

# Course Catalog

B.A./B.Sc. Program Bachelor of Liberal Arts and Sciences Winter Semester 2022-23

Albert-Ludwigs-Universität Freiburg

# UNI FREIBURG

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#### I General Information

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

#### 1 Teaching Periods and Dates

| Teaching Period     | Dates   |
|---------------------|---|
| Pre Block           | 26 September – 7 October  |
| Block III           | 17 October – 9 December   |
| Block IV            | 12 December – 17 February   |
| University Semester | 17 October – 10 February (semester-long LAS courses run according the univer-<br>sity semester) |
| Resit Period        | 3 – 29 April 2023 (resit examinations that require students' presence only)                     |

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

#### 2 EPICUR – The European University

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

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

#### Due to the international schedule, EPICUR courses and the LAS semester are not in sync. Registration for the new EPICUR LAS autumn 2022 courses will open from August 24 to September 18.

More information on upcoming courses and on course registration is available in the course catalog and on EPICampus, the EPICUR Virtual Campus Learning Platform. You can also find information on the new EPICUR European Track concept there. Credit recognition at UCF follows the procedure for courses taken outside the University of Freiburg during LAS.

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

#### 3 LAS Academic Calendar

| Date        |                | Important Dates and Deadlines   |  |  |  |
|-------------|----------------|---|--|--|--|
| Septe       | September 2022 |   |  |  |  |
| Fri         | 02.09.         | <b>Deadline: Application for Admission of Bachelor Thesis</b><br>(recommended date for students graduating at the end of WS 2022-23)  |  |  |  |
| Startir     | ng 17.09.      | <b>LAS Course Registration</b> with consecutive registration periods for courses of the upcoming winter semester (see Course Registration)  |  |  |  |
| Tue         | 04.10.         | Start: Application for SLI Language Courses (courses paid by UCF)   |  |  |  |
| Octob       | per 2022       |   |  |  |  |
| 10.10       | 14.10.         | LAS Welcome Week  |  |  |  |
| Mon         | 10.10.         | Deadline: Application for Non-LAS University of Freiburg Courses to be recognized in the Core or Major<br>Application forms have to be submitted to the course coordinators for recognition and signatures.       |  |  |  |
| Fri         | 14.10.         | LAS Graduation Ceremony   |  |  |  |
| Mon         | 17.10.         | Exam Registration and withdrawal for courses of Block I courses in HISinOne begin   |  |  |  |
| Fri         | 21.10.         | <b>Deadline: Application for Non-LAS University of Freiburg Courses to be</b><br><b>recognized as Elective</b> (for graded examinations only)<br>Please note that incomplete applications will not be considered. |  |  |  |
| Nove        | mber 2022      |   |  |  |  |
| Tue         | 01.11.         | Public Holiday: All Saint's Day (no teaching)   |  |  |  |
| Fri         | 11.11.         | <b>Deadline: Exam Registration and withdrawal</b> for courses of Block I courses in HISinOne ( <u>not</u> for courses of Block II)  |  |  |  |
| Thu         | 15.11          | <b>Deadline: Round One Application UCF Exchange Programs</b> for the Aca-<br>demic Year 2022/23. Details on the Application procedure will be announced<br>by Email.  |  |  |  |
|             |                | Deadline: Application Credit Recognition for Study Abroad/Previous<br>Studies   |  |  |  |
| Decei       | mber 2022      |   |  |  |  |
| Fri         | 02.12.         | Deadline: Application for Admission of Bachelor Thesis  |  |  |  |
| Mon         | 12.12.         | Exam Registration and withdrawal for courses of Block II AND semester long in HISinOne begin  |  |  |  |
|             |                | Bachelor Thesis Information Session, 14-16h (tbc)   |  |  |  |
| 23.1206.01. |                | University Christmas Break (no teaching)  |  |  |  |
| Janua       | ary 2023       |   |  |  |  |
| Fri         | 13.01.         | Deadline: Exam registration and withdrawal for Block II AND semester long courses   |  |  |  |

| Date                  |               | Important Dates and Deadlines   |  |  |
|-----------------------|---------------|---|--|--|
| Sun                   | 15.01.        | <b>Deadline: Round Two Applications for UCF Exchange Programs</b> for the Academic Year 2022/23. Details on the Application procedure will be announced via Email |  |  |
| Tue                   | 31.01.        | <b>Deadline: Declaration of Major</b> (to be taken into account for the upcoming course registration)   |  |  |
|                       |               | Deadline: Application for Graduation WS 2022-23   |  |  |
| Febru                 | February 2023 |   |  |  |
| Mon                   | 06.02.        | Second Semester Information Session, 14-16h (tbc)<br>(recommended for first year students)  |  |  |
| Thu                   | 16.02.        | Deadline: Application for Admission of Bachelor Thesis<br>(recommended date for students graduating at the end of SS 2023)  |  |  |
| Fri 17.02.            |               | End-of-semester Get-together  |  |  |
| Marcl                 | March 2023    |   |  |  |
| Beginning of<br>March |               | Publication of the LAS Course Catalog SS 2023 on the UCF website  |  |  |

#### **II** Course Registration

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

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

#### 1 When to Register for Courses?

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

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

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

| Registration Period I               |  |
|-------------------------------------|--|
| Sat, 17.9 Tue, 20.9. (12:00h, noon) |  |

| Who can register  | For what   | Comment  |
|---|--|--|
| Liberal Arts and Sci-<br>ences (LAS) students<br>who have <u>formally</u> de-<br>clared their major by<br>31 <sup>st</sup> of January | LAS courses to be rec-<br>ognized as <b>Major</b><br><b>courses only</b> ( <u>not</u> as<br>Electives, Core or Lan-<br>guage courses!) | LAS students are allowed to register for a <b>maximum of</b><br><b>5 courses in total</b> (including language courses paid by<br>UCF, excluding pre-block courses). If students register<br>for more than 5 courses they will be removed from the<br>most popular courses. No exceptions to this rule will be<br>made.<br>LAS Students who have <u>not</u> formally declared their ma-<br>jor by 31 <sup>st</sup> of January can only register for courses in<br>Registration Period II. |

Places will be assigned after the registration period. Higher year students will get priority on places unless otherwise noted in the course description.

You can check your registration status on Wednesday evening. Your registration request may have been declined or you may have been moved to a different workgroup. Students whose registration requests have been declined will have the opportunity to register for alternative courses on **Thu**, **22.9**, 14:00h to 18:00h in HISinOne.

Please, de-register from courses that you do not want to take immediately.

| Registration Period II<br>Sat, 24.9 Tue, 27.9. (12:00h, noon) |   |
|---|---|
| For what  | Comment   |
| All courses listed in the LAS Course Catalog.                 | LAS and Exchange Students are allowed to register for<br>a <b>maximum of 5 courses in total</b> (including language<br>courses paid by UCF, excluding pre-block courses). No<br>exceptions to this rule will be made. |
|   | Sat, 24.9 Tue,<br>For what<br>All courses listed in the   |

otherwise noted in the course description. Whether or not a student has declared their major will not be considered anymore.

You can check your registration status on Wednesday evening. Your registration request may have been declined or you may have been moved to a different workgroup. Students whose registration requests have been declined will have the opportunity to register for alternative courses on **Thu**, **29.9**, 14:00h to 18:00h in HISinOne.

Please, de-register from courses that you do not want to take immediately

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| Registration Period III<br>Sat, 1.10 Wed, 5.10. (12:00h, noon)  |  |  |
|---|--|--|
| Who can register  | For what                                     | Comment  |
| LAS students, LAS Ex-<br>change students, and<br>Students of partner de-<br>gree programs at the<br>University Freiburg | All courses listed in the LAS Course Catalog | Students can register for courses that still have places<br>available.<br>Students are allowed to register for a <b>maximum of 6</b><br><b>courses in total.</b> |

Places will be assigned throughout the registration period. Regularly check your registration status in HISinOne. Your registration request may have been declined. In some cases, priority on places will be given to students of partner degree programs.

Please, de-register from courses that you do not want to take immediately.

#### 2 How to Register for Courses?

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

#### 3 Participant Lists

Course participant lists will be finalized **on Monday, October 10, 2022** and passed on to the instructors. Later admissions to courses by the LAS program coordination will not be possible.

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

Courses with will less than five participants may be cancelled.

#### 4 Problems with Course Registration?

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

#### Always provide

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

#### **III** Exam Registration

#### 1 Who Needs to Register for Examination?

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

#### 2 When to Register for Examination?

| Registration<br>Period | Dates                      | Exam Registration and Withdrawal   |
|------------------------|----------------------------|------------------------------------|
| 1                      | Diverse dates tba in class | Pre-block                          |
| 2                      | 17.10.2022 – 11.11.2022    | Block I                            |
| 3                      | 12.12.2022 – 13.1.2023     | Block II AND semester long courses |

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

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

#### 3 How to Register for Examination?

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

#### 3.1 Students of other degree programs and other exchange programs

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

#### 3.2 Has the exam registration been successful?

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

#### 4 Problems with Exam Registration

See Problems with Course Registration.

| ear Schedule |
|--------------|
| ×            |
| undational   |
| ō            |

|    |           | 08:00-10:00   | 10:00-12:00                                       | 12:00-14:00                                  | 14:00-16:00                                      | 16:00-18:00                            | 18:00-20:00 |
|----|-----------|---|---|--|--|--|-------------|
| B2 | Friday    | Introduction to<br>Resp. & Leadership 08:00-10:00<br>Projects | Introduction to<br>Resp. & Leadership<br>Projects |  |  |  |             |
|    | Fri       |   |   |  |  |  |             |
|    | Thursday  |   |   | English Academic Writing<br>(4 SR)<br>(1 SG) | English Academic Writing<br>(3 TL)               | English Academic<br>Writting<br>(2 5G) |             |
| 81 | Thu       | Research &<br>Presentation<br>(RP)                            | Research &<br>Presentation<br>(SS)<br>(SS)        | English Acad<br>(4<br>(1                     | English Acad                                     | Research &<br>Presentation<br>(MM)     |             |
| 82 | Wednesday | Introduction to<br>Resp. & Leadership<br>WGs                  | Introduction to<br>Resp. & Leadership<br>WGs      | Knowledge in Context<br>WG 1 + 2             | Knowledge in Context<br>WG 3+4                   |  |             |
|    | Wedi      |   |   | <b>Knowledg</b> e<br>WG                      | <b>Knowledg</b> e<br>WG                          |  |             |
|    | Tuesday   |   |   | English Academic Writing<br>(1 SR)           | English Academic Writing<br>(2 SG)<br>(3 TL)     | English Academic<br>Writing<br>(4 SG)  |             |
| 81 | Tue       | Research &<br>Presentation<br>(RP)                            | Research &<br>Presentation<br>(SS)<br>(SS)        | English Acad<br>(1                           | English Acad<br>(2<br>(3                         | Research &<br>Presentation<br>(MM)     |             |
|    | nday      |   | Lecture<br>English Academic Writing               | Lecture<br>Knowledge in Context              | Lecture<br>Introduction to<br>Resp. & Leadership |  |             |
|    | Monday    |   | Lect<br>English Acad                              |  | Lecture<br>Research &<br>Presentation            |  |             |
|    |           | 08:00-10:00   | 10:00-12:00                                       | 12:00-14:00                                  | 14:00-16:00                                      | 16:00-18:00                            | 18:00-20:00 |

#### 2. Course Descriptions

#### 1 Pre-Block Courses

#### 1.1 Study Area: Core

| Rhetoric and Techniques of Presentation              |   |               |                          |                    |  |
|--|---|---------------|--------------------------|--------------------|--|
| Core   |   |               | Pre-Block                |                    |  |
| Holger Witzenleiter (kontakt@holger-witzenleiter.de) |   |               |                          |                    |  |
| Open to Stud   | lents   | Credit Points | Max. Enrollment          | Course Number      |  |
| Year(s) 2-   | ·4  | 2             | 20                       | 00LE62S-LAS-CO0061 |  |
| М  | odule(s) \$   | StuPo 2015    | Module(s) S              | StuPo 2020         |  |
| Elective Joker                                       |   |               | Advanced Academic Skills | 5                  |  |
| Prerequisites  | none  |               |                          |                    |  |
| Format, Dates,<br>Times and<br>Rooms                 | Intensive Seminar<br>4.10., 9-17h, Ph HS1<br>7.10., 9-17h, AU Co-Creation Room  |               |                          |                    |  |
| Course<br>Description                                | <ul> <li>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 <ul> <li>short speeches and brief addresses</li> <li>body language, facial expressions and gestures</li> <li>voice pitch, articulation, emphasizing through rhythmic speaking</li> </ul> </li> </ul> |               |                          |                    |  |
| Remarks  | Students of PO20 will have priority.<br>Course registration in HISinOne from 15.821.9.2022.   |               |                          |                    |  |
| Examination<br>Dates                                 | SL only   |               |                          |                    |  |

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

| Observing Nature                     |   |  |  |  |
|--------------------------------------|---|--|--|--|
| EES/ESS, Electiv                     | EES/ESS, Electives  |  |  |  |
| Sabine Sané (sa                      | bine.sane   | e@ucf.uni-freiburg.de)   |  |  |
| Open to Stud                         | ents  | Credit Points  | Max. Enrollment  | Course Number  |
| Year(s) 2-4                          | 4   | 6  | 15   | 00LE62S-LAS-EE0032   |
| Mc                                   | odule(s) S  | StuPo 2015   | Module(s) S  | StuPo 2020   |
| Methods of Obse<br>Elective Joker    | erving Na   | ture   | Methods of Observing Na<br>Elective Joker  | ture   |
| Prerequisites                        | Introduc  | tion to EES/ESS  |  |  |
| Format, Dates,<br>Times and<br>Rooms |   |  | Freiburg on September 26-<br>day in case of extremely b  |  |
| Course<br>Description                | created,<br>agricultu<br>nature is<br>environn<br>living en<br>can be u<br>We will  | new roads installed, mo<br>ire is applied, windmills and<br>s essential to be able to un<br>nent. The methods to observironment. This course pro<br>sed to observe our nature. | is due to different reasons.<br>ore agricultural land is ne<br>disolar parks are installed an<br>inderstand nature and the of<br>rive our nature are manifold<br>wides you with an overview<br>We will go on daily excursion<br>alitative methods to identi-<br>observe animal behavior. | eded, different forms of<br>nd many more. Observing<br>changes that occur in our<br>d as is our living and non-<br>of different methods that<br>ns in and around Freiburg. |
| Remarks                              | Students majoring in EES/ESS have priority. You must attend all excursion days. Only<br>in case of sickness you can skip one excursion day but you will have to do make-up<br>work for the missed day! The excursions will be whole day and partly outside of<br>Freiburg. So you will also need to go to different locations either by public transport, car<br>or if possible by bike. Only in case of extremely bad weather an excursion might be<br>postponed to October 7. So always wear appropriate cloths since we will be outside in<br>nature.<br>Course registration in HISinOne from 15.821.9.2022. |  |  | Il have to do make-up<br>I partly outside of<br>er by public transport, car<br>n excursion might be  |
| Examination<br>Dates                 | Examination 21 10 2022  |  |  |  |
| Resit Date                           | 04.11.20  | )22  |  |  |

#### 1.3 Study Area: Life Sciences

| Drug Development and Regulation      |  |  |  |                           |
|--------------------------------------|--|--|--|---------------------------|
| Life Sciences, El                    | lectives   |  | Pre-Block  |                           |
| Dr. Petra Lachm                      | ann (Lach  | nmannp@aol.com)  | ^  |                           |
| Open to Stud                         | lents  | Credit Points  | Max. Enrollment  | Course Number             |
| Year(s) 2-                           | 4  | 6  | 7  | 00LE62S-LAS-LS0035        |
| M                                    | odule(s) S   | StuPo 2015   | Module(s) S  | StuPo 2020                |
| Advanced Life S<br>Specialization O  |  |  | Advanced Life Sciences I<br>Specialization I or II: Life S |                           |
| Prerequisites                        | Introduc   | tion to Life Sciences                                      |  |                           |
| Format, Dates,<br>Times and<br>Rooms |  |  |  |                           |
| Course<br>Description                | 28.0905.10., 9-15h, Lab at BIOSS Schänzlestraße 18, 79104 Freiburg<br>06.1007.10., 9-13h, AU 01065<br>What is a drug? What is an active substance? What are biologics? What is an orphan<br>drug? How are drugs discovered? What are the potential starting points? Who decides<br>which drug /treatment/disease to follow up? What regulations have to be fulfilled to get<br>pharmaceuticals approved? Who are the stakeholders involved?<br>In this interdisciplinary course, we are going to investigate different areas of drug<br>development. Starting point will be a disease and how it affects the body. The<br>molecules – receptors, enzymes, genes – that might play a role in the disease will be<br>discussed. Then we will talk about active substance - a chemical-synthetic substance or a<br>biopharmaceutical - has to be produced in a larger scale and has to be tested in cell<br>cultures, animals and finally in humans (GLP, GMP, GCP). We will take a closer look at<br>preclinical development and at clinical trials. We will talk about the Committee of Animal<br>Experimentation as well as the Ethics Commission and discuss the history behind it. |  |  |                           |
| Remarks                              | Course   | registration in HISinOne fro                               | om 15.821.9.2022.  |                           |
| Examination<br>Dates                 |  | Standard Operating Procec<br>o the instructor) and printed | lure for the experiments cor<br>d form (to Dr. Büchner).   | nducted, due on 31.10. in |

#### 1.4 Study Area: Multiple

| Empowering for Sustainable Development |   |  |                 |   |
|--|---|--|-----------------|---|
| Electives                              | Electives   |  |                 |   |
|  |   | lose@ucf.uni-freiburg.de),<br>ebner, Julia Wlasak, Micha |                 | ak, Joanna Kic-Drgas (both<br>enna)   |
| Open to Stud                           | lents   | Credit Points  | Max. Enrollment | Course Number   |
| Year(s) 2-                             | -4  | 4  | 20              | 00LE62S-LAS-EE0035-E012   |
| M                                      | odule(s)  | StuPo 2015   | Module(s        | s) StuPo 2020   |
| Elective Joker                         |   |  | Elective Joker  |   |
| Prerequisites                          | B2 Gern   | nan proficiency  |                 |   |
| Format, Dates,<br>Times and<br>Rooms   | nes and 21 + 22 0 - 0 46:20h L castion TPA  |  |                 |   |
| Course<br>Description                  | <ol> <li>2. die Grundbegriffe der Nachhaltigkeit auf Deutsch zu diskutieren und zu<br/>kommunizieren</li> <li>3. sich kritisch zu nachhaltiger Entwicklung und/oder globalen Herausforderungen zu<br/>äußern</li> </ol>   |  |                 | es braucht, um ein<br>id stärken Sie sich, um<br>e Entwicklung kennen,<br>kutieren und zu |
| Remarks                                | 4. Ideen umzusetzenCourse registration in HISinOne from 15.816.9.2022.Für die Teilnahme am einwöchigen Kurs erhalten Sie 2 ECTS. Bei einer Teilnahme am<br>Kurs plus einer zusätzlichen anschließenden Projektaufgabe, erhalten Sie insgesamt 4<br>ECTS. Der Kurs ist unbenotet.<br>EPICUR students who already have pre-registered for the course have priority. |  |                 |   |

| $\mathbf{a}$ |
|--------------|
| 2            |

| Global Challenges                    |   |                              |  |                    |  |
|--------------------------------------|---|------------------------------|--|--------------------|--|
| Governance, EE                       | ES/ESS, E   | lectives                     | Pre-block  |                    |  |
| Ermelinda Kanu                       | shi (erme   | linda.kanushi@ucf.uni-freib  | ourg.de)   |                    |  |
| Open to Stud                         | dents   | Credit Points                | Max. Enrollment                                  | Course Number      |  |
| Year(s) 2-                           | -4  | 6                            | 20   | 00LE62S-LAS-GO0061 |  |
| M                                    | lodule(s)   | StuPo 2015                   | Module(s) S                                      | StuPo 2020         |  |
| Advanced Gove                        | rnance I c  | or II                        | Advanced Governance I of Humans and the Environr |                    |  |
| Prerequisites                        | Introduc  | tion to Governance OR Intr   | oduction to EES/ESS                              |                    |  |
| Format, Dates,<br>Times and<br>Rooms | Seminar<br>26.97.7  |                              | , Ph HS2   |                    |  |
| Course<br>Description                | 26.97.10., 8-18h (exact times tba), Ph HS2<br>Humans share not only the same planet but also the same problems. Global problems transcend national borders and challenge international regimes. So what are some major issues the world is facing nowadays? Are these issues interconnected with each other? What are some possible solutions to these challenges? Global Challenges is a pre-block course that will introduce students to some of the major challenges humans currently face. Initially, you will be acquainted with a global panorama of selected issues that are impacting life on earth.<br>The course will be offered in a hybrid format. Most sessions of the course with be inpresence with however online scenarios are not be excluded. During the first session, you will be given an overview of the latest data on issues arising from challenges such as: poverty, income inequality, water, artificial intelligence, overpopulation, migration, health, educations etc. Also, the course will introduce you to one of the roadmaps to |                              |  |                    |  |
| Remarks                              |   | registration in HISinOne fro |  |                    |  |
| Examination<br>and Resit             | The examination is in the form of written assignments, totaling about 4,500 words (policy paper, solutions paper, interlinkage paper).  |                              |  |                    |  |

| Heal the World: Pop Music as a Means of Sustainability Communication |   |   |  |  |  |
|--|---|---|--|--|--|
| Culture & History  | y, EES/ES   | SS, Electives   | Pre-Block  |  |  |
| Dr. Thorsten Phi   | ilipp (thor   | sten.philipp@tu-berlin.de)  |  |  |  |
| Open to Stud   | dents   | Credit Points   | Max. Enrollment  | Course Number  |  |
| Year(s) 2-   | -4  | 6   | 20   | 00LE62S-LAS-CHEE0001   |  |
| М  | odule(s)  | StuPo 2015  | Module(s)  | StuPo 2020   |  |
| Art, Literature, A<br>Advanced Cultur<br>Humans and the              | re & Histo  | ry I, II or III   | Culture: Arts<br>Culture & History I, II or III<br>Humans and the Environr   |  |  |
| Prerequisites  | Introduc  | tion to Culture & History or  | Introduction to ESS  |  |  |
| Format, Dates,<br>Times and<br>Rooms                                 | 27.09., 1<br>28.09., 1  | 9, 9-13h, HS 1234<br>17-19.30h, HS 1224<br>17.30-21h, HS 1234<br>9-13h, HS 1224   |  |  |  |
| Course<br>Description  | As an indicator of social change and an instrument of mobilization, pop and rock music<br>have played a central role since the 1960s in the processing of perceptions of risk,<br>danger and decline and in the renegotiation of power constellations. To what extend are<br>the ecological movements and the sustainability discourse part of these dynamics?<br>Which interconnections arise between pop music and environmental discourses, which<br>have become a prominent theory pool of popular culture at since disturbing alarm calls<br>such as "Limits to Growth" (1972) and "Global 2000" (1980)?<br>The seminar examines popular music as a pre-political everyday code and as a<br>resonance room within the dispute on sustainability, nature and environmental<br>protection, sufficiency and post growth theories. By constantly redefining the idea of<br>nature, popular songs not only provide a way of self-assurance and self-discovery to<br>ecologically inspired protest groups; they are just as much a monument of the "era of<br>ecology" (Joachim Radkau) as they deliver a sonic and narrative mirror of human-<br>environmental relations. As an expression and agent of power, they are an ambivalent<br>factor in ecological crisis dynamics.<br>At the interface of political, cultural and media science perspectives, the seminar will be<br>dedicated to selected examples of popular music in their environmental and climate |   |  |  |  |
| Remarks  | Course  | registration in HISinOne fro  | m 15.821.9.2022.   |  |  |
| Examination  | 18.11.20  | )22   |  |  |  |
| Resit Date   | 04.12.20  | )22   |  |  |  |
| Recommended<br>Reading   | from mu<br>Newig, J<br>Perspec<br>Philipp,<br>Nachhal<br>Philipp,   | sical frontlines. Arlesford: Z<br>Jens et al. 2013. Communic<br>tives and Exploration of So<br>Thorsten. 2019. Popmusikf<br>tigkeit interdisziplinär. Konz<br>Thorsten. 2021. Der Sound | e. From Public Enemy to P<br>Zero Books.<br>cation Regarding Sustainab<br>cietal Subsystems. Sustain<br>orschung. In: Evi Zemanek<br>zepte, Diskurse, Praktiken.<br>I der Katastrophe: Popmusi<br>urnal Soziale Bewegungen | ility : Conceptual<br>ability 5: 2976-2990.<br>und Ursula Kluwick (ed.),<br>Stuttgart: UTB, 330-346.<br>k als Resonanzraum |  |

Examination

Dates

No exam.

| Pre-Course Maths & Physics           |  |   |                             |                          |  |
|--------------------------------------|--|---|-----------------------------|--------------------------|--|
| Life Sciences, E                     | ES/ESS   |   | Pre-Block                   |                          |  |
| Dr. Benoit Louv                      | el (benoit.  | louvel@ucf.uni-freiburg.de)                                   |                             |                          |  |
| Open to Stud                         | dents  | Credit Points   | Max. Enrollment             | Course Number            |  |
| Year(s) 2                            | -4   | none (course optional)  | 20                          | 00LE62S-LAS-LSEE0006     |  |
| N                                    | lodule(s)  | StuPo 2015  | Module(s)                   | StuPo 2020               |  |
| none                                 |  |   | none                        |                          |  |
| Prerequisites                        | Introduc   | tion to Earth and Environm                                    | ental Sciences and/or Intro | duction to Life Sciences |  |
| Format, Dates,<br>Times and<br>Rooms | Tue, 10<br>Wed, 10   | 0.20222<br>12h, AU 01065<br>0-12h, AU 01065<br>-12h, AU 01065 |                             |                          |  |
| Course<br>Description                | Optional preparatory course for the semester-long course Maths and Physics (p. 56).  |   |                             |                          |  |
| Remarks                              | Course registration in HISinOne from 15.821.9.2022.<br>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 kosmic, a part of ILIAS. |   |                             |                          |  |

You can log in and join the class with your ILIAS account.

#### 2 Courses Offered in Block I

#### 2.1 Study Area: Core

| Foundational Year: Research and Presentation   |  |   |  |                           |  |
|--|--|---|--|---------------------------|--|
| Core   |  |   | Block I                                  |                           |  |
| Dr. Simon Büchner (buechner@ucf.uni-freiburg.de), Dr. Mila Mikalay (mikalay@ucf.uni-freiburg.de)<br>Dr. Sabine Sane (sabine.sane@ucf.uni-freiburg.de), Dr. Ryan Plumley (ryan.plumley@ucf.uni-<br>freiburg.de) |  |   |  |                           |  |
| Open to Stud   | ents   | Credit Points   | Max. Enrollment                          | Course Number             |  |
| Year(s) 1  |  | 6   | 80                                       | 00LE62S-LAS-CO0008        |  |
| Мо   | odule(s) S   | StuPo 2015  | Module(s) S                              | StuPo 2020                |  |
|  |  | -   | Research and Presentation                | on                        |  |
| Prerequisites  | none   |   |  |                           |  |
| Format, Dates,<br>Times and<br>Rooms   | Lecture<br>Mon, 14-16h, AU HS 2<br>Seminars<br>R+P 1: Tue and Thu, 8-10h, AU 01065<br>R+P 3: Tue and Thu, 10-12h, AU 01036a<br>R+P 4: Tue, 16-18h, KG 1228 and<br>Thu, 16-18h, KG 1036<br>Final Conference<br>Thu, Dec 8, 14-18h and Fri, Dec 9, 9-13h   |   |  |                           |  |
| Course<br>Description  | "The world has problems while universities have disciplines." Gordon Wilson (The Open<br>University, Milton Keynes, UK)<br>Complex problems require profound thinking from different points of view, sometimes a<br>combination of methods, and always educated sagacity. This course will introduce<br>students to different approaches of dealing with complex problems, not only different<br>scholarly disciplines, but also with respect to the methods used in and across these<br>disciplines. It will face students with questions on different forms of knowledge and will<br>discuss in particular what scholarly knowledge is and how it differs from other forms of<br>knowledge.<br>At the same time students will acquire skills of scholarly work such as finding relevant<br>literature from different sources, reading and understanding scholarly texts, and<br>managing references. In addition, they will practice the presentation of a topic in a<br>limited amount of time to a specific audience. It will also provide the starting point for<br>the training in academic writing, which will be complemented by the course "English<br>Academic Writing". |   |  |                           |  |
| 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<br>Dates   |  | ed bibliography (due date a<br>3 or 9, 2022 (latest examina | s announced in the semina<br>ation date) | r) and final presentation |  |

## 2.2 Study Area: Earth and Environmental Sciences / Environmental and Sustainability Sciences

| Urban Biodiversity and Green Infrastructures |   |   |  |                    |
|--|---|---|--|--------------------|
| EES/ESS, Elect                               | ives  |   | Block I  |                    |
| Marufa Sultana                               | (marufa.s   | ultana@wildlife.uni-freiburg                  | .de)   |                    |
| Open to Stud                                 | dents   | Credit Points                                 | Max. Enrollment                                      | Course Number      |
| Year(s) 2-                                   | -4  | 6   | 20   | 00LE62S-LAS-EE0031 |
| M  | lodule(s)   | StuPo 2015                                    | Module(s) \$   | StuPo 2020         |
| Humans and the Specialization O              |   |   | Humans and the Environr<br>ESS: Specialization Optio |                    |
| Prerequisites                                | Introduc  | tion to EES/ESS                               |  |                    |
| Format, Dates,<br>Times and<br>Rooms         | Tue, 14-  | -16h, Ph HS 2<br>18h, KG 1140<br>16h, KG 1139 |  |                    |
| Course<br>Description                        | <ul> <li>Ind, 14-160, KG 1139</li> <li>Urbanisation is a long-standing phenomenon and is considered an integral part of economic development and human well-being. It is, however, also a direct driver of alteration and degradation of natural areas and loss of biodiversity. Here, green infrastructure (GI) features, e.g., small parks, green roofs, green walls, street trees, etc., can help to improve habitat heterogeneity and connectivity in an urban landscape and benefit biodiversity in cities. In this interdisciplinary course, students will get a fundamental understanding of relevant topics: <ul> <li>Concepts of patterns and drivers of urban biodiversity</li> <li>Methods of biodiversity documentation and monitoring in urban areas</li> <li>Urban biodiversity conservation issues in cities</li> <li>Concepts of green infrastructure (GI)</li> <li>An overview of GI planning and practices globally</li> <li>Different types of GI features</li> <li>GI features' contribution to urban biodiversity conservation</li> <li>The course will be a mix of short lectures, group discussions, fieldworks, and a review of literature on selected topics.</li> </ul> </li> </ul> |   |  |                    |
| Remarks                                      | Students majoring in Earth and Environmental Sciences/Environmental and Sustainability Sciences have priority   |   |  |                    |
| Examination<br>Dates                         | 06.12.2023  |   |  |                    |

#### 2.3 Study Area: Governance

| Urban Governance in the Global South |  |                              |                                    |                            |  |  |  |
|--------------------------------------|--|------------------------------|------------------------------------|----------------------------|--|--|--|
| Governance, Ele                      | ectives  |                              | Block I                            |                            |  |  |  |
| Dr. Aysegul Car                      | Dr. Aysegul Can (aysegul.can87@gmail.com)  |                              |                                    |                            |  |  |  |
| Open to Stud                         | dents  | Credit Points                | Max. Enrollment                    | Course Number              |  |  |  |
| Year(s) 3                            | -4   | 6                            | 20                                 | 00LE62S-LAS-GO0064         |  |  |  |
| M                                    | lodule(s) \$   | StuPo 2015                   | Module(s) \$                       | StuPo 2020                 |  |  |  |
| Specialization O                     | ption Gov  | vernance I or II             | Specialization Option Gov          | rernance                   |  |  |  |
| Prerequisites                        | Introduc   | tion to Governance           |                                    |                            |  |  |  |
| Format, Dates,<br>Times and<br>Rooms | Online S<br>Tue, 8-1<br>Thu, 8-1   | 2h                           |                                    |                            |  |  |  |
| Course<br>Description                | <ul> <li>Thu, 8-12h</li> <li>For the first time in history, almost half of the global population is urban. This number is growing more rapidly in the Global South. The rapid urbanisation presents us with a challenge to analyse and explore what it means. This course proposes a sociological and political study of urban spaces and their conflicts, with an emphasis on governance as a concept that permeates themes such as democracy, authoritarianism, collective action, social movements and participation. It covers: <ul> <li>Urban space and democracy - What are the relationships between the shaping of the cities and governance structures?</li> <li>Collective action and the urban issue - How do people act in groups in cities, how do they interact and dispute urban territories?</li> <li>Cities in the Global South - Are there specificities in the urban dynamics of the Global South?</li> </ul> </li> </ul> |                              |                                    |                            |  |  |  |
| Remarks                              | This is a online is  |                              | national team of lecturers.        | The effective contact time |  |  |  |
| Examination +<br>Resit Dates         | Will be annoumced in the updated Course Catalogue.   |                              |                                    |                            |  |  |  |
| Recommended<br>Reading               | Simone,<br>622.  | A. 2020. "Cities of the glob | oal south." <i>Annual Review</i> o | of Sociology, (46), 603 –  |  |  |  |

#### 2.4 Study Area: Life Sciences

| Life Sciences, Electives   |   | Block I   |  |                    |
|--|---|---|--|--------------------|
| PD Dr. Melanie   | . Hart an   | d colleagues (melaniehar@                           | gmail.com)   |                    |
| Open to Stud   | lents   | Credit Points                                       | Max. Enrollment  | Course Number      |
| Year(s) 3-   | ·4  | 6   | 8  | 00LE62S-LAS-LS0020 |
| М  | odule(s) S  | StuPo 2015  | Module(s) S  | StuPo 2020         |
| Specialization O<br>Elective module  | •   | e Sciences I or II                                  | Specialization Option: Life<br>Elective module (Joker)   | Sciences I or II   |
| Prerequisites  | Laborato  | ory Work for the Life Scienc                        | ces, Cell Biology, Biochemis                             | stry               |
| Format, Dates,<br>Times and<br>Rooms   | Engesse   | 0-12h, G.E.R.N . (Gewebe<br>erstrasse 4 (2nd floor) | ersatz, Regeneration & Nec<br>room, Engesserstrasse 4 (5 | - /                |
| Course Description This course will consist of a series of lectures, student-led seminars, journal clubs (student-led presentation of current research articles) and hand-on laboratory work. Lectures will introduce you to the topics relevant to the field of tissue engineering and cellular therapies in regenerative medicine such as Good Manufacturing Practice (GMP) production of cells for cellular therapies, choosing the right cell type for a specific cell therapy, the importance of the extracellular matrix in regeneration of tissue, the role of biomechanical and biophysical stimuli in tissue engineering and creating three-dimensional (3D) environments for cells and vital implants. Students will team up to present a research article ("Journal Club"), as well as a seminar topic relevant to the this field of in order to gain knowledge in how to read, present and evaluate scientific research papers and to become more acquainted with standard and new techniques that can be used in tissue engineering and regenerative medicine. Hands-on work in the laboratory will include sterile cell culture techniques, how to isolate and culture mesenchymal stem cells from tissue, creating and assessing 3D cellular environments and analyzing their biomechanical properties. |   |   |  |                    |
| Remarks  | First meeting will be taught in the seminar room on the entrance level next to the elevators of Engesserstrasse 4. Please always be on time as the doors automatically lock. If necessary, call to be let in but this will disrupt the course (Tel. 40975). The location of the remaining courses will be provided to you on the first day of the course. |   |  |                    |
| Examination<br>Dates   | Two presentations, maintaining a laboratory notebook about the contents of the hands-<br>on laboratory work, as well as a short multiple choice exam in the final week.<br>Resit date tba.  |   |  |                    |
| Recommended  | Guraya, S. Y., Sampogna, G., & Forgione, A. (2015). Regenerative Medicine: Historical Roots and Potential Strategies in Modern Medicine.  |   |  |                    |

| Laboratory Methods in Cell and Molecular Biology                        |   |                               |   |                    |
|---|---|-------------------------------|---|--------------------|
| Life Sciences   |   |                               | Block I                                       |                    |
| Dr. Juncal Fernandez Orth (juncal.fernandez.orth@uniklinik-freiburg.de) |   |                               |   |                    |
| Open to Stud  | dents   | Credit Points                 | Max. Enrollment                               | Course Number      |
| Year(s) 2-  | -4  | 6                             | 8   | 00LE62S-LAS-LS0039 |
| M   | lodule(s)   | StuPo 2015                    | Module(s)                                     | StuPo 2020         |
| Methods (LS)<br>Specialization O  | ption Life  | Sciences I or II              | Methods I or II,<br>LS Specialization I or II |                    |
| Prerequisites   | Introduc  | tion to Life Sciences, Cell E | Biology                                       |                    |
| Format, Dates,<br>Times and<br>Rooms                                    | Seminar<br>Thu, 14-16h, Ph HS 3<br>Fri, 13:30-16:30, ZTZ-Zentrum für Translationale Zellforschung, Laboratory 2 OG. 017,<br>Breisacher Str 115  |                               |   |                    |
| Course<br>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. |                               |   |                    |
| Examination<br>Dates  | Lab-book (70%) at the end of the course and formal written exam (30%) on 9.12.2022. Resit date tba.   |                               |   |                    |
| Recommended<br>Reading  | Wilson and Walker: <i>Principles and Techniques of Biochemistry and Molecular Biology</i> ,<br>8th edition.<br>(6th edition available in the university library: TM 2020/1186)  |                               |   |                    |

#### 3 Courses Offered in Block II

#### 3.1 Study Area: Core

| Foundational Year: Principles of Responsible Leadership   |   |               |                           |                      |
|---|---|---------------|---------------------------|----------------------|
| Core Block II   |   |               |                           |                      |
| Dr. Simone Krais (simone.krais@sli.uni-freiburg.de), Elisabeth Ahner-Tudball (ahner-tudball@web.de) |   |               |                           | hner-tudball@web.de) |
| Open to Stud  | dents   | Credit Points | Max. Enrollment           | Course Number        |
| Year(s) 1   | -2  | 6             | 80                        | 00LE62VS-LAS-CO0026  |
| M   | lodule(s) \$  | StuPo 2015    | Module(s) \$              | StuPo 2020           |
|   |   |               | Responsibility and Leader | ship 1               |
| Prerequisites   | none  |               |                           |                      |
| Format, Dates,<br>Times and<br>Rooms  | Lecture<br>Mon, 14-16h, AU HS 2<br>Workgroups<br>WG1: Wed, 8-10h, KG 1032<br>WG2: Wed, 8-10h, KG 1234<br>WG3: Wed, 10-12h, HH 9 HS 00 018<br>WG4: Wed, 10-12h, BT 204<br>Projects + Coachings<br>Fri, 8-10h and Fri, 10-12h   |               |                           |                      |
| Course<br>Description   | We experience an increasing dynamic and complexity of daily life, a variety of lifestyles<br>and beliefs about what is right or wrong which make the task of leading responsibly<br>more difficult, complex, and uncertain. In addition to this, grand challenges like global<br>warming, rising inequality and global migration put pressure on every one of us to<br>contribute to a sustainable future for people and the planet.<br>This foundational course introduces essential principles of responsible leadership,<br>understood broadly as a multifaceted approach to constructive action in professional life<br>and beyond. Our comprehensive treatment of the term is reflected in different parts,<br>each presenting responsibility and leadership from a different angle.<br>At the same time, this course will introduce a foundation and practical guideline for<br>working dynamically and efficently in groups.<br>Based on this input, students will develop their own project which will be presented at<br>the end of this first semester. |               |                           |                      |
| Remarks   | This course is part of the Foundational Year. First year students register for this course during the Welcome Week. No registration required.   |               |                           |                      |
| Examination<br>Dates  | Regular attendance and active work in the project groups. Students will organize the presentation of the projects at the End-of-semester Get-together on 17.02.2023. SL only.   |               |                           |                      |

#### 3.2 Study Area: Governance

| Governance: Oral examination         |  |  |  |   |  |  |
|--------------------------------------|--|--|--|---|--|--|
| Governance only                      |  |  | Block II   |   |  |  |
| Dr. Mila Mikalay                     | (mikalay   | @ucf.uni-freiburg.de), Dr. S   | toyan Panov, Dr. Elina Sar   | nehag   |  |  |
| Open to Stud                         | lents  | Credit Points  | Max. Enrollment  | Course Number   |  |  |
| Year(s) 4                            | Ļ  | 4 (PL only)  | 10   | tba   |  |  |
| M                                    | odule(s)   | StuPo 2015   | Module(s) \$   | StuPo 2020  |  |  |
|                                      | -  |  | Senior Profile Governance  | 9   |  |  |
| Prerequisites                        | STUPO  | prerequisites for Senior mo  | odules apply   |   |  |  |
| Format, Dates,<br>Times and<br>Rooms | Thu, Fel   | amination (a 1h slot per stud<br>b 9, 8-16h<br>10, 8-16h                           | dent)  |   |  |  |
|                                      | offers 4<br>learn ab<br>Theory,  | ECTS for an oral examination out in foundational Governa Comparative Politics, Com | of the Senior Profile to Gov<br>on on Governance-related<br>ance modules, such as the<br>parative Politics and Interna<br>of topics, which are appound | topics, which students<br>Introduction, Political<br>ational Relations. |  |  |
|                                      | The examination is based on a list of topics, which are announced at the beginning of each semester, and consists of a 30 minutes preparation time followed by a 30 minutes oral examination, in presence or online. |  |  |   |  |  |
|                                      | Topics cover central concepts, questions and debates across Governance disciplines.<br>General examples of topics:   |  |  |   |  |  |
|                                      |  | nce of power as a mechan<br>mationally,  | ism of avoiding oppression   | domestically and  |  |  |
|                                      |  | imacy of authotrity and pro-<br>ety and activism, civil disob                      | cesses of legitimation (difer<br>bedience and uprisings),  | ent types of rules, civil   |  |  |
| Course<br>Description                |  |  | on political processes (stro<br>ction systems as a factor of   |   |  |  |
|                                      | within th  |  | allows students to review ar to apply skills and knowled   |   |  |  |
|                                      |  | rubrics will be announced of   | nination, list of topics, prepa<br>on the Governance Wiki at t   |   |  |  |
|                                      | Students are assessed on how well they are able to demonstrate the following abilities (Senior Profile learning goals):  |  |  |   |  |  |
|                                      | <ul> <li>identify, describe, illustrate, compare and assess the ways to integrate knowledge<br/>about social, political and economic reality across disciplines and contexts;</li> </ul>                             |  |  |   |  |  |
|                                      | <ul> <li>choose, adapt and assess the use of disciplinary and interdisciplinary vocabulary,<br/>and ways of presenting and communicating knowledge about social, political and<br/>economic reality.</li> </ul>      |  |  |   |  |  |
| Remarks                              | This is a PL only offering. There are no meetings associated with it, apart from the ex-<br>amination itself.  |  |  |   |  |  |
| Examination<br>Dates                 |  | nd Feb 10, 2023  |  |   |  |  |
| 24.00                                | Resit da   |  |  |   |  |  |

#### 3.3 Study Area: Multiple

| Climate Change and Biodiversity                        |  |                              |  |                      |
|--|--|------------------------------|--|----------------------|
| EES/ESS, Governance, Electives                         |  |                              | Block II   |                      |
| Dr. Benoit Sittler                                     | <b>(</b> benoit.s  | ittler@nature.uni-freiburg.c | le)  |                      |
| Open to Stud   | lents  | Credit Points                | Max. Enrollment  | Course Number        |
| Year(s) 2-   | -4   | 6                            | 20   | 00LE62S-LAS-GOEE0004 |
| M  | odule(s) S   | StuPo 2015                   | Module(s)  | StuPo 2020           |
| Specialization O<br>Humans and the<br>Specialization O | Environr   | nent                         | Humans and the Environr<br>ESS: Specialization Option<br>Specialization Option Gov | n I or II            |
| Prerequisites  | Introduc   | tion to EES/ESS or Introdu   | ction to Governance  |                      |
| Format, Dates,<br>Times and<br>Rooms                   | Seminar<br>Tue, 8-12h, AU 01036a<br>Thu, 8-12h, AU 01036a  |                              |  |                      |
| Course<br>Description                                  | Climate change and biodiversity are among the major environmental issues modern societies face. They call for governance solutions both on global and local levels. 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. 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. |                              |  |                      |
| Examination<br>Dates                                   | 15.03.2023   |                              |  |                      |
| Resit Date   | 15.04.20   | )23                          |  |                      |

| Wicked Problems in Socio-Economic Systems           |   |                            |  |                         |
|---|---|----------------------------|--|-------------------------|
| EES/ESS, Governance, Electives                      |   |                            | Block II                                       |                         |
| Stefanie Klose (stefanie.klose@ucf.uni-freiburg.de) |   |                            |  |                         |
| Open to Stud  | lents   | Credit Points              | Max. Enrollment                                | Course Number           |
| Year(s) 2-  | -4  | 6                          | 20   | 00LE62S-LAS-EE0033-E011 |
| М   | odule(s)  | StuPo 2015                 | Module(s                                       | s) StuPo 2020           |
| Global Cycles of<br>Advanced Gove                   |   |                            | Sustainability Sciences<br>Advanced Governance |                         |
| Prerequisites                                       | Introduc  | tion to EES/ESS or Introdu | ction to Governance                            |                         |
| Format, Dates,<br>Times and<br>Rooms                | Seminar<br>Mon, 14-16h, Ph HS 3<br>Tue, 14-18h, Iniversitätsst. 5 HS<br>Thu, 14-16h, KG 1019  |                            |  |                         |
| Course<br>Description                               | <ul> <li>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.</li> <li>Learning goals</li> <li>Students understand stock and flow dynamics and apply them in socio-economic systems</li> <li>Students explore different sustainability problems and the underlying conflicting dilemmas</li> <li>Students explore different aspects of sustainable consumption and production</li> <li>Students understand the basic principles of causal loop diagrams and can apply the concept to real-world sustainability problems</li> </ul> |                            |  |                         |
| Remarks   | Students  | s majoring in EES/ESS hav  | e priority.                                    |                         |

#### 4 Semester long Courses

#### 4.1 Study Area: Core

| Foundational Year: English Academic Writing   |  |               |                          |                              |
|---|--|---------------|--------------------------|------------------------------|
| Core  |  |               | Semester                 |                              |
| Dr. Sebastian Gehart (sebastian.gehart@ucf.uni-freiburg.de), Thorsten Leiendecker (thorsten.leiendecker@ucf.uni-freiburg.de), Dr. Steven Randall (steven.randall@ucf.uni-freiburg.de) |  |               |                          |                              |
| Open to Stud  | dents  | Credit Points | Max. Enrollment          | Course Number                |
| Year(s) 1-  | -2   | 6             | 80                       | 00LE62S-LAS-CO0013           |
| M   | lodule(s) S  | StuPo 2015    | Module(s)                | StuPo 2020                   |
|   |  |               | English Academic Writing |                              |
| Prerequisites   | none   |               |                          |                              |
| Format, Dates,<br>Times and<br>Rooms  | Lecture<br>Mon, 10-12h, AU HS 2<br>Seminars<br>Group 1 (SR): Tue and Thu, 12-14h, AU<br>01065<br>Group 3 (TL): Tue and Thu, 14-16h, AU<br>Group 4 (SG): Tue, 16-18h, Ph HS 1 and<br>Group 4 (SG): Tue, 16-18h, Ph HS 1 and |               |                          | 2<br>ue, 16-18h, Ph HS 1 and |
| Course<br>Description   | 01036aThu, 12-14h, Wilhelmstr. 26, R016English for Academic Writing (EAW) is designed to introduce students to the essentials<br>of English academic writing culture. The objective of this course is to support students<br>in a regular practice of critically reading and writing academic texts across genres. One<br>overarching goal of the module is to explore how writing is not a passive medium of<br>communication, but a social activity that involves many actors and has multiple effects<br>in the world.In Block I of this course, we will identify academic discourse and the features of<br>academic writing. Students will learn how to write structured paragraphs and how to<br>present their research — in the form of summary, paraphrase, and quotation — with<br>academic integrity.In Block II, we will explore critical reading and writing with a focus on the genres review<br>and essay. Students will extend their recognition of argumentation by examining the<br>specific anatomy of the persuasive essay. Building on the skills and contents developed<br>in Research and Presentation, each student will craft an essay aimed at compellingly<br>convincing the reader of the merits of its claims.Upon successful completion of this course, students should be able to:Write persuasively and criticallyIdentify, analyse, and evaluate academic textsUse outside sources with academic integritySuccessfully proofread and edit their seminar papers  |               |                          |                              |
| Remarks   | This course is part of the Foundational Year. First year students register for this course during the Welcome Week.  |               |                          |                              |
| Examination<br>Dates  | Student will compose several pieces of writing; the final assignment will be due on 15.03.2023.<br>Resit date tba.   |               |                          |                              |

| Foundational Year: Students and Other Knowers in Context |   |                            |                           |                      |
|--|---|----------------------------|---------------------------|----------------------|
| Core   |   |                            | Semester                  |                      |
| Prof. Dr. Veronik  | a Lippha  | dt (veronika.lipphardt@ucf | .uni-freiburg.de)         |                      |
| Open to Stuc   | lents   | Credit Points              | Max. Enrollment           | Course Number        |
| Year(s) 1-   | 2   | 6                          | 80                        | 00LE62V/S-LAS-CO0020 |
| M  | odule(s) S  | StuPo 2015                 | Module(s) \$              | StuPo 2020           |
|  |   |                            | Knowledge in Context      |                      |
| Prerequisites  | none  |                            |                           |                      |
| Format, Dates,<br>Times and<br>Rooms                     | Workgro<br>WG1: V   | Ved, 12-14h, AU 01065      |                           |                      |
| Course<br>Description                                    | WG1: Wed, 12-14h, AU 01065WG2: Wed, 12-14h, AU 01036aWG3: Wed, 14-16h, AU 01065WG4: Wed, 14-16h, AU 01036aThe central part of the course introduces students to a broad consideration of<br>knowledge in its historical, social, political and practical contexts. This will be the most<br>academic part of the course, with academic readings and much sociological theory.<br>Drawing on work in the history, anthropology, and sociology of knowledge, the course<br>addresses knowledge production, appropriation and circulation beyond academia, in<br>and across (non-academic) professional fields, educational systems, regions, cultures,<br>individuals, and in knowledge regimes.The course aims at fostering reflection about questions such as, How do individuals or<br>groups approach, appreciate, and determine what knowledge is for them? What counts<br>as knowledge, why, and on what grounds; where, for whom, and in what context? What<br>is (or what was) the relationship between scientific knowledge and knowledge that is (or<br>was) not deemed scientific, as, for example, common sense knowledge, or the<br>knowledge of non-academic professional fields, or knowledge produced and used by<br>political entities?Furthermore, we will discuss different forms of knowledge, such as explicit and tacit<br> |                            |                           |                      |
| 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 workgroups only.<br>Students will work on several assignment sheets and submit an E-Portfolio as a final  |                            |                           |                      |
| Dates  | 15.03.20  | 023.                       | due on 01.03.2023, with a | second deadline on   |
| Resit Date   | 30.05.20  | 023                        |                           |                      |

| Leadership Ethics                    |   |               |                           |                    |
|--------------------------------------|---|---------------|---------------------------|--------------------|
| Core                                 |   |               | Semester                  |                    |
| Dr. Dan Corjesc                      | u (corjesc  | cu@gmail.com) |                           |                    |
| Open to Stud                         | dents   | Credit Points | Max. Enrollment           | Course Number      |
| Year(s) 2                            | -4  | 6             | 20                        | 00LE62S-LAS-CO0079 |
| I                                    | lodule(s)   | StuPo 2015    | Module(s)                 | StuPo 2020         |
| Responsibility a                     | nd Leadei   | ship 2        | Responsibility and Leader | ship 2             |
| Prerequisites                        |   |               |                           |                    |
| Format, Dates,<br>Times and<br>Rooms | Online Seminar<br>Tue, 12-14h<br>(Thu, 12-14h, individual feedback sessions)  |               |                           |                    |
| Course<br>Description                | What makes a great leader great? Is it vision, charisma, fortitude, kindness, sacrifice or<br>all of these traits in combination? What can we do to enhance our leadership skills and<br>develop a leadership mentality that will help us both grow as people as well as be able<br>to better serve others? Ultimately, do we need leaders? These questions and more will<br>be explored through close readings and open discussions of some of the great<br>Philosophers and Leaders of the past: ranging from Plato and Pericles to Dr. Martin<br>Luther King Jr. and Mahatma Gandhi we will seek revelatory answers to this<br>quintessential human behavior and at the same time help to illuminate what we find<br>worthy and worthwhile in both ourselves and others. |               |                           |                    |
| Examination<br>Dates                 | Resit date tba.   |               |                           |                    |
| Recommended<br>Reading               | Terry L. Price (2008): <i>Leadership Ethics. An Introduction</i><br>Louis P. Pojman (2018): <i>Selected Philosophical Works from The Moral Life</i><br>Stephen M. Cahn (2020): <i>Exploring Ethics</i>  |               |                           |                    |

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| Knowledge and Its Problems           |   |  |  |                      |
|--------------------------------------|---|--|--|----------------------|
| Core                                 |   |  | Semester                               |                      |
| Prof. Dr. Frieder                    | Vogelma   | nn (frieder.vogelmann@uc                         | f.uni-freiburg.de)                     |                      |
| Open to Stud                         | Open to Students Credit Points  |  | Max. Enrollment                        | Course Number        |
| Year(s) 2-                           | -3  | 6  | 80                                     | 00LE62V/S-LAS-CO0011 |
| М                                    | lodule(s) S   | StuPo 2015                                       | Module(s)                              | StuPo 2020           |
| Theory of Knowl                      | edge  |  | Theory of Knowledge                    |                      |
| Prerequisites                        | none  |  |  |                      |
| Format, Dates,<br>Times and<br>Rooms | WGs<br>Fri, 8-1   | -14h, AU HS 1<br>0h, AU 01036a<br>12h, AU 01036a | Fri, 8-10h, AU 01<br>Fri, 10-12h, AU 0 |                      |
| Course<br>Description                | <ul> <li>Fri, 10-12h, AU 01036a Fri, 10-12h, AU 01065</li> <li>This course offers an overview of contemporary epistemology and introduces the basics of philosophical logic (propositional and predicate logic). At the same time, it introduces non-philosophy students to philosophy in the sense of working on conceptual problems, questions and arguments. Students of all disciplines will profit from the introduction to conceptual thinking and logic in the first three sessions. The primer on propositional and first-order logic is based on standard textbooks for logic in philosophy. The overview of epistemology is structured according to Michel Williams (2001: 1–12) five systematic problems of epistemology:</li> <li>1) <i>The Analytical Problem.</i> What is knowledge and how can we define it? The course introduces the so-called "standard analysis of knowledge" as justified true belief (JTB) and the famous counterexamples by E. Gettier. We then dis¬cuss the most important contemporary theories of knowledge (internalism, externalism, virtue epistemology, knowledge-first epistemology etc.) with a focus on their core ideas and arguments.</li> <li>2) <i>The Problem of Scepticism.</i> Can we know anything at all? How can we know that we do (not)? The course outlines the most common sceptical positions and arguments (Agrippa's trilemma, Cartesian scepticism) as well as the attempts to refute them.</li> <li>3) <i>The Problem of Boundaries.</i> What different kinds (know-how, know-that) and sources (perception, testimony, memory) of knowledge are there? How do we explain and distinguish them? The course focuses on testimony as a source of knowledge and the resulting recognition of the social aspects of epistemology.</li> <li>4) <i>The Problem of Method.</i> How do we explain knowledge? Why does true belief not suffice? The course discusses the intertwinement of values and knowledge by considering contributions from feminist epistemology.</li> <li>5) <i>The Problem of Method.</i> How do we egin knowledge? What role do rationality and reason play in epis</li></ul> |  |  |                      |
| Examination<br>Dates                 | Examination: Written exam on 08.02.2023 (100%).Pass/Fail Examination: To be eligible for the exam, students must give an oral presentation to one of the texts discussed in the workgroups.   |  |  |                      |
| Resit Date                           | 08.03.20  | 23   |  |                      |
| Recommended<br>Reading               | Nagel, Jennifer (2014): Knowledge. A Very Short Introduction. Oxford: Oxford<br>University Press.Williams, Michael (2001): Problems of Knowledge. A Critical Introduction to<br>Epistemology. Oxford: Oxford University Press.  |  |  |                      |

| Sozial- und geisteswissenschaftliche Neuerscheinungen besprechen: Eine Schreibwerkstatt |  |                          |                              |                      |
|---|--|--------------------------|------------------------------|----------------------|
| Core, Electives   |  |                          | Semester                     |                      |
| Prof. Dr. Frieder   | <sup>.</sup> Vogelma   | nn (frieder.vogelmann@uc | f.uni-freiburg.de) and Prof. | Dr. Ulrich Bröckling |
| Open to Stud  | dents  | Credit Points            | Max. Enrollment              | Course Number        |
| Year(s)   |  | 2                        | 20                           | 00LE62S-LAS-CO0073   |
| N   | lodule(s) \$   | StuPo 2015               | Module(s) \$                 | StuPo 2020           |
| Elective Joker  |  |                          | Advanced Academic Skill      | S                    |
| Prerequisites   | none   |                          |                              |                      |
| Format, Dates,<br>Times and<br>Rooms  | Seminar<br>Tue, 14-16h, KG IV, Übungsraum 1 (Soziologie, 5th floor)  |                          |                              |                      |
| Course<br>Description   | <ul> <li>Das geplante Seminar verfolgt drei miteinander verbundene Ziele: Es soll</li> <li>Studierenden Erfahrungen mit dem Verfassen von Buchbesprechungen als<br/>Schlüsselkompetenz in den Geistes- und Sozialwissenschaften ermöglichen, dabei</li> <li>grundlegende Techniken des guten wissenschaftlichen Schreibens trainieren und</li> <li>Informationen über das wissenschaftliche Publizieren und dessen Veränderungen<br/>im Zuge der Digitalisierung vermitteln.</li> <li>Dabei wechseln praktische Übungen, theoretische Diskussionen und Workshops mit<br/>eingeladenen Gästen aus Verlagen und Zeitschriftenredaktionen einander ab.<br/>Vorgesehen sind neben wöchentlichen Seminarsitzungen zwei Blocktermine.</li> </ul> |                          |                              |                      |
| Remarks   | Reviews can be written in English, too, and the discussion in the seminar can be in English and German. However, the readings in the seminar will often be in German.  |                          |                              |                      |
| Examination<br>Dates  | Studienleistung: zwei Rezensionen.   |                          |                              |                      |

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#### 4.2 Study Area: Culture and History

| Ideals of (Liberal) Education  |   |   |                      |                    |  |
|--|---|---|----------------------|--------------------|--|
| Culture & History, Electives   |   |   | Semester             |                    |  |
| Dr. Brendan Boy  | Dr. Brendan Boyle (bpboyle@gmail.com)   |   |                      |                    |  |
| Open to Students   |   | Credit Points   | Max. Enrollment      | Course Number      |  |
| Year(s) 2-4  |   | 6   | 20                   | 00LE62S-LAS-CH0065 |  |
| Ma   | odule(s) \$   | StuPo 2015  | Module(s) StuPo 2020 |                    |  |
| Culture & History Up to the Early Modern Period<br>Advanced Culture & History I, II or III |   | History: Ancient, Medieval, or Early Modern<br>Culture & History I, II or III |                      |                    |  |
| Prerequisites  | Introduction to Culture & History   |   |                      |                    |  |
| Format, Dates,<br>Times and<br>Rooms   | Seminar<br>Mon, 8-10h, AU 01036a<br>Wed, 8-10h, AU 01036a   |   |                      |                    |  |
| Course<br>Description  | What is the purpose of higher education? What is the purpose of "liberal arts and sciences" in higher education? Is it, as the name "liberal" suggests, connected to freedom? Freedom from or for what and for whom? Or does focusing over much on freedom obscure other ends like contributing (critically and constructively) to political and economic life? What kind of books and curricula would best do whatever it had been determined higher education ought to do? Because every society worries whether its education is well suited to its values, these are very old questions that have been posed by many people in many situations. In this course, we will investigate some ancient, medieval, and early modern answers, practicing close reading of texts that are very historically distant from ourselves. With that preparation, we will then turn our attention to some more modern answers. Along the way, we will practice adopting and adapting older ideas to our contemporary circumstances. For instance, how can ancient ideals of education be repurposed for a culturally and socially diverse student body in a modern university? The course will provide students the opportunity to reflect critically on their own education. |   |                      |                    |  |
| Examination<br>Dates   | 13.02.2023  |   |                      |                    |  |
| Resit Date   | 17.03.2023  |   |                      |                    |  |
| Recommended<br>Reading   | Readings will include (among others) Plato, Aristotle, Augustine, Erasmus, Fichte, Nietzsche, Newman, and Dewey.  |   |                      |                    |  |

| Politics and the Sciences: An Introduction |   |                           |   |                    |
|--|---|---------------------------|---|--------------------|
| Culture & History, Electives               |   |                           | Semester                                      |                    |
| Dr. Justo Serran                           | o Zamora  | a (justserrano@gmail.com) |   |                    |
| Open to Students                           |   | Credit Points             | Max. Enrollment                               | Course Number      |
| Year(s) 2-                                 | ·4  | 6                         | 20  | 00LE62S-LAS-CH0066 |
| М  | odule(s) \$   | StuPo 2015                | Module(s) StuPo 2020                          |                    |
| Philosophy<br>Advanced Cultur              | Philosophy<br>Advanced Culture & History I, II and III  |                           | Philosophy<br>Culture & History I, II and III |                    |
| Prerequisites                              | Introduction to Culture & History   |                           |   |                    |
| Format, Dates,<br>Times and<br>Rooms       | Seminar<br>Tue, 14-16h, Ph HS 4<br>Thu, 14-16h, KG 1228   |                           |   |                    |
| Course<br>Description                      | Is politics science-like? Are scientific achievements mere political interventions? Are politics and science fully independent from each other, instead? In this seminar we will discuss these and other questions by exploring how thinkers from different disciplines (philosophy, sociology, history, anthropology) have conceived of the relation between politics and the sciences. We will also analyze study-cases where the relation between the two is crucial.<br>The seminar is divided in two parts: In the first part we will discuss classical texts on topics concerning the relation between politics and the sciences: the Weberian division of means and ends, feminist and postcolonial approaches to scientific knowledge, the constructivism-realism debate and its political implications, the role of uncertainty and experiments in both politics and science, the importance of "situated" knowledge for democratic politics, the role of numbers (statistics, quantitative analysis), the influence of evolutionary theories in politics, the modern sciences in our political imagination, and the analogy between political and scientific communities.<br>In the second part, students in small groups will choose one study-case (i.e., AIDS-activism's challenges to control-trials in contemporary medical research) at the beginning of the course and they will present their results at the end of the semester. In their research, students are expected to use the analytical and normative tools acquired in the seminar. |                           |   |                    |
| Examination<br>Dates                       | tbd   |                           |   |                    |

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| The World as S  |  |   | O manta i            |                    |
|---|--|---|----------------------|--------------------|
| Culture & History only Semester   |  |   |                      |                    |
| Dr. Johanna Gampe (johanna.gampe@ucf.uni-freiburg.de)                             |  |   |                      |                    |
| Open to Stude   |  | Credit Points   | Max. Enrollment      | Course Number      |
| Year(s) 2-4   |  | 6   | 20                   | 00LE62S-LAS-CH0056 |
| Мс  | dule(s) S  | StuPo 2015  | Module(s) StuPo 2020 |                    |
| Art, Literature, Aesthetics, or Music<br>Advanced Culture & History I, II and III |  | Culture: Arts<br>Culture & History I, II and III  |                      |                    |
|   | Introduction to Culture & History  |   |                      |                    |
| Format, Dates,<br>Times and   | Online Seminar<br>Mon, 10-12h<br>Wed, 10-12h   |   |                      |                    |
| Course<br>Description   | Wed, 10-12h<br>Shifting the perspective from the visual focus to the sonic side of life allows us a<br>different understanding of our world in its complexity, volatility, and ambiguity.<br>Moreover, the features of mediated sound deepen our understanding of both human<br>perception and digitality. "Think with your ears. Make listening your culture." These are<br>the slogans of the relatively new Master's degree in Sound Studies at the UDK Berlin.<br>Likewise, in this course we will look at the world through sound and listening.<br>In the arts, the so-called Sonic Turn reflects a wider cultural awareness of<br>contemporary reality. The spectrum reveals fascinating artistic genres in their own right,<br>such as contemporary musical composition and sound installations, but also science<br>topics such as sonification or sound pollution.<br>On the practical side, we will learn to produce our own sonic creations by means of<br>simple audio tools and equipment. No matter your previous knowledge, we gradually<br>built up creative and technical competencies starting with soundscapes and the<br>sonification of a chosen poem, editing music, noises and loop samples, producing a<br>radio teasers and creating an audio drama as a group work.<br>In addition to instructed peer feedback in the course, each participant receives a<br>coaching session about their pratical and creative work. The latter won't be graded in<br>order to provide feedom and flexibility. Instead a presentation in class is graded,<br>together with a written reflexion at the end of the term.<br>The seminar pursues a truly interdisciplinary approach to the world of sound through<br>arts, science, and the humanities. The study of both theoretical approaches and<br>practical examples will be at the center of this course, including presentations,<br>discussions and peer-feedback. In summary, both academic and practical methods<br>structure the course, aiming for advanced media competence, creative self-confidence<br>and cultural horizons. |   |                      |                    |
| Remarks   | Howeve<br>as well (<br>For the µ<br>The Unil   | se is planned as an entirely online learning experience.<br>if possible for some or all participants, there may be some presence elements<br>roject group work and individual coaching).<br>ractical exercises a laptop is needed where free audio software is installed.<br>ib optionally provides further equipment, in addition to the recording functions<br>al smartphone and other audio devices. |                      |                    |
| Examination<br>Dates  | 27.02.2023   |   |                      |                    |
| Resit Date  | 28.03.2023   |   |                      |                    |

| Theory of History                    |   |                           |                   |                    |
|--------------------------------------|---|---------------------------|-------------------|--------------------|
| Culture & History only               |   | Semester                  |                   |                    |
| Dr. Ryan Plumle                      | y (ryan.pl  | umley@ucf.uni-freiburg.de | )                 |                    |
| Open to Stud                         | 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 Top                     | ic of Acad  | demic Inquiry             | Theory of History |                    |
| Prerequisites                        | Introduc  | tion to Culture & History |                   |                    |
| Format, Dates,<br>Times and<br>Rooms | Seminar<br>Tue, 12-14h, Ph HS 2<br>Thu, 12-14h, Ph HS 2   |                           |                   |                    |
| Course<br>Description                | Thu, 12-14h, Ph HS 2<br>All human groups engage with the past, with their history. The past is used to sustain<br>identities, to legitimate institutions, and to justify action in the present and future.<br>Through the informal mechanisms of individual and collective memory and through the<br>formal memorialization of states, churches and other authorities, the past is selectively<br>appropriated for social, political, and cultural needs.<br>Some human groups have also dedicated effort to systematic study of the past and to<br>recording it in historiography, written texts about the past. Amongst the ancient Greeks,<br>Herodotus and Thucydides initiated a genre of writing called "historia", by which they<br>meant "inquiry" or "investigation," an accounting of the past using verifiable information.<br>Since then, ancient Roman historians, the chroniclers of monarchical dynasties around<br>the world, and other expert groups have written texts that served as authoritative<br>knowledge of the past in various contexts.<br>In the modern world this specialized field of study is undertaken by a professionalized<br>academic discipline: History. Beginning in the 19th century, especially in Germany, the<br>scholarly or scientific (wissenschaftlich) study of the past coalesced around the attempt<br>to provide reliable and verifiable knowledge about the past according to the standards<br>of logic, proof, and secular ontology that guided other fields of inquiry. Since then, the<br>academic discipline of History has spread around the world and professional historians<br>enjoy considerable authority in deciding how the past.<br>The primary goal of this course is to explore modern History understood as<br>methodologically rigorous research and judiciously selective reconstruction of the past in<br>writing. The course is designed to develop students' specifically theoretical thinking about<br>history and historigraphy, that is, in reference to problems and questions in historical<br>research that cannot be resolved empirically or methodologically. |                           |                   |                    |
| Examination<br>Dates                 | 10.02.2023  |                           |                   |                    |
| Resit Date                           | 10.03.2023  |                           |                   |                    |

PhPeterhofHHHermann-Herder-StraßeFMFStefan-Meier-Str. 21

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

| EEC/ESS Electiv                                   |   |                     |                         |                    |
|---|---|---------------------|-------------------------|--------------------|
| EES/ESS, Electives for other majors only Semester |   |                     |                         |                    |
| Jan Oechsler (jan.oechsler@ucf.uni-freiburg.de)   |   |                     |                         |                    |
| Open to Stude                                     | Open to Students Credit Points Max. Enrollment Course Number  |                     |                         |                    |
| Year(s) 2-4                                       | 4   | 6                   | 25                      | 00LE62S-LAS-EE0010 |
| Мо  | odule(s) S  | StuPo 2015          | Module(s) S             | StuPo 2020         |
| Chemistry   |   |                     | Environmental Chemistry |                    |
| Prerequisites                                     | Introduc  | tion to EES/ESS     |                         |                    |
| Times and   |   | -20h, AU 01036a     |                         |                    |
| Course<br>Description                             | <ul> <li>Mon, 18-20h, AU 01036a</li> <li>Wed, 18-20h, KG 1228</li> <li>In this course students will be introduced to chemistry in general and get an outlook on some applications such as regenerative engery sources and environmental chemistry. To understand these concepts basic knowledge of chemistry is needed. This course will be split into three parts.</li> <li>In the first part the basics of chemistry will be discussed. It will serve as an introduction to the concepts of atoms, molecules, acidity, redox reactions and basic electro chemistry. Basic ideas of thermodynamics, kinetics and quantum mechanics will be discussed.</li> <li>The second part of this course will focus on some applications of chemistry regarding environmental topics: solar cells / LEDs, fuel cells and batteries.</li> <li>The third part of this course will focus on the topic of environmental chemistry. The students will take a closer look on a few biogeochemical cycles and our impact on these.</li> <li>Upon successful completion of this module, you should be able to:</li> <li>Describe the basic electronic and structural features of molecules (nature of chemical bonds; three-dimensional structures; chirality).</li> <li>Set up and complete chemical equations (stoichiometry; acids and bases; oxidants and reductants; transfer of protons and electrons).</li> <li>Understand elementary thermodynamic (heat) and kinetic (velocity) aspects of chemical reactions.</li> <li>Understand the basic working principles of a solar cell, fuel cell and a battery.</li> <li>Apply the principles of reactivity and equilibrium to certain biogeochemical cycles.</li> </ul> |                     |                         |                    |
|   | Students majoring in Earth and Environmental Sciences/Environmental and Sustainability Sciences have priority   |                     |                         |                    |
| Examination                                       | Exam ar   | nd resit dates tba. |                         |                    |

| Environment Risks and Us             |  |                            |                              |                      |
|--------------------------------------|--|----------------------------|------------------------------|----------------------|
| EES/ESS, Life Se                     | EES/ESS, Life Sciences, Electives  |                            |                              |                      |
| DiplChem. Isme                       | ene Jäge   | r (info@oekologischenetze  | .de), Prof. Dr. Dirk Bunke ( | D.Bunke@oeko.de)     |
| Open to Stud                         | ents   | Credit Points              | Max. Enrollment              | Course Number        |
| Year(s) 2-4                          | 4  | 6                          | 20                           | 00LE62S-LAS-LSEE0002 |
| Mc                                   | odule(s) S   | StuPo 2015                 | Module(s)                    | StuPo 2020           |
| · · ·                                | e EnvironmentHuman and the Environment I or IIOption: EES I or IIAdvanced Life Sciences I, II or IIISciences I, II or IIIIII   |                            |                              |                      |
| Prerequisites                        | Introduc   | tion to EES/ESS and Introc | luction to Life Sciences     |                      |
| Format, Dates,<br>Times and<br>Rooms | Seminar<br>Mon, 16-18h, AU 01065<br>Wed, 16-18h, Ph HS 1   |                            |                              |                      |
| Course<br>Description                | In this course students explore the manifold impacts of human activities on the<br>environment and resulting risks – for human health as well as for the environment. The<br>course aims to create an understanding of present sources for environmental pollution,<br>alternative options to act as well on regulatory and voluntary steps for abatement.<br>Based on examples from everyday life products, several groups of pollutants and their<br>sources will be introduced. Examples are given to show the environmental fate of<br>chemicals and mechanisms how chemicals can interfere with organisms. In addition,<br>students develop basic skills in environmental risk assessment and management<br>strategies. The course will include topics such as properties of eco-labels, assessment<br>of chemicals e.g. chemicals in products from your everyday life, ecotoxicology,<br>assessment of contaminants in surface/drinking waters and their effects on human<br>health, environmental pollutants and their effect on animals, their regulation and their<br>substitution.<br>The course also includes 2 excursions and several practical examples |                            |                              |                      |
| Remarks                              | Excursion on one or two Fridays possible   |                            |                              |                      |
| Examination                          | Exam ar  | nd resit dates tba.        |                              |                      |

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| Land Use and Food                    |   |                             |  |                    |
|--------------------------------------|---|-----------------------------|--|--------------------|
| EES/ESS, Electives                   |   | Semester                    |  |                    |
| Juan Carlos Zan                      | nora (juar  | n.zamora@ife.uni-freiburg.c | le)  |                    |
| Open to Stud                         | lents   | Credit Points               | Max. Enrollment                                  | Course Number      |
| Year(s) 2-                           | -4  | 6                           | 20   | 00LE62S-LAS-EE0034 |
| М                                    | odule(s)  | StuPo 2015                  | Module(s) S                                      | StuPo 2020         |
| Human and the Specialization O       |   |                             | Human and the Environm Specialization Option: ES |                    |
| Prerequisites                        | Introduc  | tion to EES/ESS             |  |                    |
| Format, Dates,<br>Times and<br>Rooms | -   | -18h, KG 1231               |  |                    |
| Course<br>Description                | <ul> <li>Wed, 16-18h, KG 1231</li> <li>Land is first a biophysical reality; however, it is also humanity's home. What land is used for is a major piece of the sustainability puzzle. On the one hand, forests, trees and agorforestry play a key, often undervalued, role to support food security and nutrition, although around the globe its availability, access, utilization and stability differ greatly provoking inequalities, but also opportunities. On the other hand, agriculture (e.g., from small to large scale) is a part of the problem but also a pivotal part of the solution to mitigate climate change and solve (if possible) food security, if managed smartly. Land is a scarce resource – it is needed to produce food for a growing world population, while at the same time forests and peatlands need to be preserved so they can fulfill their role in the earth system. Moreover, there is a need to explore the land use-food nexus in much more detail, particularly in relation to the integrated management of multi-functional landscapes, and the multi-scalar and cross-sectoral governance approaches that are required for the equitable delivery of benefits. If those ideas made echo in your hungry mind (or in your curious stomach), we may have a lot to talk in the next semester. The aim of this course is to work through study cases and gain a better understanding of land use, land use change, and sustainable food production. We will critically asses the socio-ecological implications of food production. We will critically asses the socio-ecological implications of food production, explore the possibilities of food transition to sustainable means, and assess the environmental stability of different food production systems. Additionally, we will discuss about possible trade-off and synergies from food production and nature conservation, and which are the cross-scale interactions between land uses and food.</li> </ul> |                             |  |                    |
| Remarks                              | Students majoring in Earth and Environmental Sciences/Environmental and Sustainability Sciences have priority   |                             |  |                    |
| Examination                          | Exam ar   | nd resit dates tba.         |  |                    |

# 4.4 Study Area: Governance

| Central and Eastern Europe           |  |                                |   |                    |
|--------------------------------------|--|--------------------------------|---|--------------------|
| Governance, Electives                |  | Semester                       |   |                    |
| Malgorzata Hoffi                     | mann (ma   | algorzata_hoffmann@hotma       | ail.com)  |                    |
| Open to Stud                         | lents  | Credit Points                  | Max. Enrollment   | Course Number      |
| Year(s) 2-                           | ·4   | 6                              | 20  | 00LE62S-LAS-GO0077 |
| М                                    | odule(s) \$  | StuPo 2015                     | Module(s) S   | StuPo 2020         |
| Regional Goverr<br>Advanced Gover    |  | or II                          | Regional and Area Studie<br>Advanced Governance I o     |                    |
| Prerequisites                        | Introduc   | tion to Governance             |   |                    |
| Format, Dates,<br>Times and<br>Rooms | Wed, 10  | -12h, Ph HS 2<br>-12h, Ph HS 2 |   |                    |
| Course<br>Description                | <ul> <li>Mon, 10-12h, Ph HS 2</li> <li>Wed, 10-12h, Ph HS 2</li> <li>There are regions in Europe that modernize but remain mainly unchanged over the years and there are parts that one cannot recognize any more after a decade and not to mention two or three decades. Eastern, East-Central and European Countries are those regions that experienced very dynamic changes in their infrastructure, architectural style, and also in their way of conducting business and politics. After the collapse of the Soviet Union, those countries were longing to become members of western democracies and aspired to join NATO and the EU. However, the psychological barrier between "East" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is still a talk about "new member states" and "West" exists until today and in the EU there is students will obtain essential knowledge of the region and its relationship with the Western European I Russia. The course will include 10 weeks segmented in interdisciplinary topics (sequence may vary):</li> <li>W1: Changing geography and modern history;</li> <li>W2: Concepts of identity and democracy;</li> <l< td=""></l<></ul> |                                |   |                    |
| Examination<br>Dates                 |  |                                | and immigration in the CEE<br>assignments, date of exam |                    |

| European Union: Policies and Legal Framework |  |  |   |  |
|--|--|--|---|--|
| Governance, Electives                        |  |  | Semester  |  |
| Dr. Stoyan Pano                              | ov (stoyan   | .panov@ucf.uni-freiburg.de   | e)  |  |
| Open to Stud                                 | dents  | Credit Points  | Max. Enrollment   | Course Number  |
| Year(s) 2-                                   | -4   | 6  | 20  | 00LE62S-LAS-GO0084   |
| M  | lodule(s)  | StuPo 2015   | Module(s) \$  | StuPo 2020   |
| Regional Govern                              | nance  |  | Regional and Area Studie<br>Advanced Governance I c   |  |
| Prerequisites                                | Introduc   | tion to Governance   |   |  |
| Format, Dates,<br>Times and<br>Rooms         |  | 14h, KG 1234   |   |  |
| Course<br>Description                        | <ul> <li>Thu, 12-14h, KG 1231</li> <li>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.</li> <li>Some questions that we will address: <ul> <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> </li> <li>This is a sample of issues that we will address in the course.</li> <li>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.</li> </ul> |  |   |  |
| Remarks                                      | The cou  | rse is highly recommended  | I to 2nd-year Governance s  | tudents.   |
| Examination<br>Dates                         | Form of assessment: The final grade will be based on analytical or research paper(s)/<br>policy paper(s), and presentation(s).<br>Final component of the examination is planned to be due on 24 February 2023.   |  |   |  |
| Recommended<br>Reading                       | For the l<br>can che<br>Another<br>An intro  | ck the free-access <i>Politico</i><br>publication that offers insig<br>ductory academic text on th | and current events and deve<br>as well as the daily newslet<br>phts from Brussels is <i>The E</i><br>the topic of the functioning of<br>topean Union: How Does It N | ter Brussels Playbook.<br><i>U Observer.</i><br>f the EU: D. Kenealy, J. |

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| Human Rights and International Security |  |                             |   |                    |
|---|--|-----------------------------|---|--------------------|
| Governance only                         | y  |                             | Semester  |                    |
| Dr. Stoyan Panc                         | ov (stoyan   | .panov@ucf.uni-freiburg.de  | e)  |                    |
| Open to Stud                            | dents  | Credit Points               | Max. Enrollment   | Course Number      |
| Year(s) 3-                              | -4   | 6                           | 18  | 00LE62S-LAS-GO0085 |
| М                                       | odule(s)   | StuPo 2015                  | Module(s)   | StuPo 2020         |
| Advanced Gove                           | rnance III   |                             | Research in an Area of Go<br>Specialization Option: Go    |                    |
| Prerequisites                           | Introduc   | tion to Governance          |   |                    |
| Format, Dates,<br>Times and<br>Rooms    | -  | -18h, Ph HS 2               |   |                    |
| Course<br>Description                   | <ul> <li>Mon, 16-18h, Ph HS 2</li> <li>Wed, 16-18h, HH 9 HS 00 003a</li> <li>The course introduces students to an interdisciplinary exploration of the concepts of Human Rights and International Security. The course is an opportunity for students to develop knowledge and understanding of fundamental principles of Human Rights as a subject matter with a focus not only on states and international organizations as main actors but also on individuals. The course also looks at the thread of international security in the fields of human rights, the law of armed conflict (war), economic and social inequality and discrimination, terrorism and cybersecurity among other relevant topics. Related to the concept of International Security, discussions will focus on recent developments such as international interventions in armed conflicts, Responsibility to Protect, migration, terrorism, collective security among others. The emphasis is on dealing with classical debates on international security as well as novel approaches to the topic through the prism of Human Rights. What function do Human Rights play in international security? From human rights perspective, the relevant topics addressed in the course will cover effective enforcement and protection of Human Rights to liberty, the right to private life, and the right to effective remedy. The complex design of protection of Human Rights norms in armed conflicts will also be addressed. 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. 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 Human Rights 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 grou</li></ul> |                             |   |                    |
| Remarks                                 | The course may be offered in a hybrid mode. It is possible to complete the examination requirements of the course online.  |                             |   |                    |
| Examination<br>Dates                    |  | •                           | nments, research paper/res<br>ent of the grade is planned | • •                |
| Recommended<br>Reading                  | B. Buza  | n (1997), Security: A New I | Framework for Analysis.                                   |                    |

| Introduction to Western Political Theory                |  |   |                  |                    |
|---|--|---|------------------|--------------------|
| Governance, Electives                                   |  |   | Semester         |                    |
| Dr. Elina Sannehag (elina.sannehag@ucf.uni-freiburg.de) |  |   |                  |                    |
| Open to Stud  | dents  | Credit Points   | Max. Enrollment  | Course Number      |
| Year(s) 2-  | -4   | 6   | 20               | 00LE62S-LAS-GO0073 |
| M   | lodule(s)  | StuPo 2015  | Module(s) \$     | StuPo 2020         |
| Theoretical and<br>Social Sciences                      |  | ical Foundations of   | Political Theory |                    |
| Prerequisites   | none   |   |                  |                    |
| Format, Dates,<br>Times and<br>Rooms                    | Seminar<br>Mon, 16-18h, AU 01036a<br>Wed, 16-18h, KG 1023  |   |                  |                    |
| Course<br>Description                                   | <ul> <li>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 Introduction to Western Political Theory.</li> <li>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.</li> <li>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.</li> </ul> |   |                  |                    |
| Remarks   | The course is in a hybrid format, with some sessions taking place on-site and others online.<br>Prioritry to second-year students!<br>No exchange students.  |   |                  |                    |
| Examination<br>Dates                                    | Three reading diaries as pass/fail assignments, one reflective paper, and two essays.<br>Date of exam and resit tba.   |   |                  |                    |
| Recommended<br>Reading                                  | Marx, Ka   | Mill, John Stuart. 1859. <i>On Liberty</i> .<br>Marx, Karl, and Friedrich Engels. 1848. <i>Manifesto of the Communist Party</i> .<br>Pope Leo XIII (1891): <i>Rerum Novarum</i> . |                  |                    |

| Law-Making in Europe                          |   |  |                              |                            |
|---|---|--|------------------------------|----------------------------|
| Governance only                               | y   |  | Semester                     |                            |
| Dr. Sofiya Kartalova (s.kartalova@csl.mpg.de) |   |  |                              |                            |
| Open to Stud                                  | dents   | Credit Points                              | Max. Enrollment              | Course Number              |
| Year(s) 3-                                    | -4  | 6  | 20                           | 00LE62S-LAS-GO0079         |
| M   | odule(s)  | StuPo 2015                                 | Module(s)                    | StuPo 2020                 |
| Specialization O                              | ption Gov   | ernance I or II                            | Specialization Option Gov    | vernance                   |
| Prerequisites                                 |   | tion to Governance, additio<br>ng on STUPO | nal prerequisites apply to a | Il Specialization Options, |
| Format, Dates,<br>Times and<br>Rooms          | · ·   | -20h, KG 1134<br>-20h, KG 1134             |                              |                            |
| Course<br>Description                         | <ul> <li>Wed, 18-20h, KG 1134</li> <li>How are laws made? How can we compare such processes across countries? How are conflicts that might arise in the process of making laws solved? When is the law-making process considered efficient? High-quality? Transparent?</li> <li>This course provides a comprehensive overview of the foundational principles, theory, and practice of law-making in Europe. The course focuses not only on the variety of law-making practices in European states, but also on the multi-level legislative process in the European Union.</li> <li>We will highlight the role of the judiciary branch (as distinct from the legislative, i.e. parliaments) in the interpretation and creation of legal rules.</li> <li>Finally, we will discuss the contemporary and future socio-political challenges as an opportunity for improving the efficiency and quality of the legislative process in Europe. By the end of this course, the students will have acquired the ability to characterise and critically examine the legislative process in a particular jurisdiction (written assignment), describe, analyse, and present case studies of legislative action within said jurisdiction (oral presentation), and debate and deliberate on a proposed bill of legislation (simulation).</li> <li>In terms of the format, the course will combine lectures, seminars, oral presentation and a simulation of parliamentary work. If the University prolongs the winter holidays or makes similar adjustments, the course may have a part of the classes online.</li> </ul> |  |                              |                            |
| Remarks                                       | Highly re   | ecommended to take Princi                  | ples of Law or equivalent c  | ourse beforehand.          |
| Examination<br>Dates                          | Exam consists of written and oral assignments, final deadline 28.02.2023.   |  |                              |                            |
| Resit Date                                    | 20.04.20  | )23  |                              |                            |

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### 4.5 Study Area: Life Sciences

| Anatomy and Functions of the Brain                        |   |  |  |   |
|---|---|--|--|---|
| Life Sciences, Electives                                  |   |  | Semester   |   |
| Dr. Janina Kirscl   | h (janina.l   | kirsch@biologie.uni-freiburg                                 | g.de)  |   |
| Open to Students Credit Points Max. Enrollment Course Num |   |  | Course Number                                    |   |
| Year(s) 2-  | -4  | 6  | 25   | 00LE62S-LAS-LS0007  |
| М   | odule(s)  | StuPo 2015   | Module(s) S                                      | StuPo 2020  |
| Advanced Life S   | ciences I   | , II or III  | Advanced Life Sciences I,                        | ll or III   |
| Prerequisites   | Introduc  | tion to Life Sciences  |  |   |
| Format, Dates,<br>Times and<br>Rooms                      | Self-paced online class with video feedback<br>In-class meetings:<br>Fri, 2.12., 14-16h, Biology, SR 00 043<br>Fri, 13.1., 14-16h, Biology, SR 00 043<br>Fri, 3.2., 14-16h, Biology, SR 00 043  |  |  |   |
|   | <ul> <li>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.</li> <li>In this course different components of the vertebrate brain and associated functions are presented one by one. In particular these are</li> </ul> |  |  | s at home using<br>dels will help you to<br>Feedback is provided<br>n person. |
| Course<br>Description                                     | <ul> <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   | Self-paced online class with video feedback and optional in-class meetings. You will be able to pick up the plasticine at UCF shortly before the course starts.   |  |  |   |
| Examination<br>Dates                                      | Final computer-based exam in presence in one of the computer pools (at Biologie II/III) on 10.02.2023, 14-16h.  |  |  |   |
| Recommended<br>Reading                                    |   | pt of the course along with<br>e in the reading room for in: | two SOMSO models of the spection and self-study. | human brain are   |

| Biotechnology   |   |   |  |                           |
|---|---|---|--|---------------------------|
| Life Sciences, El                                       | lectives  |   | Semester   |                           |
| Dr. Christoph Howe (C.Howe@gmx.net)                     |   |   |  |                           |
| Open to Stud  | lents   | Credit Points   | Max. Enrollment  | Course Number             |
| Year(s) 3-  | 4   | 6   | 20   | 00LE62S-LAS-LSEE0008      |
| M   | odule(s) S  | StuPo 2015  | Module(s)  | StuPo 2020                |
| Advanced Life S<br>Specialization O<br>EES: Specializat | ption: Life   | e Sciences I or II  | Advanced Life Sciences I<br>Specialization Option: Life<br>ESS: Specialization Optio | Sciences I or II          |
| Prerequisites   | Biochem   | nistry (Foundational Chemis                                 | stry) or Environmental Cher  | nistry                    |
| Format, Dates,<br>Times and<br>Rooms                    | Seminar<br>Mon, 10-12h, AU 01036a<br>Wed, 10-12h, AU 01036a   |   |  |                           |
| Course<br>Description                                   | <ul> <li>Wed, 10-12h, AU 01036a</li> <li>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 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.</li> <li>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 a planned excursion to a biotechnological company.</li> </ul> |   |  |                           |
| Examination<br>Dates                                    | Final exam and project work to be accomplished during the class.  |   |  |                           |
| Recommended<br>Reading                                  |   | erg, Berkling, Loroch & Sus<br>ically available through the | ssbier (2017) Biotechnology<br>UB  | for Beginners (2nd ed.) - |

| Cell Biology                         |   |                            |                            |                    |
|--------------------------------------|---|----------------------------|----------------------------|--------------------|
| Life Sciences, Electives             |   | Semester                   |                            |                    |
| Dr. Christoph Howe (C.Howe@gmx.net)  |   |                            |                            |                    |
| Open to Stud                         | lents   | Credit Points              | Max. Enrollment            | Course Number      |
| Year(s) 2-                           | ·4  | 6                          | 20                         | 00LE62S-LAS-LS0004 |
| М                                    | odule(s) S  | StuPo 2015                 | Module(s) S                | StuPo 2020         |
| Cell Biology                         |   |                            | Cell Biology               |                    |
| Prerequisites                        | Introduc  | tion to Life Sciences      |                            |                    |
| Format, Dates,<br>Times and<br>Rooms | Seminar<br>Tue, 12-14h, KG 1134<br>Thu, 12-14h, KG 1134   |                            |                            |                    |
| Course<br>Description                | This course provides a basic understanding of the structure and the molecular functions of the different components within eukaryotic cells. Lectures will provide knowledge on the follwoing questions on a molecular level: What biobricks are we made of and how are these bricks created in a typcial cell? What does happen when we breath and how do plants provide us with the necessary oxygen? How do we digest our food? How does our immune system work and what are the strategies of viruses to infect our cells? How do neurons transmit signals and how do we move our muscles and see with our eyes? How does our inner clock steer our need for sleep? Classes are based on discussion-oriented lectures including a practical introduction of microscopy. Additionally, students actively work on self-chosen projects during the course to explore their interests in cell biology. Upon completion of this course, students will demonstrate a comprehensive understanding of the structure and molecular function of living cells. |                            |                            |                    |
| Examination<br>Dates                 | 50% res   | earch project and 50% fina | l exam. Exam and resit dat | es tba.            |

| Computationa                         | al Genor   | nics                        |   |                    |  |
|--------------------------------------|--|-----------------------------|---|--------------------|--|
| Life Sciences, Electives             |  |                             | Semester  |                    |  |
| Dr. Senthilkuma                      | r Ramam  | oorthy (senthilkumar.ramar  | noorthy@uniklinik-freiburg.                             | de)                |  |
| Open to Stud                         | dents  | Credit Points               | Max. Enrollment   | Course Number      |  |
| Year(s) 3-                           | -4   | 6                           | 20  | 00LE62S-LAS-LS0035 |  |
| М                                    | odule(s)   | StuPo 2015                  | Module(s) S   | StuPo 2020         |  |
| LS: Methods<br>Specialization O      | ption I or   | II                          | LS: Methods I or II<br>Specialization I or II           |                    |  |
| Prerequisites                        | Introduc   | tion to Life Sciences       | <u>~</u>  |                    |  |
| Format, Dates,<br>Times and<br>Rooms |  | -12h, KG 1134               |   |                    |  |
| Course<br>Description                | <ul> <li>Wed, 10-14h, HH 9, HS 00 003a</li> <li>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.</li> <li>The following topics will be covered during the course in the form of lectures, lab exercises, group discussions, assignments and a group project.</li> <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 (Microarray and RNASeq).</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> </ul> |                             |   |                    |  |
| Remarks                              | Students need to bring their personal laptop for the exercise sessions. Prior knowledge of computer programming is not required, but an added advantage. The study materials will be provided during the course for each topic.  |                             |   |                    |  |
| Examination<br>Dates                 | 50% res  | earch project (due 25.01.20 | 023) and 50% presentation                               | (during class)     |  |
| Recommended<br>Reading               |  | •                           | enome analysis" by David W<br>evanis, Gary D. Bader and |                    |  |

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

| Human-Technology Interaction in Medicine |  |  |  |   |  |
|--|--|--|--|---|--|
| Life Sciences, E                         | lectives   |  | Semester                                     |   |  |
| Dr. Philipp Kellm                        | neyer (phi   | lipp.kellmeyer@uniklinik-fre                         | eiburg.de)                                   |   |  |
| Open to Stud                             | lents  | Credit Points  | Max. Enrollment                              | Course Number   |  |
| Year(s) 3-                               | -4   | 6  | 20   | 00LE62S-LAS-LS0038  |  |
| M  | odule(s) \$  | StuPo 2015   | Module(s) S                                  | StuPo 2020  |  |
| Methods<br>Specialization O              | ption LS I   | or II  | Methods I or II<br>Specialization LS I or II |   |  |
| Prerequisites                            | Introduc   | tion to Life Sciences                                |  |   |  |
| Format, Dates,<br>Times and<br>Rooms     |  | 18h, HH9 HS 01 020B                                  |  |   |  |
| Course<br>Description                    | <ul> <li>Thu, 16-18h, HH9 HS 01 020B</li> <li>Digital technologies have become a ubiquituous presence in medicine and health care. Robots can assist in surgery or as 'social' companions in rehabilitation. Virtual reality can be used as an auxiliary tool in psychotherapy, burn victims, stroke rehabilitation and many other contexts. Decision-support systems based on artificial neural networks can help medical professionals in diagnosing and treating complex diseases. Yet, the presence and increasingly interactive and adaptive character of these emerging technologies places complex cognitive, emotional and practical demands on users (both medical professionals and patients) for successful interactions with devices and software.</li> <li>In the first part of the seminar, we will examine conceptual foundations of humantechnology interaction (HTI) from an interdisciplinary perspective. Drawing on works from the philosophy of technology and philosophical anthropology, psychology, cognitive science and neuroscience, we will elucidate and critically examine important concepts underlying HTI.</li> <li>In the second part, we will familiarize ourselves with a variety of methods for the qualitative study of HTI in a medical contexts. In the spirits of a mixed-methods and methods from design thinking and HTI research in psychology. Throughout this second phase, students will apply some of the methods in mini research projects on HTI involving consumer health technologies. Together, we will analyse and critically discuss the results from these projects.</li> <li>In the third part, we will jointly examine some ethical tensions, legal challenges and societal implications of HTI in medicine. The aim is, to jointly identify preconditions and factors that make succesful HTI in medicine more likely. An important emphasis will be</li> </ul> |  |  | bilitation. Virtual reality<br>s, stroke rehabilitation<br>artificial neural networks<br>plex diseases. Yet, the<br>of these emerging<br>I demands on users<br>ctions with devices and<br>hdations of human-<br>ve. Drawing on works<br>ogy, psychology,<br>cally examine important<br>of methods for the<br>a mixed-methods<br>hnographic methods and<br>c Throughout this second<br>ch projects on HTI<br>lyse and critically discuss<br>ns, legal challenges and<br>identify preconditions and |  |
| Examination<br>Dates                     |  | of technology design in me<br>say due on 25.02.2023. |  |   |  |

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| Life Sciences, El                    | ectives   |                            | Semester                    |                     |  |
|--------------------------------------|---|----------------------------|-----------------------------|---------------------|--|
| Dr. Wilf Gardner                     | (w.gardn  | er@unistra.fr)             |                             |                     |  |
| Open to Stud                         | ents  | Credit Points              | Max. Enrollment             | Course Number       |  |
| Year(s) 3-                           | 4   | 6                          | 20                          | 00LE62S-LAS-LS0029  |  |
| M                                    | odule(s) S  | StuPo 2015                 | Module(s) S                 | StuPo 2020          |  |
| Advanced Life S                      | ciences I,  | ll or III                  | Advanced Life Sciences I,   | II or III           |  |
| Specialization O                     | ption: Life   | Sciences I or II           | Specialization Option: Life | Sciences I or II    |  |
| Prerequisites                        | "Anatom   | y and Functions of the Bra | in" or "Neuroscience: From  | Brain to Behaviour" |  |
| Format, Dates,<br>Times and<br>Rooms | -   | -20h, Werthmannst. 4, HS   |                             |                     |  |
| Course<br>Description                | <ul> <li>Wed, 18-20h, Werthmannst. 4, HS 01016</li> <li>The central nervous system is the biological engine through which humans navigate the world, an expression of nature with the capacity for self-awareness and autonomy in the trajectory of its own evolution. Every modality of the human condition, from the most primitive functions of our survival to our higher-order intelligence and self-awareness, is directed through this complex web of matter that is our nervous system. The classic experiments of antiquity and modern breakthroughs in medical technology have granted us deeper insight into the mechanics of the brain and everything it controls. Modern neuroscience is a diverse and interdisciplinary field, variously engaging elements of biology, chemistry, psychology and philosophy to advance our understanding the nervous system in health and disease.</li> <li>This course explores the nervous system through its disorders, the study of which has long been used to provide insight into healthy function. Drawing from molecular and cellular biology, genetics, physiology and psychology, students will develop an understanding of how neuroscience research utilises tools from a wide range of disciplines to describe the normal functioning of the nervous system, and to diagnose and treat its disorders. Students will go on to develop in-depth knowledge of how disruption of nervous system function at various stages can give rise to discussion. Topics will include neuroscience research methods, infectious and developmental disorders, neurodegeneration, brain injury and psychiatric disorders. Students will learn to interact critically with research methodology and scientific literature, allowing them to engage with material beyond that specifically discussed in the course. The course endeavours to equip students with specialised neuroscientific knowledge and offer a basis for those who would choose to further pursue basic or clinical research, in neuroscience or the</li> </ul> |                            |                             |                     |  |
| Remarks                              | The course will be delivered partly online, with some sessions delivered in presence.<br>Preference will be given to delivering the more lecture-focused sessions online and<br>holding discussion sessions in presence.  |                            |                             |                     |  |
| Examination<br>Dates                 | Presentation (20% of final grade) + exercises (20% of final grade) + end-of-term essay (60% of the final grade; max 2000 words)   |                            |                             |                     |  |
| Recommended<br>Reading               | Sontheimer, H. (2015). <i>Diseases of the Nervous System</i> . Academic Press. (Reading Room: NT/So/1)<br>Kandel, Schwartz et al. (2013) <i>Principles of Neural Science</i> . McGraw-Hill Medical. (Reading Room: NT/Kan/1)  |                            |                             |                     |  |

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

# 4.6 Study Area: Multiple

| Planning and Doing Research          |   |  |   |  |  |
|--------------------------------------|---|--|---|--|--|
| Core, all Majors                     |   |  | Semester  |  |  |
| Dr. Simon Büch                       | ner (buecl  | hner@ucf.uni-freiburg.de)                                    |   |  |  |
| Open to Stud                         | dents   | Credit Points  | Max. Enrollment   | Course Number                                  |  |
| Year(s) 4                            | 4   | 4  | 20  | 00LE62S-LAS-CO0042                             |  |
| M                                    | lodule(s) \$  | StuPo 2015   | Module(s) S   | StuPo 2020                                     |  |
| Research Desig                       | n Across  | Disciplines  | Senior Profiles of all majo   | rs   |  |
| Prerequisites                        |   |  |   |  |  |
| Format, Dates,<br>Times and<br>Rooms |   | -16h, Ph HS 2  | Creation Room   |  |  |
| Course<br>Description                | <ul> <li>26.10. and 30.11., 14-16h, AU Co-Creation Room</li> <li>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. 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 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</li> </ul> |  |   |  |  |
| Remarks                              | 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.  |  |   |  |  |
| Examination<br>Dates                 | Submission of course work by 28.02.2023.  |  |   |  |  |
| Recommended<br>Reading               | Chicago<br>Snieder,   | and London: University of R., & Larner, K. (2009). <i>Tl</i> | J. (2008). <i>The Craft of Res</i><br>Chicago Press (Reading ro<br><i>ne Art of Being a Scientist: ,</i><br>ridge University Press. (UB | om: EDU/Boo/1).<br>A <i>Guide for Graduate</i> |  |

| Research Design                                |  |                                  |                             |                    |  |
|--|--|----------------------------------|-----------------------------|--------------------|--|
| Core, all Majors                               |  |                                  | Semester                    |                    |  |
| Dr. Mila Mikalay (mikalay@ucf.uni-freiburg.de) |  |                                  |                             |                    |  |
| Open to Stud                                   | lents  | Credit Points                    | Max. Enrollment             | Course Number      |  |
| Year(s) 4                                      | 1  | 4 SL, 4 PL, 6 SL, 6 PL           | 18                          | 00LE62S-LAS-CO0056 |  |
| М  | odule(s)   | StuPo 2015                       | Module(s)                   | StuPo 2020         |  |
| Advanced Gover                                 | rnance III   |                                  | Senior Profiles of all majo | rs                 |  |
| Prerequisites                                  | as per S   | TUPO                             |                             |                    |  |
| Format, Dates,<br>Times and<br>Rooms           |  | 14h, AU 01036a<br>14h, AU 01036a |                             |                    |  |
|  | <ul> <li>formulating a convincing relevance statement by contextualizing your research as an informed position in an existing academic debate,</li> <li>improving the capacity to efficiently and correctly use sources to construct a clear</li> </ul>  |                                  |                             |                    |  |
| Course<br>Description                          |  |                                  |                             |                    |  |
|  | <ul> <li>and convincing argument,</li> <li>improving the ability to clearly and convincingly communicate your research, both in writing and oral presentations;</li> </ul>   |                                  |                             |                    |  |
|  | <ul> <li>improving the ability to provide constructive feedback on the research of other<br/>scholars.</li> </ul>  |                                  |                             |                    |  |
|  | The course is offered for any Major, uses materials from all disciplines and has in the past been very successfully completed by students from all Majors. As an experienced researcher and lecturer, I am able to guide you in all your projects in terms of research design. Note however that I am a political scientist by training so I will tend to start from the conceptual framework used in social sciences. |                                  |                             |                    |  |
| Remarks  | This course may be taken for 4 or 6 ECTS, with or without a grade, for any Senior Profile. The decision is to be taken by students in consultation with the lecturer and their advisor – ideally.  |                                  |                             |                    |  |
| Examination<br>Dates                           | Depends on the option chosen, but always includes a research proposal. Final deadline: 28.02.2023.   |                                  |                             |                    |  |
| Resit Date                                     | 20.04.2023   |                                  |                             |                    |  |
| Recommended<br>Reading                         | Get a co   | ppy of Booth, Colomb, Willia     | ams: The Craft of Research  |                    |  |

| Bachelor Projects - Student Conference |  |  |   |                         |  |
|--|--|--|---|-------------------------|--|
| Senior Profile/Co                      | ore  |  | Conference  |                         |  |
| Dr. Simon Büchi                        | ner (buecl   | hner@ucf.uni-freiburg.de)                                  |   |                         |  |
| Open to Stud                           | lents  | Credit Points  | Max. Enrollment                                     | Course Number           |  |
| Year(s) 4                              | 1  | 2  | any number  | 00LE62S-LAS-CO0078      |  |
| M                                      | odule(s) S   | StuPo 2015   | Module(s) \$  | StuPo 2020              |  |
| Research Desig                         | n Across   | Disciplines  | Senior Profile in any majo                          | r                       |  |
| Prerequisites                          | none   |  |   |                         |  |
| Format, Dates,<br>Times and<br>Rooms   | Preparatory Meeting (online)<br>Fri, 9.12., 14-16h<br>Conference<br>13.2., 10-16h, Ph HS 1, 3 and 4<br>14.2., 10-16h, Ph HS 1, 3 and 4   |  |   |                         |  |
| Course<br>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. All participants who take this event for credits also have to contribute to the organization of the conference. A preparatory meeting will take place before the Christmas break at which an organizing committee will be formed. Students then jointly prepare the conference in January/February and hold the event mid-February. |  |   |                         |  |
| Remarks                                | Students in StuPO 2015 can cover the module "Research Design Across Disciplines" by taking the course "Planning and Doing Research" and this one to cover 6 credits.   |  |   |                         |  |
| Examination<br>Dates                   |  | I (SL) only. Active participance as well as a presentation | tion in the organisation of the nat the conference. | e conference and in the |  |

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| Environmental Psychology  |  |                            |                             |                      |  |  |
|---|--|----------------------------|-----------------------------|----------------------|--|--|
| EES/ESS, Life   | EES/ESS, Life Sciences, Governance, Electives Semester   |                            |                             |                      |  |  |
| Nathalie Niekisc  | Nathalie Niekisch (nathalie.niekisch@wandel-werk.org)  |                            |                             |                      |  |  |
| Open to Stud  | dents  | Credit Points              | Max. Enrollment             | Course Number        |  |  |
| Year(s) 2-  | -4   | 6                          | 20                          | 00LE62S-LAS-GOEE0005 |  |  |
| M   | lodule(s)  | StuPo 2015                 | Module(s) \$                | StuPo 2020           |  |  |
| Specialization Option: EES I or IISpecialization Option: ESS I or IIHuman and the EnvironmentHuman and the Environment I or IIAdvanced Life Sciences I or IIAdvanced Life Sciences I or II or IIIAdvanced Governance I and IIAdvanced Governance I and II |  |                            | ent I or II<br>or II or III |                      |  |  |
| Prerequisites   | Introduc   | tion to EES/ESS and Introc | luction to Governance       |                      |  |  |
| Format, Dates,<br>Times and<br>Rooms  | Seminar<br>Tue, 14-17h, FMF 01 009   |                            |                             |                      |  |  |
| Course<br>Description   | <ul> <li>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?</li> <li>A key 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. 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</li> </ul> |                            |                             |                      |  |  |
| Remarks   | Students majoring in Earth and Environmental Sciences/Environmental and Sustainability Sciences have priority  |                            |                             |                      |  |  |
| Examination   | Exam ar  | Exam and resit dates tba.  |                             |                      |  |  |

| ETS Colloquium                       |   |   |                                 |                    |  |
|--------------------------------------|---|---|---------------------------------|--------------------|--|
| Electives                            | Electives Semester  |   |                                 |                    |  |
|                                      | •   | nn (frieder.vogelmann@uc<br>ohie.uni-freiburg.de) | f.uni-freiburg.de), Prof. Dr. I | Nadja Germann      |  |
| Open to Stu                          | dents   | Credit Points                                     | Max. Enrollment                 | Course Number      |  |
| Year(s)                              |   | none  | none                            | 00LE62S-LAS-IN0028 |  |
| N                                    | lodule(s) \$  | StuPo 2015  | Module(s) S                     | StuPo 2020         |  |
|                                      |   | -   |                                 | -                  |  |
| Prerequisites                        | none  |   |                                 |                    |  |
| Format, Dates,<br>Times and<br>Rooms |   | Colloquium<br>Wed, 17-20h, KG 1227 (bi-weekly)    |                                 |                    |  |
| Course<br>Description                | In this joint colloquium, we will read research literature on alternative epistemologies as well as discuss talks on current research projects from members of the colloqium and external guests. |   |                                 |                    |  |
| Remarks                              | Come to   | the initial meeting on Octo                       | ber 19 to join us and find o    | ut more.           |  |

| Geographical  | Informa   | tion Services                     |  |   |
|---|---|-----------------------------------|--|---|
| EES/ESS, Gove   | EES/ESS, Governance   |                                   | Semester   |   |
| Katharina Gernle  | er (kathari   | ina.gernler@posteo.de)            |  |   |
| Open to Stud  | dents   | Credit Points                     | Max. Enrollment  | Course Number                                       |
| Year(s) 2-  | -4  | 6                                 | 20   | 00LE62S-LAS-GOEE0005                                |
| M   | lodule(s) S   | StuPo 2015                        | Module(s) \$   | StuPo 2020  |
| Analytical Metho<br>Specialization O<br>Qualitative or Qu | ption: EE   | S I or II<br>Methods (Governance) | ESS Methods I or II<br>Specialization Option: EE<br>Methods (Governance) | S I or II   |
| Prerequisites   | Introduc  | tion to EES/ESS or Introdu        | ction to Governance  |   |
| Format, Dates,<br>Times and<br>Rooms                      | Seminar<br>Thu, 8-12h, KG 1243  |                                   |  |   |
|   | Managing data with a spatial reference to the earth is a central function of a Geographic<br>Information System (GIS). At one hand, it is a system that holds and manages different<br>data types. At the other hand, a GIS also connects data to a map, hence serving as a<br>data visualization tool. GIS are commonly used in science, in almost every industry, as<br>well as by governments and administrations.   |                                   |  | ls and manages different<br>hap, hence serving as a |
| Course<br>Description                                     | This course consists of three parts. Within the first part, making up approx. a quarter of the whole course, we will do some theory of spatial data and pursue the broad application of GIS in practice. Also, we will look into data acquisition (to cue open source data) and administrative regulations. Students will do a small Studienleistung and group work. During the second part, we will learn to deal with main tools of the QGIS Software. Besides, there will be a lot of accompanying examples on geospatial analysis commonly used in environmental science. In the final part, taking about half the time of the whole course, the students will do a study project on a freely chosen topic. All lessons during the project part will be supervised. |                                   |  |   |
|   | After completing this course, students will be able to handle the basic functions in a GIS software, perform statistical and geospatial analytics, understand the basic aspects of geodata and create resp. publish maps.   |                                   |  |   |
| Remarks   | Students  | s majoring in EES/ESS hav         | re priority  |   |

| Im Dialog: Wis                       | ssensch  | aften und ihr Publikum   |                               |                    |
|--------------------------------------|--|--------------------------|-------------------------------|--------------------|
| Electives                            | Electives  |                          |                               |                    |
| Prof. Dr. Frieder                    | Vogelma  | nn (frieder.vogelmann@uc | f.uni-freiburg.de) and others | 3                  |
| Open to Stuc                         | lents  | Credit Points            | Max. Enrollment               | Course Number      |
| Year(s) 1-                           | -4   | None                     | 80                            | 00LE62S-LAS-IN0029 |
| M                                    | odule(s) S   | StuPo 2015               | Module(s) S                   | StuPo 2020         |
|                                      |  |                          |                               | -                  |
| Prerequisites                        | none   |                          |                               |                    |
| Format, Dates,<br>Times and<br>Rooms | Lecture<br>Wed, 18   |                          |                               |                    |
| Course<br>Description                | Wed, 18-20h, KG 1098<br>Über ihre jeweilige Wissenschaft zu sprechen, gehört zum täglichen Brot aller Wissen-<br>schaftler:innen – und nicht nur über Forschungsergebnisse oder die Wege, die dorthin<br>geführt haben. Die Diskussion und der Austausch mit anderen wissenschaftlichen Dis-<br>ziplinen und Institutionen sind genauso Inhalt solcher Gespräche wie die Wahrneh-<br>mung in der Öffentlichkeit sowie Freud und Leid in der Lehre.<br>Insbesondere in der Corona-Pandemie hat sich die Vermittlung von wissenschaftlichen<br>Ergebnissen sowie deren Interpretation oder auch die Beratung der Politik intensiviert –<br>ebenso wie das Nachdenken darüber, wie dieser Dialog geführt wird und geführt wer-<br>den sollte, mit welchen Problemen er behaftet ist und wie diese gelöst werden können.<br>Wenn über Wissenschaften und ihre Kommunikation nachgedacht wird, steht dieser<br>Austausch oft im Vordergrund. Doch die Wissenschaften wenden sich auch an andere<br>Adressat:innen: andere Wissenschaftler:innen, an Studierende, Unternehmen, politi-<br>sche Akteure sowie an die Öffentlichkeit im Allgemeinen. Lässt sich auch in diesen Fäl-<br>len etwas darüber sagen, wann und wie diese Dialoge gelingen? Welche Kritik, wel-<br>ches Lob verdienen diese Dialoge in ihrer derzeitigen Fassung – und wie könnten sie<br>kreativ weiterentwickelt werden?<br>Anlässlich seines 10jährigen Bestehens widmet das University College Freiburg (UCF)<br>diesem Austausch der Wissenschaften mit ihren verschiedenen Adressat:innen eine Vor-<br>lesungsreihe. Das UCF hat mit seinem fächerübergreifenden Bachelorstudiengang Libe-<br>ral Arts and Sciences sowie seinen interdisziplinären Lehr- und Forschungsaktivitäten<br>ein genuines Interesse, diesen Fragen nachzugehen. An acht Abenden werden die ver-<br>schiedenen Gesprächsformen von Wissenschaften zu ihrem Publikum aus verschiede-<br>nen Perspektiven unter die Lupe genommen. |                          |                               |                    |
| Remarks                              | For more information, including dates and speakers, please consult the poster and UCF website.   |                          |                               |                    |

| Journalism                             |  |   |   |                              |
|--|--|---|---|------------------------------|
| all majors                             |  |   | Semester  |                              |
| Prof. Dr. Sabine                       | Rollberg   | (srollberg@t-online.de)                     | <u>^</u>  |                              |
| Open to Stud                           | ents   | Credit Points                               | Max. Enrollment   | Course Number                |
| Year(s) 3,                             | 4  | 6   | 20  | 00LE62S-LAS-<br>CHEEGOLE0001 |
| M                                      | odule(s)   | StuPo 2015                                  | Module(s) S   | tuPo 2020                    |
| Specialization Op<br>Specialization Op |  | ture & History I or II<br>S I or II         | Senior Profiles of all major                                  | S                            |
| Prerequisites                          |  |   | istory + Theory of Culture/Th<br>nd all Advanced Life Science |                              |
| Format, Dates,<br>Times and<br>Rooms   |  | -16h, Medienzentrum<br>4-16h, Medienzentrum |   |                              |
| Course<br>Description                  | Independent investigative journalism has never been more important than today, when<br>the world is more and more complex.<br>Yet the threats against it are widespread. Many groups target "the media" as enemy,<br>the slogan "fake news" has more and more entered the daily language and the erosion<br>of traditional media business models makes it difficult to finance independent<br>journalism.<br>This course pushes back against these trends by introducing a new generation into<br>journalistic thinking, working and writing.<br>Students eager to test this professional world will learn to distinguish between<br>academic and journalistic language, will examine journalistic principles, will explore<br>journalistic genres (political, cultural, science, PR) and will practice production in<br>different media (print, radio, TV, online) We start with basics like writing news and then<br>explore other forms like reportage, portraits, etc.<br>The final project will be a video "Magazine" as a group project, with contributions from<br>each student drawn from their research interest in whatever field. This course includes<br>training in camera and editing work in preparation for the final project.<br>Experts from print, radio and television, working as investigative reporters, war journalists<br>or cultural experts will be invited to share their theoretical knowledge and practical<br>experiences. Students will help prepare these visits and evaluate what they learn from<br>journalistic experts. |   |   |                              |
| Remarks                                | This course mixes seminar style learning with project based learning. Students will be<br>encouraged to write their own blog. These articles can also be written in German.<br>Some literature will be in German, so reading knowledge of German is recommended.<br>However, no part of the grade will depend on German, and non-German-speakers are<br>entirely welcome to participate.<br>There will be an opportunity for individual and group consultations a few times in the<br>semester on Mon/Tues 16:00-17:00.<br>Students should plan significant time in January / February 2022 completing the final<br>project, the "magazine."   |   |   |                              |
| Examination<br>Dates                   | 15.04.2023   |   |   |                              |
| Resit Date                             | 01.05.20   | )23   |   |                              |

| Maths and Physics                    |   |                             |                            |                       |
|--------------------------------------|---|-----------------------------|----------------------------|-----------------------|
| Life Sciences, EES/ESS, Electives    |   | Semester                    |                            |                       |
| Dr. Benoit Louve                     | el (benoit.   | louvel@ucf.uni-freiburg.de) |                            |                       |
| Open to Stud                         | dents   | Credit Points               | Max. Enrollment            | Course Number         |
| Year(s) 2                            | -4  | 6                           | 45                         | 00LE62VS-LAS-LSEE0003 |
| M                                    | lodule(s) S   | StuPo 2015                  | Module(s)                  | StuPo 2020            |
| Maths and Phys<br>Sciences           | ics for the   | Liberal Arts and            | Mathematics for the Scie   | nces                  |
| Prerequisites                        | Introduc  | tion to EES/ESS and/or Int  | roduction to Life Sciences |                       |
| Format, Dates,<br>Times and<br>Rooms | Lecture:<br>Mon, 8-10h, Wihlelmstrasse 26, Room 006<br>Wed, 8-10h, KG 1228<br>Tutorials:<br>WG1: Fri, 10-12h, KG 1134<br>WG2: Fri, 12-14h, KG 1134  |                             |                            |                       |
| Course<br>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.<br>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<br>Dates                 | Mid-term  | n and final exam. Exam and  | d resit dates tba.         |                       |

| Mountains in  | the Anth   | ropocene: Politics of C      | Culture and Nature   |                      |
|---|--|------------------------------|--|----------------------|
| Culture & Histor                                      | Culture & History, EES/ESS, Electives  |                              |  |                      |
| Dr. Eva Rüskam<br>(maria.koscielnia                   |  |                              | ourg.de), Maria Kościelniak-   | Woźniak              |
| Open to Stud  | lents  | Credit Points                | Max. Enrollment  | Course Number        |
| Year(s) 2-  | -4   | 6                            | 20   | 00LE62S-LAS-CHEE0002 |
| M   | odule(s) S   | StuPo 2015                   | Module(s) \$   | StuPo 2020           |
| Sociocultural An<br>Advanced Cultur<br>Humans and the | re & Histo   | •                            | Culture: Peoples and Prac<br>Culture & History I, II or III<br>Humans and the Environr | I                    |
| Prerequisites   | Introduc   | tion to Culture & History or | Introduction to EES/ESS  |                      |
| Format, Dates,<br>Times and<br>Rooms                  |  | -20h, Ph HS 2                |  |                      |
| Course<br>Description                                 | <ul> <li>Wed, 18-20h, Ph HS 2</li> <li>From the Alps to the Tatras, from the Smokey Mountains to the Misty Mountains – humans are inspired and threatened by mountains, both real and fantastical, in equal measure. While some mountain ranges have attracted the settlement of humans early on, others remained wilderness refuges for centuries only to be discovered as "pristine" nature resorts and mythical spaces inhabited by all kinds of human and non-human creatures. Some high and inaccessible mountain areas have become unique places to be conquered, being at the same time a challenge and a prize available for elite mountaineers. Other ranges, more reachable, suffer due to over-tourism and environmental degradation. As natural borders and landmarks, mountains furthermore served as prominent figures on maps and in political disputes; they also became hideouts for partisans and vagrants, as outsiders to dominant society sought out mountains and their valleys for the freedom they afforded to pursue alternative ways of life. As a result, mountain people – whether they be proud highlanders or quirky mountain folks – accumulated a reputation themselves that informs more mainstream perceptions of the mountains they inhabit.</li> <li>In this course, we will introduce students to different ways of approaching and understanding mountains, both as types of spaces and as particular landscapes in regional, national and even global contexts. In addition to looking at "real" mountains, we will examine the representation and even construction of fantastical mountains in different types of media (books, movies, games). Offering a set of diverse analytical tools – from ethnographic study to geo- and ecocriticism - in the first part of the class, students will then have an opportunity to apply them in their group projects. In this second part, the independent study of the students will be accompanied by peer feedback and advisory sessions. In the last part of the course, students will be able to experience mountainous spaces during ex</li></ul> |                              |  |                      |
| Remarks   | This course is offered in a hybrid fashion, with classes alternating between in person<br>and online through WS.<br>In addition, the class will culminate in an excursion / mini conference at the end of terr<br>Please ensure that you are available February 10-12, 2023 (that includes a weekend)  |                              | erence at the end of term.   |                      |
| Examination<br>Dates                                  | 12.02.20   | 023                          |  |                      |
| Resit Date  | 27.02.20   | 023                          |  |                      |

| Research on International Politics   |  |                             |   |                              |
|--------------------------------------|--|-----------------------------|---|------------------------------|
| all majors, not electives            |  |                             | Semester  |                              |
| Ermelinda Kanu                       | shi ( <mark>erme</mark>  | linda.kanushi@ucf.uni-freib | burg.de)  |                              |
| Open to Stud                         | lents  | Credit Points               | Max. Enrollment   | Course Number                |
| Year(s) 3-                           | -4   | 6                           | 20  | 00LE62S-LAS-<br>CHEEGOLS0001 |
| М                                    | odule(s) \$  | StuPo 2015                  | Module(s) \$  | StuPo 2020                   |
| Advanced Gove                        | rnance III   |                             | Research in an Area of G<br>Senior Profiles of all majo |                              |
| Prerequisites                        | as per S   | TUPO                        |   |                              |
| Format, Dates,<br>Times and<br>Rooms | Seminar<br>Mon, 10-12h, KG 1236<br>Wed, 10-12h, HH 9 HS 00 003B  |                             |   |                              |
| Course<br>Description                | The course aims at preparing students to understand, design, and conduct academic research on international politics. The course will provide a step-by-step guidance on a research project undertaken by the student. There is a theoretical and practical approach to this course. In the theoretical section of the course, students will acquire knowledge and information on envisaging, designing, and executing a research project. Practically, students will be able to pursue one research project systematically by utilizing distinct academic methods.<br>Furthermore, the students will be able to get engaged with different exercises that will sharpen their research skills and capabilities. As a first step, the students will be able to identify a topic of preference and research question in the fields of international organizations and foreign policy. In parallel, the students will receive thorough theoretical and empirical knowledge on topics such as: research methods and approaches, academic writing, literature review, research paper structures, research presentation, how to write an abstract or introduction etc. Designing and conducting academic research is mostly an individual undertaking. However – for this course - students will be able to share the journey with the classmates that will play a crucial role in providing feedback to ameliorate the quality of the research. The course will be offered in a hybrid format. Most sessions of the course with be in-presence with occasional online sessions. |                             |   |                              |
| Remarks                              | Students   | s taking the course for Res | earch in an Area of Govern                              | ance have priority.          |
| Examination<br>Dates                 | The exam is in the form of assignments totaling max 8000 words.<br>Final deadline: 28.02.2023  |                             |   |                              |

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

| Sustainable C                        | ities   |                            |  |                      |
|--------------------------------------|---|----------------------------|--|----------------------|
| EES/ESS, Governance, Electives       |   |                            | Semester   |                      |
| Sabine Sané (sa                      | bine.san  | e@ucf.uni-freiburg.de), Ma | ara Gonçalves (goncalvesr                          | nai01@gmail.com)     |
| Open to Stud                         | lents   | Credit Points              | Max. Enrollment                                    | Course Number        |
| Year(s) 2-                           | 4   | 6                          | 16   | 00LE62S-LAS-GOEE0012 |
| M                                    | odule(s)  | StuPo 2015                 | Module(s)  | StuPo 2020           |
| Humans and the                       | Environr  | nent                       | Humans and the Environr<br>Advanced Governance I o |                      |
| Prerequisites                        | Introduc  | tion to EES/ESS            |  |                      |
| Format, Dates,<br>Times and<br>Rooms | -   | -12h, AU 01065             |  |                      |
| Course<br>Description                | <ul> <li>Wed, 10-12h, AU 01065</li> <li>Cities were estimated to house about 56% of the world's population in 2020 and contribute 40-70% of global GHGs already a decade ago. Thus, the sustainable development of cities is critical for providing a safe and healthy living environment for a bulk of the human population, and for meeting our global GHG emissions reduction and biodiversity conservation targets.</li> <li>In this course, we will explore what sustainable city development means. What features and developments should a sustainable city strive for? We will look at different challenges or problem scenarios and explore possible solutions. Experts on 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.</li> <li>We will go on a virtual excursion to different cities, often described as one of the most sustainable and green cities in the world. How have these cities achieved goals that many cities are still dreaming about? What makes them so sustainable?</li> <li>Equipped with this extensive background information and reflection, you will explore the sustainability of your city or a city of your choice, and compare your findings with what we have discussed in class. Where do you find sustainable developments in your city? Where could the sustainability of your city still be improved? You will create a virtual tour on sustainability of your city by producing a video. Thereby, we will alb eable 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. After this course you will be able to</li> <li>Describe different possibilities and challenges for sustainable city development</li> <li>Identify sustainable development with experts</li> <li>Apply your knowledge by collecting and presenting information on your city's sustainability</li> </ul> |                            |  |                      |
| Remarks<br>Examination               | Students majoring in Earth and Environmental Sciences/Environmental and Sustainability Sciences have priority   |                            |  |                      |
| Dates                                | 24.02.20  |                            |  |                      |
| Resit Date                           | 31.03.20  | )23                        |  |                      |

#### 4 **Courses of Other (Degree) Programs**

Cooperations of Culture and History and Environmental and Sustainability Sciences with other degree programs will be announced in the updated course catalog in mid-September.

### 4.1 Study Area: Wissenschaft, Technologie, Gesellschaft

| Environmenta                            | I Confli  | ct: Expertise, Power, ar    | nd the Control of Nature  | •                         |
|---|---|-----------------------------|---|---------------------------|
| Wissenschaft, Technologie, Gesellschaft |   |                             | Semester  |                           |
| Dr. Nicholas Bud                        | chanan (n   | icholas.buchanan@ucf.uni    | -freiburg.de) with Alina Unk  | elbach and Miriam Zierott |
| Open to Stud                            | lents   | Credit Points               | Max. Enrollment   | Course Number             |
| Year(s) 2-                              | -4  | 6                           | 20  | 00LE62S-WTG-000102        |
| M                                       | odule(s)  | StuPo 2015                  | Module(s) S   | StuPo 2020                |
| Humans and the Specialization O         |   |                             | Humans and the Environn<br>Spezialization Option: ES<br>Senior Profile C&H            |                           |
| Prerequisites                           | none  |                             |   |                           |
| Format, Dates,<br>Times and<br>Rooms    | Semina<br>Wed, 10   | )-12h, KG 1234              |   |                           |
| Course<br>Description                   | Is that thing they're calling food actually food? How safe, or unsafe, is the drinking water? And who gets to define "safe," and by what metric? Will 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? 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. The course will focus on tracing the social, scientific, and technical dynamics of environmental conflicts. 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 environmental decision-making is becoming increasingly participatory, complicating the boundaries between experts and the public, as well as between regulators and the regulated. |                             |   |                           |
| Remarks                                 | Attendance at a student conference on Friday, 03.02.2023 from 9-15h is required and incorporated into the contact time for the course.<br>The language of instruction is English. However, students may contribute to discussions and fulfill all course requirements in English or German.   |                             |   |                           |
| Examination<br>Dates                    | 1500-wo   | ord paper on the same topic | ntation at student conference<br>c (due 17.02.2023).<br>, in class presentation on co |                           |
| Resit Date                              | 31.03.20  | )23                         |   |                           |
| Recommended<br>Reading                  | Stephen Bocking, <i>Nature's Experts: Science, Politics, and the Environment</i> . New Brunswick: Rutgers University Press (2004).  |                             |   |                           |

- Hörsaal
- HS Breisacher Tor ΒT

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

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| Immortality: In   | nterdisci  | iplinary Perspectives o           | n the Human Future |                    |
|---|--|-----------------------------------|--------------------|--------------------|
| Wissenschaft, T   | echnologi  | e, Gesellschaft                   | Semester           |                    |
| Dr. Nicholas Buchanan (nicholas.buchanan@ucf.uni-freiburg.de) |  |                                   |                    |                    |
| Open to Stud  | lents  | Credit Points                     | Max. Enrollment    | Course Number      |
| Year(s) 2-  | -4   | 6                                 | 20                 | 00LE62S-WTG-000103 |
| М   | odule(s)   | StuPo 2015                        | Module(s)          | StuPo 2020         |
| Elective Joker  |  |                                   | Senior Profile C&H |                    |
| Prerequisites   | none   |                                   |                    |                    |
| Format, Dates,<br>Times and<br>Rooms                          |  | 14h, KG 1243<br>ng on 08.11.2022) |                    |                    |
| Course<br>Description   | Trigger warning: Mortality and death<br>While the focus of this seminar is the academic study of unending life—immortality—<br>discussions may, unavoidably, involve the subject of mortality and death, even if only<br>implicitly. Before enrolling in this class, please consider if you feel comfortable engaging<br>with these topics.<br>New technologies, advances in medicine, and research in artificial intelligence raise the<br>possibility, however far-fetched it may seem, of human immortality. While medicine has<br>long, and often successfully, pursued the quest to extend lifespans, companies in the<br>Silicon Valley are investing in the idea of unending life through artificial intelligence, and<br>geneticists and biologists are thinking about ways to prolong life with stem cell- or gene<br>therapy.<br>In this seminar, we will learn about and discuss the dreams and concrete research<br>evolving around the goal of immortality. In addition to exploring bio-scientific, medical,<br>and technical perspectives (in particular information technology), we will also discuss<br>cultural concepts and narratives of immortality. In addition, we will consider the topic<br>from psychological, economic, and resource perspectives, among others. Throughout,<br>the course will reflect on the role of academics (including ourselves) in this field, and on<br>critical questions of gender, race, (dis)ability, post-colonialism, and social justice. |                                   |                    |                    |
|   | All of these questions shall make us consider what the possibility of becoming immortal would mean for our society and ourselves as individuals. What dynamics could this create, and who should be granted the power to decide?   |                                   |                    |                    |
| Remarks   | Attendance at a student conference on Friday, 03.02.2023 from 9-15h is required and incorporated into the contact time for the course.<br>The language of instruction is English. However, students may contribute to discussions and fulfill all course requirements in English or German.  |                                   |                    |                    |
| Examination<br>Dates  | Graded Examination: Poster presentation at student conference (due 03.02.2023) plus 1500-word paper on the same topic (due 17.02.2023).<br>Pass/Fail Examination: Attendance, in class presentation on course readings.  |                                   |                    |                    |
| Resit Date  | 31.03.20   | )23                               |                    |                    |

| Sciences vs.                            | Non- and  | d Pseudo-Sciences: Th    | e Demarcation Problem   | I                     |
|---|---|--------------------------|---|-----------------------|
| Wissenschaft, Technologie, Gesellschaft |   |                          | Semester  |                       |
| Prof. Dr. Frieder                       | <sup>.</sup> Vogelma  | nn (frieder.vogelmann@uc | f.uni-freiburg.de)  |                       |
| Open to Stud                            | dents   | Credit Points            | Max. Enrollment   | Course Number         |
| Year(s) 3                               | -4  | 6                        | 20  | 00LE62S-WTG-000101    |
| N                                       | lodule(s)   | StuPo 2015               | Module(s)   | StuPo 2020            |
| Specialization C                        | ption: C&   | H I or II                | Specialization Option: C&<br>Senior Profile C&H<br>Senior Profile LS<br>Senior Profile Governance |                       |
| Prerequisites                           |   |                          | istory + Theory of Culture/T<br>nd all Advanced Life Scienc                                       |                       |
| Format, Dates,<br>Times and<br>Rooms    | Seminai<br>Thu, 16-   | 18h, KG 1227             |   |                       |
| Course<br>Description                   | We have a rough and ready idea what sciences are and that some methods to gain<br>knowledge are "scientific" whereas others are "unscientific." Conducting a social survey,<br>doing experiments in behaviour economics or constructing computer models to predict<br>how the climate changes is scientific, relying on hearsay, following gut intuitions or<br>compiling knowledge from randomly selected search results on google is not.<br>Moreover, we consider some fields of knowledge to be "pseudo-sciences." Astrology is<br>a prime example, although it was consider being a science for a long time.<br>How do we justify these intuitive judgements? What principles do we appeal to, and which<br>elements of the sciences do we focus on? A central discussion in philosophy of science<br>is devoted to precisely this "demarcation problem": to finding criteria that distinguish<br>between sciences, pseudo-sciences and non-scientific knowledge. Despite the fact that<br>philosophers and scientists often agree on individual cases, giving an account of general<br>criteria is not just surprisingly hard but the search for it was more or less abandoned in<br>the 1980s. The demarcation problem was declared unsolvable or even a "pseudo-<br>problem." In the seminar, we will revisit this discussion and consider newer contributions,<br>which were often prompted by political worries. After all, should philosophy of science not<br>be able to show why e.g. creationism or astrology are not sciences? |                          |   |                       |
| Remarks                                 | The language of instruction is English. However, students may contribute to discus-<br>sions and fulfill all course requirements in English or German.  |                          |   | contribute to discus- |
| Examination<br>Dates                    | Graded Examination: Essay of up to 5,000 words (100%), due on 15.03.2023.<br>Pass/Fail Examination: Students must give a short oral presentation about one of the texts discussed in the seminar.   |                          |   |                       |
| Recommended<br>Reading                  | <ul> <li>Hansson, Sven Ove (2017): Science and Pseudo-Science. In: Edward N. Zalta, <i>The Stanford Encyclopedia of Philosophy</i> (Summer 2017 Edition).</li> <li>https://plato.stanford.edu/entries/pseudo-science/</li> <li>Oreskes, Naomi (2021): <i>Why Trust Science?</i> Princeton, N.J./Oxford.</li> <li>Pigliucci, Massimo and Maarten Boudry (eds.) (2013): <i>Philosophy of Pseudoscience. Reconsidering the Demarcation Problem.</i> Chicago, Ill.: University of Chicago Press.</li> </ul>   |                          |   |                       |

Immortality: Interdisciplinary Perspectives on

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Publication Date: August 11, 2022

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