Photovoltaics – Technology Review (short introduction to the structure and technology of crystalline silicon solar cells)</li> <li>▪ Solar Thermal – Physics of Solar Collectors (basics of thermodynamics, fluid dynamics, absorption, emission, power output and other performance criteria)</li> <li>▪ Solar Thermal – Technology Review (from low temperature applications up to power plants – examples)</li> <li>▪ Heat pumps – Thermodynamics, electrical and thermal driven heat pumps and chillers, main components (compressor, evaporator, condensor etc.), system configurations (layout, sources, storages, control strategies etc )</li> <li>▪ Heat pumps: field tests and best case examples – Heat pumps and smart grid interaction, Heat pumps and PV, Heat pumps + solar thermal, storage integration)</li> </ul> <p>The lecture will be accompanied by a weekly exercise to deepen the understanding of the lecture's content and to discuss further details.</p>		
Remarks	See specific remarks of the course Fundamentals of Resilience on page 57.		

**5.3 Study Area: Wissenschaft, Technologie, Gesellschaft**

Environmental Conflicts: Expertise, Power, and the Control of Nature			
EES/ESS, Culture & History, Elective		Semester	
Dr. Nicholas Buchanan ( <a href="mailto:nicholas.buchanan@ucf.uni-freiburg.de">nicholas.buchanan@ucf.uni-freiburg.de</a> )			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	Tba
Module(s) StuPo 2015		Module(s) StuPo 2020	
Humans and the Environment Specialization Option: C&H I or II Specialization Option: EES I or II		Humans and the Environment I or II Specialization Option: ESS I or II Specialization Option: C&H I or II Senior Profile C&H	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Tue, 12-14h, BT R 207		
Course Description	<p>How safe, or unsafe, is the drinking water? And who gets to define “safe,” and by what metric? Should geoengineering be used to combat climate change? How can we ensure such decisions are just and inclusive? Is that animal species endangered? And if so, should we do something about it?</p> <p>These are but a few of the questions at the center of ongoing environmental conflicts that affect the lives of everyone on earth, whether directly or indirectly. Such controversies are moments in which people disagree about the environmental past, present, and future; about what the relationship between the environment and human societies should or should not be; about how best to produce and communicate environmental knowledge; about who has the authority to govern the environment and the people in it; and about what action, if any, to take.</p> <p>The course will focus on tracing the social, scientific, and technical dynamics of environmental conflicts and will draw consistently on concepts from the field of Science and Technology Studies (although no prior coursework in this area is required). Through theoretical and empirical readings, we will explore the dynamics of scientific and technical authority within environmental conflicts, the politics of expert disagreement, and the fate of plural ways of knowing and valuing the environment (e.g., indigenous and local knowledge). We will also investigate how environmental decision-making is becoming increasingly participatory, complicating the boundaries between experts and the public, as well as between regulators and the regulated.</p>		
Remarks	The language of instruction is English. However, students may contribute to discussions and fulfill all course requirements in English or German.		
Examination	<p>Studienleistung (3 ECTS): Attendance, completion of activities during class time, attendance at the student conference.</p> <p>Prüfungsleistung (3 ECTS): Project poster for the student conference, project presentation, 1500 word project paper.</p>		

Fungi in the Anthropocene			
Elective		Semester	
Manuel Jaimes with Anne Schiffers and Jonas Greiser			
Open to Students	Credit Points	Max. Enrollment	Course Number
Year(s) 2-4	6	20	00LE62S-WTG-002301
Module(s) StuPo 2015		Module(s) StuPo 2020	
Elective Joker		Senior Profile C&H Elective Joker	
Prerequisites	none		
Format, Dates, Times and Rooms	Seminar Wed, 14-16h, KG 1224		
Course Description	<p>In this seminar we will approach the realm of fungi (commonly known as mushrooms) from biological, ecological, cultural and philosophical perspectives.</p> <p>We repeatedly bridge the gap between the biological materiality of fungi and mycelial webs to their globally very different cultural embeddedness in value systems and rituals. Why are there mycophilic and mycophobic societies, i.e. cultures that love or detest mushrooms? What is the reason for these culturally very different reactions to mushrooms?</p> <p>We will look at the shift from indigenous and everyday knowledge to a scientization of knowledge about fungi, as well as the evolution of concepts such as symbiosis in biology but also in society.</p> <p>As Anna Lowenhaupt Tsing illustrates in her much discussed book <i>The Mushroom at the End of the World</i>, mushrooms can serve us to concretize general questions. With this in mind, the seminar will explore how fungi can help us better understand the human and natural worlds, both local and global, and their possible futures.</p>		
Remarks	The languages of instruction are both English and German. Students should have at least good comprehension skills (reading and listening) in one language and very good expressive skills in the other. Students may complete both the Studienleistung and Prüfungsleistung in either language.		
Examination	<p>Studienleistung (3 ECTS): Attendance, completion of activities during class time, attendance at the student conference.</p> <p>Prüfungsleistung (3 ECTS): Project poster for the student conference, project presentation, 1500 word project paper.</p>		

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KG Kollegiengebäude  
AU Alte Universität  
HS Hörsaal  
BT Breisacher Tor

Ph Peterhof  
HH Hermann-Herder-Straße  
FMF Stefan-Meier-Str. 21

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