

MA Environment and Society



Course Catalog Winter Semester 2022/23

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About the Course Catalog

This course catalogue is meant to help you navigate the courses on offer for **winter semester 2022/23** and plan your schedule.

This overview is for this semester only. For a detailed overview of the MA Environment and Society's structure, please consult the official study and examination regulations (Prüfungs- und Studienordnung, PStO).

This document includes detailed information on your mandatory courses as well as on the range of electives (and their designated modules) that you can choose from this semester.

You must attend all mandatory courses and should select **elective courses for a total of up to 12 European Credit Transfer System (ECTS) points**. Electives have been grouped into four content areas, but you can select courses freely from among them. There are no additional rules for choosing your electives.

Many elective courses change every semester/year (especially in the humanities and social sciences), so there is no guarantee that the courses listed here will be available the next academic year. If you are interested in a particular course, we recommend that you take it this semester. However, you should keep in mind that a module (to which elective courses are assigned) can be chosen only once. Courses listed in English are taught in English, courses listed in German are taught in German.

When you put together your study plan, please pay attention to the following:

- 1) the number of participants may be limited;
- 2) some courses can run in multiple time blocks on the same or on different days;
- 3) course times can overlap;
- 4) LMU is not a campus university, so always check room locations and travel times.

Please check your courses on LSF periodically as changes (dates, times, rooms) can occur last minute, especially for courses in other departments.

How to register for courses:

Course registration needs to be completed on LMU's online platform LSF. Each course is listed with a code (Belegnummer) you can use to find it on LSF. **Please complete the course registration via the online platform LSF. Course registration on LSF will run from 26 September through 6 October.** Please don't wait until the last day to sign up for courses.

In addition, also fill out the excel document that was sent to you by email (2022-23_Students' elective choices). Please send the table back to our e-mail address: envhum@rcc.lmu.de, by 5 October 2022 at the latest.

Please note that you will also need to register for exams later in the semester, using LSF. You will be informed about this additionally nearer to the exam registration times.

Program Overview

Sem.	Core Modules (84 ECTS)					Elective Profiles (36 ECTS)
1	P1.1 Histories & Theories of E & S (6 ECTS)	P1.2 Field Laboratory in E&S (3 ECTS)	P2.1 Current Perspectives on E&S (3 ECTS)	P3.1 Survey of Methods for E&S (3 ECTS)	P4.1 Writing Skills in E&S (3 ECTS)	EP 1: Environmental Humanities EP 2: Politics and Social Sciences EP 3: Sustainability and Environmental Sciences EP 4: Practice and Outreach
2	P 5.1 Natures and Justice (6 ECTS)	P 5.2 Environmental Justice and Practice (3 ECTS)	P2.2 New Fields of Research on E&S (3 ECTS)	P3.2 Interdisciplinary Methods for E&S (3 ECTS)	P4.2 Representation Skills in E&S (3 ECTS)	
3	P6.1 Human and More-than-Human Ecologies (6 ECTS)	P 6.2 Concepts and Outreach in E&S (3 ECTS)	P 7.1 Making and Unmaking Environments (6 ECTS)		P 7.2 Inhabiting Environments (3 ECTS)	
4	P 8.1 Master Thesis Colloquium (3 ECTS)	P8 Master Thesis (27 ECTS)				

Lecture Times Overview WiSe 22/23

Mandatory courses (Pflicht, P)

Elective courses (Wahlpflicht, WP)

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8-10	WP 45	WP 45	WP 39		WP 11, WP 12
10-12	WP 4.1, WP 6, WP 44	WP 4.2, WP 13, WP 44	WP 8	WP 10	WP 12
12-14	P 1.1	WP 2, WP 43	P 3.1, WP 4.2	P 2.1	WP 10
14-16	WP 7, WP 14, WP 35, WP 41	WP 9, WP 15	P 4.1	WP 5	P 1.2
16-18	WP 14, WP 41	WP 36	WP 1	WP 7	

Fill in your own semester schedule:

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8-10					
10-12					
12-14	P 1.1		P 3.1	P 2.1	
14-16			P 4.1		P 1.2
16-18					

Mandatory Modules (Pflichtveranstaltungen)

P 1 Introduction to Environment and Society

P1.1 Histories and Theories of Environment and Society

DR. HANNA STRAß-SENL

This course provides an overview of key issues, themes, and debates within regarding Environment and Society along with their historical background. It presents and familiarizes students with relevant terms and approaches in the environmental humanities, and with different theories pertaining to the relationship between humans and their environment. It takes into account local and global contexts.

- **Language:** English
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Monday, 11:45 – 12:15
- **Location:** RCC, Leopoldstr. 11, 4. OG; Room 415
- **Work format:** Seminar
- **Belegnummer:** 14834

P1.2 Connecting Theory and Practice

PROF. DR. CHRISTOF MAUCH

In parallel with the acquisition of theoretical knowledge in P1.1, students participate in field trips and hands-on activities in and around Munich. This course guides students to explore selected places relevant for our understanding of socio-ecological relationships and to learn about local and regional environmental projects. Working in teamwork exercises, students apply multi-/inter-/transdisciplinary knowledge in diverse practical contexts.

- **Language:** English
 - **ECTS:** 3 ECTS Point
 - **SWS:** 2 hours per week
 - **Dates:** Friday, 14:00 – 16:00, 4.11,18.11, 09.12, 20.01
 - **Location:** RCC, Leopoldstr. 11, 4. OG; Room 415
 - **Work format:** Übung
 - **Belegnummer:** 14833
-

P 2 Lecture Series: New Directions in Environment and Society

P2.1 Current Perspectives on Environment and Society

PROF. CHRISTOF MAUCH

The first part of the lecture series with varying speakers takes place in the winter semester. It familiarizes students with new research questions and topics currently developed in the field of environment and society and related disciplines.

- **Language:** English
 - **ECTS:** 3 ECTS Point
 - **SWS:** 2 hours per week
 - **Dates:** Thursday, 12:30– 14:00
 - **Location:** Katholische Hochschulgemeinde (KHG) Leopoldstr. 11, 1. OG.
 - **Work format:** Lecture
 - **Belegnummer:** 13185
-

P 3 Research Methods in Environment and Society

P3.1 Survey of Methods for Environment and Society

DR. ANNA ANTONOVA

The course introduces students to research methods and approaches to knowledge production in the environmental humanities and qualitative social sciences. Students are familiarized with research ethics and learn how to evaluate research processes and results, and how to assess their significance for environment and society.

- **Language:** English
 - **ECTS:** 3 ECTS Point
 - **SWS:** 2 hours per week
 - **Dates:** Wednesday, 12:00 – 14:00
 - **Location:** RCC, Leopoldstr. 11a, 4th floor, Room 415
 - **Work format:** Seminar
 - **Belegnummer:** 14835
-

P 4 Representation and Outreach

P 4.1 Writing Skills in Environment and Society

TABEA HAWKINS

The course teaches communication skills for academia, including different formats and genres of academic writing (abstract/essay/article/thesis). In this course, students learn about writing

process and practice how to constructively reflect on their own individual experiences with the writing processes. The course includes low stakes writing assignments, in which students use writing as a tool to acquire and deepen knowledge, to recognize and establish connections between disparate fields of knowledge, and to develop their thoughts and ideas.

- **Language:** English
- **ECTS:** 3 ECTS Point
- **SWS:** 2 hours per week
- **Dates:** Wednesday, 14:30 – 16:00
- **Location:** RCC, Leopoldstr. 11a, 4th floor, Room 415
- **Work format:** Seminar
- **Belegnummer:** 14836

Electives Overview Winter Semester 22/23

Environmental Humanities

- WP 1: Visionary Ecologies
- WP 2: Petrocultures in Europe & Beyond
- WP 4: Grundlagen der Kommunikationswissenschaft
- WP 5: Hotspots, Spillovers, and Resource Extraction: Critical Approaches from the EH
- WP 35: Ist Wissenschaft Objektiv? (Geschichte)
- WP 36: America 's National Park System
- WP 41 Sustainability, Infrastructure and Technology

Politics and Social Sciences

- WP 6: Ethnologische Feldforschung
- WP 7: Das eigentlich ganz gute Leben. Ethnologische Perspektiven auf die Degrowth-Debatte
- WP 8: Einführung in die Umweltsoziologie
- WP 9: Geography and Sustainability (Lecture)

Sustainability and Environmental Sciences

- WP 10 Vielfalt des Lebens
- WP 11 Grundlagen der Ökologie, Verhaltens- und Evolutionsbiologie
- WP 12 Systematic Data and Evidence
- WP 13 Klimawandel und das Erdsystem
- WP 14 Global Cycles
- WP 15 Marine Biology
- WP 43 Theoretische und angewandte Hydrologie
- WP 44 Evolutionary Genetics
- WP 45 Evolutionary Ecology

Electives (Wahlpflichtmodule)

WP 1 Topics and Themes in Environment and Society

Visionary Ecologies

JENS BENÖHR, ELISA BALMACEDA, KARA VIRIK

“We cannot build, what we cannot imagine. So, we absolutely need [visionary] spaces. Once the imagination is unshackled, liberation is limitless.” - Walidah Imarisha

This seminar aims to dive into visionary ecologies that we can inhabit in a critically damaged planet. Here, we bring together thinkers and makers from the fields of the arts, the technologies, and the social and natural sciences, to generate an experimental, creative and speculative learning platform. This seminar opens up a space of encounter and exchange between different visions, epistemologies and worldviews on the environment and liberation. Queer, sentient, and decolonial ecologies are some of the multiple lenses we will investigate together. How can we think and envision multiple natures and futures to come? We will collectively explore these issues through weekly virtual gatherings with guests, reading sessions and experimental workshops.

Key concepts: Ecology / Art & Science / Queer / Utopia / Visionary Fiction / Ecofeminism / Decolonialism / Post-Natural / Intersectionality / Multispecies / Non-binary / Empathy / Planetary / Worldbuilding / Futurism / Future Change.

Attention: block seminar!

- **Language:** English
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Wednesdays, 16:00 - 18:00 (blocks)
Nov-Feb, exact dates tbd
- **Location:** online
- **Work format:** Blockseminar
- **Belegnummer:** 14832

WP 2 Climate Change and Society

Petrocultures in Europe & Beyond

DR. KATIE RITSON

In *Petrocultures in Europe & Beyond* we will explore the cultural implications of our dependency on oil. Modern culture is petroculture: oil is ubiquitous in the modern world but the infrastructures and technologies (drilling platforms, pipelines, tankers) that bring it to us are largely removed from our everyday experience. By tracing the ways in which oil has seeped into literary texts, films, TV, visual art and museums across Europe and beyond we can see the extent to which modern life is shaped by energy use, and how shared imaginations of past, present and future energy regimes shape our attitudes to the current energy crisis.

- **Language:** English
 - **ECTS:** 3 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Tuesdays, 12:00 – 14:00
 - **Location:** RCC, Leopoldstr. 11b, 2.0. OG, 244
 - **Work format:** Seminar
 - **Belegnummer:** 14830
-

WP 4 Disziplinäre Perspektive: Grundlagen der Kommunikationswissenschaft

NB: This module consists of TWO parts (WP 4.1 and WP 4.2), both of which need to be taken to gain the full amount of ECTS points.

WP 4.1 Einführung in die Kommunikationswissenschaft I

UNIV. PROF. DR. REINEMANN CARSTEN

Die Vorlesung für Studierende des ersten Fachsemesters führt in die Grundlagen der Kommunikationswissenschaft ein und stellt ausgewählte Fachgebiete mit zentralen Fragen, Theorien und Befunden vor. Der erste Teil der zweisemestrigen Vorlesung beschäftigt sich mit dem Selbstverständnis und der Struktur des Fachs, seinen Grundbegriffen (u.a. Kommunikation, Medien, Massenkommunikation, Öffentlichkeit), dem Mediensystem (Presse, Rundfunk, Online-Medien) sowie verschiedenen Arten von Medieninhalten und ihrer Entstehung.

- **Language:** German
- **ECTS:** 3 ECTS Points
- **SWS:** 2h per week
- **Dates:** Mondays, 10:00 – 12:00
- **Start Date:** 17.10.2022 **End date:** 06.02.2023, **Individual course:** 13.03.2023
- **Location:** Oettingenstr. 67 (B) - B 001 every week, except for 06.02.2023 - Luisenstr. 37 (C) - C 006
- **Work format:** Seminar
- **Belegnummer:** 15001

WP 4.2 Kommunikationsberufe I

DR. CORINNA LAUERER & DR. RIESMEYER- LORENZ CLAUDIA

Im Rahmen der Vortragsreihe Kommunikationsberufe stellen berufserfahrene Praktiker aus den zentralen Feldern der Medien- und Kommunikationsberufe verschiedene Berufsbilder vor und diskutieren Voraussetzungen und Eintrittschancen in das Berufsleben sowie die Aussichten und Karrieremöglichkeiten.

Mehr Informationen zu den einzelnen Veranstaltungen und die verbindliche Anmeldung zu den Veranstaltungen erfolgt über <https://webservices.ifkw.lmu.de/kobe>. Die Playlist der Veranstaltung ist unter <https://cast.itunes.uni-muenchen.de/#/clip-list/bnHbEdBAzi> verfügbar, allerdings werden die Veranstaltungen im aktuellen Semester ganz überwiegend in Präsenz abgehalten. Sollte es Schwierigkeiten geben mit dem persönlichen Besuch der Veranstaltung, dann wenden Sie sich bitte an kommunikationsberufe@ifkw.lmu.de.

- **Language:** German
- **ECTS:** 3 ECTS Points

- **SWS:** 2h per week
 - **Dates:** Tuesdays, 10:00 – 12:00/Wednesdays, 12:00 – 14:00 and Monday, 21.11.2022:(**single course**, location: Geschw.-Scholl-Pl. 1 (A) – A 140, 16:00 – 18:00
 - **Start Date:** 18.10.2022 **End date:** 07.02.2023
 - **Location:** Oettingenstr. 67 (B) – B 001
 - **Work format:** Seminar
 - **Belegnummer:** 15430
-

WP 5 Environments, Planning and Policy

Hotspots, Spillovers, and Resource Extraction: Critical Approaches from the Environmental Humanities

PROF. DR. GREGG MITMAN, DR. EMMA ROTH

Mass extinctions. Firestorms. Pandemics. How do we make sense of a planet on which warming temperatures, rising seas, viral spillovers, toxic exposures, and species loss, propelled by capitalism’s demand for cheap nature, differentially impact people and other beings? In this seminar, we draw upon work in the environmental humanities, and fields such as anthropology, Black studies, history, Indigenous studies, literary studies, philosophy, political ecology, and science & technology studies, to explore how planetary-scale environmental crises are reshaping past and present relations among people and other beings in different parts of the globe. We also seek to interrogate the formation of scientific and popular understandings, representations, and affects in the making of, and solutions to, such crises. We will focus on three key areas of intervention — resource extraction, conservation, and health—to recontextualize ecological crises within histories of colonialism, capitalism, and racism, and to attend to issues of socioeconomic inequality and the divergent ethics and politics that animate environmental contestations.

- **Language:** English
 - **ECTS:** 6 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Thursdays, 14:30 – 16:00
 - **Location:** RCC, Leopoldstr. 11b, 2.0. OG, 244
 - **Work format:** Seminar
 - **Belegnummer:** 14831
-

WP 6 Methodische Perspektive: Ethnologische Feldforschung

Ethnologische Feldforschung

PROF. DR. MARTIN SÖKEFELD

Die Vorlesung gibt einen Überblick über Feldforschung, die methodischer „Kern“ und zentrales Element des Selbstverständnisses der Ethnologie ist. Tatsächlich umfasst Feldforschung aber verschiedene Methoden der Datenerhebung, die für unterschiedliche Fragestellungen und Forschungsthemen verwendet werden können. Themen der Vorlesung sind die Geschichte der

Feldforschung, ihre erkenntnistheoretische Reflexion, Kurzeinführungen in einzelne Methoden der Datenerhebung (zum Beispiel teilnehmende Beobachtung, offene und strukturierte Interviews, Netzwerkanalyse), Methoden der Dokumentation (Feldnotizen) und Datenauswertung, die Frage der (sozialen) Konstruktion des Feldes, sowie die Ethik der Feldforschung.

- **Language:** German
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Mondays, 10.00 – 11.30
- **Location:** Oettingenstr. 67 (B) – B 001
- **Work format:** Lecture
- **Belegnummer:** 12397

WP 7 Disziplinäre Perspektive: Ethnologie Thematische Vertiefung I

Das eigentlich ganz gute Leben. Ethnologische Perspektiven auf die Degrowth-Debatte

DR. WOLFGANG KAPFHAMMER

Selbst in Krisenzeiten wie diesen, wenn die Infrastrukturen des fossilen Zeitalters unmittelbar gefährdet erscheinen, kommen Rufe nach Reduktion und Verzicht nach wie vor politischem Selbstmord gleich. Die Steigerungslogik des globalen Wirtschaftssystems sitzt zu tief in unseren „mentalen Infrastrukturen“ (Harald Welzer) verankert, als dass die Kassandrarufer nach Degrowth von Klima- und Umweltschützer*innen allzu großflächig durchdringen würden. Und dennoch finden alternative Entwürfe, die gemeinsame Zukunft zu gestalten, immer mehr Zulauf und Unterstützung, darunter Denk- und Praxisanstöße, welche oftmals von Konzepten aus dem Globalen Süden inspiriert scheinen. Wie steht es also um die „Indigenialität“, von der der Biologe Andreas Weber neuerdings (2018) als probatem Transformationsdesign schwärmt?

Im Seminar werden wir uns umsehen, wo möglicherweise jene „Suffizienz“ (Wolfgang Sachs) zum Grundanliegen eines Lebens ohne Exzesse wird (the good enough life, Viveiros de Castro): in einem Leben vor dem „Fall“ der neolithischen Revolution (James C. Scott), oder gerade in den ruhigen Kreisläufen einer sich selbst beschränkenden (the limited good) Landwirtschaft vorindustrieller Prägung, oder doch erst in jüngeren Initiativen einer in die Praxis umgesetzten Wachstumskritik (Via Campesina, Nyéléni, Terra Madre u.v.a.)?

NB: Seminar starts in second week of semester.

- **Language:** Seminar
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Thursday, 16:00-18:00
- **Start date:** 27.10.2022 **End date:** 06.02.2023
- **Location:** Oettingenstr. 67 - 027
- **Belegnummer:** 12414

WP 8 Disziplinäre Perspektive: Soziologische Felder

NB: This module consists of TWO parts (WP 8.1 and WP 8.2), both of which need to be taken to gain the full amount of ECTS points.

WP 8.1 Einführung in die Umweltsoziologie (Vorlesung)

PROF. DR. BERNHARD GILL

Wie entwickeln sich Gesellschaften in Abhängigkeit von ihrer physischen Umwelt? Wie ist es möglich, dass Industriegesellschaften aktuell mehr physische Umwelt verbrauchen, als – langfristig und global betrachtet – vorhanden ist? Wie lässt sich die Überlastung der globalen Umwelt durch verbesserte Technologien und vernünftigeren Lebensweisen ändern? Wie lässt es sich verstehen, dass Wahrnehmung und Interpretation des Umweltzustands nicht einfach "der Wissenschaft" folgen, sondern gesellschaftlich umstritten sind? Die Vorlesung wird diesen Fragen nachgehen. Aus aktuellem Anlass gibt es außerdem einen Schwerpunkt zu infektiologischen Problemen und Problemwahrnehmungen. Die Vorlesung ist aufgezeichnet und wird über die Website der Veranstaltung abgerufen: <http://b-gill.userweb.mwn.de/Lehrveran/22WS/lv2.pdf>

In der Tafelübung -- am 9 Nov / 14 Dez / 25 Jan -- werden zuvor verschickten Single- Choice-Fragen diskutiert. Die Tafelübung dient insoweit der Klausurvorbereitung. Die Tafelübung findet in Präsenz statt und wird per Video aufgezeichnet (und ist dann ebenfalls über die oben genannte Website abrufbar).

- **Language:** German
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Wednesdays, 10:00 - 12:00, asynchronous
09.11.2022, 14.12.2022, 25.01.2023
- **Location:** Online
- **Work format:** Lecture
- **Belegnummer:** 15255

WP 8.2 Einführung in die Umweltsoziologie (Übung)

PROF. DR. BERNHARD GILL

In der Tafelübung - am 8. Nov / 13. Dez / 24. Jan - werden zuvor verschickte Single- Choice-Fragen diskutiert. Die Tafelübung dient insoweit der Klausurvorbereitung.

- **Language:** German
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Wednesday, 10am – 12pm
09.11.2022, 14.12.2022 & 25.01.2023
- **Location:** Geschw.-Scholl-Pl. 1 (M) - M 105
- **Work format:** Lecture
- **Belegnummer:** 15256

WP 9 Disciplinary Perspective: Geographical Concepts of Sustainability

Geography and sustainability

PROF. DR. HENRIKE RAU, PROF. DR. GORDON WINDER

This lecture explores current issues in sustainability and the role of geography, both human and physical geography, in sustainability studies. It addresses what 'sustainable development' means and how and why it is a contested field. Various approaches to sustainability in economic geography, tourism geography, urban geography, environmental policy, climatology, hydrology, and resource and environmental management are introduced and discussed.

- **Language:** German
 - **ECTS:** 3 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Tuesdays, 14:00 – 16:00
 - **Location:** Richard-Wagner-Str. 10 - D 118
 - **Work format:** Lecture
 - **Belegnummer:** 20178
-

WP 10 Disziplinäre Perspektive: Grundlagen allgemeine und organismische Biologie

Vorlesung Vielfalt des Lebens

PROF. DR. FRANK WOLFGANG, PROF. DR. PETER GEIGENBERGER, PROF. DR. MARC GOTTSCHLING, PROF. DR. GERHARD HASZPRUNAR, PROF. DR. JOACHIM HAUG, PROF. DR. GUDRUN KADEREIT, PROF. DR. ANDREAS KLINGL, PROF. DR. DARIO LEISTER, PROF. DR. SILKE WERTH

Die Vorlesung Formen- und Artenvielfalt vermittelt einen Eindruck über die komplette organismische Vielfalt und erläutert die Evolution, die zu dieser geführt hat. Organismengruppen, die in der Vorlesung besprochen werden, umfassen diverse Einzeller, Pilze, Pflanzen und Tiere, inklusive einer kurzen Einführung in die Evolution des Menschen. Für die jeweiligen Organismen werden die morphologischen Merkmale besprochen, u.a. die intrazellulären Besonderheiten, der Aufbau der Gewebe und Organe sowie die Individualentwicklung (Ontogenese), und in einen evolutionären Zusammenhang gestellt. Wo angebracht, werden auch Fossilbefunde erläutert. Anhand der vorgestellten Merkmale wird im Rahmen der Phylogenetik die Merkmalsevolution entlang verschiedener evolutionärer Linien rekonstruiert. Dadurch wird ein Gesamtbild der Evolution der Organismen erzeugt, welches als Grundlage für Kurse in den weiteren Semestern dient. Die Vorlesung wird von wechselnden Dozenten abgehalten.

- **Language:** German
- **ECTS:** 6 ECTS Points
- **SWS:** 4 hours per week
- **Dates:** Thursdays, 10:30 – 12:00 and Fridays, 12:15-13:45
- **Location:** Richard-Wagner-Str. 10 - D 118
- **Work format:** Lecture
- **Belegnummer:** 19163

WP 11 Disziplinäre Perspektive: Grundlagen Ökologie, Verhaltensbiologie und Evolutionsbiologie

Vorlesung Grundlagen der Ökologie, Verhaltensbiologie und Evolutionsbiologie

PROF. DR. NIELS DINGEMANSE, PROF. DR. NICOLAS GOMPEL, PROF. DR. JOACHIM HAUG, PROF. DR. HERWIG STIBOR, PROF. DR. JOCHEN WOLF

Dieses Modul präsentiert und veranschaulicht grundlegende Konzepte in Ökologie und Evolutionsbiologie. Es beleuchtet und integriert die Prozesse, über verschiedene Organisationsebenen: Individuen, Populationen, Arten und Gemeinschaften. In der Vorlesung werden die Zusammenhänge zwischen diesen Ebenen der biologischen Komplexität untersucht. Die Studierenden lernen, wie die jeweiligen Stufen von der Umwelt beeinflusst werden (Ökologie) und im Laufe der Zeit erbliche Veränderungen erfahren (Evolution).

- **Language:** German
 - **ECTS:** 3 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Fridays, 08:30 – 10:00
 - **Location:** Großhad. Str. 2 (B) - Gr. Biologie B00.019
 - **Work format:** Lecture
 - **Belegnummer:** 19169
-

WP 12 Methodology: Systematic Data and Evidence

Systematic Data and Evidence

DR. ANDREAS BECK, PROF. DR. GUDRUN KADEREIT, PROF. DR. GERHARD HASZPRUNAR, PROF. DR. SILKE WERH, PROF. DR. JOCHEN WOLF

A series of lectures will discuss the following topics: paleontological and biogeographical data; speciation and radiations; diversity hotspots; principles of phylogenetic tree inference; introduction to biological collecting and collections (including visits to the Bavarian Natural History collections); taxon-specific approaches and problems (e.g., species concepts in bacteria, species concepts in higher organisms, the morpho species concept in paleobiology); role of organismal interactions in the evolution of adaptation; role of systematics in evolutionary biology; the meaning of classification, identification, nomenclature and taxonomy.

- **Language:** English
- **ECTS:** 6 ECTS Points
- **SWS:** 4 hours per week
- **Dates:** Fridays, 08:30 – 12:00
- **Location:** TBD
- **Work format:** Lecture
- **Belegnummer:** 19109

WP 13 Disziplinäre Perspektive: Globaler Wandel und das Erdsystem

Klimawandel und das Erdsystem

PROF. DR. JULIA PONGRATZ

Covered topics: - Scientific state of the art on climate change and climate impacts - Climate history (paleoclimate), causes of natural and anthropogenic climate change - Functionality and application of micrometeorological measurement techniques - Major consequences of climate change in the Earth system and in the human-Earth system: atmosphere, oceans, coasts, cryosphere, hydrometeorological extremes, agriculture, economy, bioclimate - Inventory of current research fields: Consequences and impairments of the natural, economic and cultural environment; region-specific vulnerabilities and resilience, - Essentials of national and international climate policy; Legal basis, directives & laws; Technical, economic and political options for climate protection; Working methods of the IPCC - Introduction to the basics of climate modeling - Physical and technical foundations, scales and scaling: AOGCM & RCM, nesting, downscaling, uncertainties and errors - Scenarios and scenario development.

- **Language:** English
 - **ECTS:** 3 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Tuesdays, 10:00 – 12:00
 - **Location:** Richard-Wagner-Str. 10 - D 116
 - **Work format:** Lecture
 - **Belegnummer:** 20160
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WP 14 Disciplinary Perspective: Environmental Geobiology

Introduction to biogeochemical global cycles and methods to acquire and analyze geobiological data in this context. In detail, the module includes *WP14.1 Global Cycles: Lecture* and *WP 14.2 Global Cycles: Tutorial*. The lecture imparts theoretical background on biogeochemical global cycles of relevant elements like carbon, nitrogen, phosphorous, iron, and sulfur. In each tutorial session, one student gives a 15-minute presentation on either a review article or original research article dealing with one of the biogeochemical processes discussed in class the week before, followed by a group discussion. Articles are assigned by the instructor but can also be suggested by the students.

NB: This module consists of TWO parts (WP 4.1 and WP 4.2), both of which need to be taken to gain the full amount of ECTS points.

WP 14.1 Global Cycles (Lecture)

PROF. DR. WILLIAM ORSI

- **Language:** English
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Mondays, 14:00 – 16:00
- **Location:** Richard-Wagner-Str. 10 - D 116

- **Work format:** Lecture
- **Belegnummer:** 20396

WP 14.2 Global Cycles (Tutorial)

PROF. DR. WILLIAM ORSI

- **Language:** English
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Mondays, 16:00 – 18:00
- **Location:** Richard-Wagner-Str. 10 - D 116
- **Work format:** Lecture
- **Belegnummer:** 20397

WP 15 Disciplinary Perspective: Marine Biology

Marine Biology

PROF. DR. GERT WÖRHEIDE

The lecture introduces the following content: Basic oceanography (geography, geomorphology, plate tectonics and water circulation systems of oceans) - Physical and chemical factors in marine ecosystems - Adaptations of marine organisms - Geobiology of marine communities - Interaction of abiotic and biotic factors in different marine ecosystems - Marine biomes and marine biogeography.

- **Language:** English
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Tuesdays, 14:00 – 16:00
- **Location:** Richard-Wagner-Str. 10 - D 116
- **Work format:** Lecture
- **Belegnummer:** 20403

WP 35 Disziplinäre Perspektive: Geschichtswissenschaft

Ist Wissenschaft objektiv?

PROF. DR. KÄRIN NICKELSEN

„Objektiv“ ist in Selbst- wie Fremdbeschreibungen eines der zentralen Merkmale von Wissenschaft. Bei näherer Betrachtung ist jedoch unklar, was es eigentlich heißt, dass Wissenschaft „objektiv“ ist -- oder es sein sollte, handelt es sich doch um eine Norm. Bedeutet es, dass Wissenschaft die Welt korrekt beschreiben soll, also das, was tatsächlich der Fall ist? Bedeutet es, dass Wissenschaft frei sein sollte von moralischen und politischen Wertungen? Wurde dies schon immer gefordert, und wenn nicht: Welche Normen galten stattdessen? Und um welche „Wissenschaft“ geht es dabei

überhaupt? Diese und andere Fragen werden wir auf der Grundlage theoretischer Ansätze und empirischer Beispiele diskutieren.

- **Language:** German
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Mondays, 14:00 – 16:00
- **Location:** Amalienstr. 52 - K 302
- **Work format:** Übung
- **Belegnummer:** 09098

WP 36 Disciplinary Perspective: Basic Theories and Concepts in Historiography

America's National Park System

DR. ANDREAS ETGES

In 1916 the National Park Service (NPS) was founded "to conserve the scenery and the natural and historic objects and the wild life" of the United States. While the original focus was on protecting natural treasures – often by driving out Native Americans – the NPS mandate grew over time by also incorporating Civil War battlefields, historic sites and buildings. The seminar will take a look at the creation of the NPS and selected parks and sites as well as the many controversies to change the celebratory national narrative in order to include more critical perspectives (e.g. slavery in the explanation of the Civil War) and places, like the Sand Creek Massacre National Historic Site in Colorado. An attempt will be made to bring in current and former park rangers via Zoom.

- **Language:** English
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Tuesdays, 16:00 – 18:00
- **Location:** Schellingstr. 3 (R) - R 052
- **Work format:** Lecture
- **Belegnummer:** 14787

WP 41 Sustainability, Infrastructure and Technology

Environments of Sufficiency: Transatlantic Perspectives on Society, Culture, Ecology and Architecture

PROF. DR. CHRISTOF MAUCH

This multidisciplinary seminar asks how we can live a good life without rapidly destroying the planet. In a dialogue with architects and civil engineer from the Technical University of Munich, humanities scholars from the Amerika-Institut and the Rachel Carson Center will discuss how green technologies, innovative infrastructures, social practices and lifestyles can contribute to new economic patterns and philosophies that will help to slow down the global ecological crisis. Overall,

this seminar asks how the US and other nations in the western world have seen nature and progress in the past and what it will take to shift ideologies of extraction and domination into new directions. Which ideas about 'green living' exist in Europe and North America? Which of them have worked? Students are expected to engage in dialogue with peers who come from very different backgrounds (architecture, planning, ecology, political science, anthropology etc.). They are asked to write their seminar paper during the semester, to precirculate it, and to discuss it during a block session on February 10-11, 2023 at the Vollmar-Akademie Kochel.

- **Language:** English
 - **ECTS:** 6 ECTS Points
 - **SWS:** 4 hours per week
 - **Dates:** Mondays, 14:15 – 16:45
 - **Start date:** 17.10.2022 **End date:** 06.02.2023
Additionally: Friday, 10.02. 2023, 10:00 - 16:00
Saturday, 11.02.2022, 10:00 - 16:00
 - **Location:** TBD
 - **Work format:** Lecture
 - **Belegnummer:** 13710
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WP 43 Disziplinäre Perspektive: Hydrologie

Theoretische und Angewandte Hydrologie

PROF. DR. MARIANELA FADER

The lecture "Theoretical and Applied Hydrology" covers the following topics: Systems theory, systems analysis, systems synthesis

- Definitions of systems
- Linear and non-linear systems
- Basics of modeling (conservation laws, energy, mass, mathematics, differential equations)
- Modeling in hydrology (analog, conceptual, physical)
- Physics of natural transport processes (diffusion, turbulence)
- Steady state flow, Darcy's law, Manning's equation
- Elements of water management (rivers, reservoirs, turbines, etc.)
- Water abundance and quality management, water resources planning
- Water Framework Directive
- Integrated and sustainable water resource management (IWRM, SWRM)

- **Language:** German
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Tuesdays, 12:00 – 14:00
- **Location:** Luisenstr. 37 (C) - C 206
- **Work format:** Lecture
- **Belegnummer:** 20163

WP 44 Disciplinary Perspective: Evolutionary Genetics

Evolutionary Genetics

PROF. DR. RICHARD MERRILL, PROF. DR. JOCHEN WOLF, PROF. DR. JOHN PARSCH

The lecture provides an introduction to evolutionary genetics and covers both classical and modern topics, including natural selection, adaptation, genetic drift, neutral theory, human evolution, molecular evolution, speciation, quantitative genetics, and genome evolution. Additional course materials are available on Moodle:

<https://moodle.lmu.de/enrol/index.php?id=10222>; Key: EvoGenLecture

- **Language:** English
- **ECTS:** 6 ECTS Points
- **SWS:** 4 hours per week
- **Dates:** Mondays, 10:30 – 12:00
Tuesdays, 10:30 - 12:00
Tuesdays, 11:00 - 12:30
- **Location:** Großhad. Str. 2 (B) - Kl. Biologie 2
- **Work format:** Lecture
- **Belegnummer:** 19108

WP 45 Disciplinary Perspective: Evolutionary Ecology

Evolutionary Ecology

PROF. DR. NIELS DINGEMANSE, PROF. DR. HERWIG STIBOR, PROF. DR. CRISTINA TUNI,
PROF. DR. NICOLAS GOMPEL

The lecture is divided in 3 parts.

The first part is a broad perspective on the history of ideas and thinking in evolutionary biology, revealing the connections between the different disciplines in ecology and evolution, as well as their origins. From a scientific point of view, it examines the interplay between genetic changes and natural selection.

The second part of the lecture is a primer on general principles of ecology. This part of the lecture is mainly repeating basic and general principles of ecology to bring EES students to a common knowledge base, independent of their educational background during their bachelor studies. Students will learn and discuss the relationships between the individual and its environment, the dynamics of populations and the structure and function of communities.

The third part focusses on the principles of behavioural ecology, introducing optimality approaches and the concept of trade-offs to explain variation in behaviour and life-history from an adaptive perspective. These principles are applied to understand life-history variation, optimal foraging strategies, mating strategies, parental care and conflict, and predator-prey interactions.

- **Language:** English
- **ECTS:** 6 ECTS Points

- **SWS:** 4 hours per week
 - **Dates:** Mondays, 08:30 – 10:00, Tuesdays: 08:30-10:00,
 - **Location:** Großhard. Str. 2 (B) - KL. Biologie 2
 - **Work format:** Lecture
 - **Belegnummer:** 19392
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Announcement Summer Semester 2023

The following course will take place at the beginning of the summer semester 2023. However, registration for the course needs to be completed during the winter semester.

WP 26 Disciplinary Perspective: Environmental Law and Governance

Environment, Law, and Society

PROF. DR. JENS KERSTEN

The module familiarizes students with specific aspects of legal systems, jurisdictions and institutions pertaining to environmental governance. Students gain concrete foundational knowledge on the functioning and principles of environmental law. They analyze the role of courts and other legal institutions as they pertain to environmental and societal issues. Students will receive paper topics and write a seminar paper before the block seminar which will then be discussed during the seminar

- **Language:** English
- **ECTS:** 3 ECTS Points
- **SWS:** Block
- **Dates:** Monday, 17.04.2023, 9:00-18:00
Tuesday, 18.04.2023, 9:00 – 12:00
- **Location:** TBD
- **Work format:** Seminar
- **Announcement of presentation topics:** 12.12.2022
- **Preparational meeting:** 31.1.2022, 10:00-11:00
- **Deadline for papers:** 3.4.2023
- **Registration period:** 9.1.2023-22.1.2023
- **Belegnummer:** tbd

Should you have any questions or trouble with registration, please do not hesitate to contact your MA coordinators at envhum@rcc.lmu.de.