

**Environmental Studies Certificate Program
(PStO 2022)**



**Course Catalog Winter Term 2024/25
As of 30 September 2024**

Please register for courses as soon as possible, rather than waiting until the last day of registration on October 4th.

Important note for exams: ALWAYS REGISTER FOR YOUR EXAMS (Prüfungsanmeldung) in January 2025 VIA LSF (even if lecturers have additional registration lists or tell you otherwise).

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P 1 International and Interdisciplinary Perspectives on Environment and Society (Mandatory Module)

DR. ANNA-MARIA WALTER

Lunchtime Colloquium: Current Perspectives on Environment and Society

ATTENTION: This colloquium also requires students to attend at least two of the four “On Environment” events on the following Wednesday evenings: 30.10.24; 13.11.24; 11.12.24; 29.01.25. For more information please check the RCC Calendar of Events: https://www.carsoncenter.uni-muenchen.de/events_conf_seminars/calendar/index.html

The Lunchtime Colloquium series consists of short, 20–30 minute presentations by RCC fellows. The talks are based on the fellow's own research. Designed to stimulate discussion, the presentations are accessible and are aimed at a non-specialist audience. All talks are free and open to the public. The talks may be of interest to undergraduate and graduate students, or to anyone with an interest in environmental issues.

- **Language:** English
- **ECTS:** 2 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Thursday, 12 pm - 2 pm
- **Start date:** 17.10.2024 **End date:** 06.02.2025
- **Location:** Katholische Hochschulgemeinde (KHG) Leopoldstr. 11, 1. OG.
- **Course format:** presentations
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 13138

DR. SUSANNE B. UNGER

Reading Course: International Perspectives

The Reading Course is the second part of the basic mandatory module of the Certificate Program. It is designed to give an overview and serve as an introduction to the different fields and disciplines related to Environmental Studies. Students must attend this course over two semesters and are invited to actively shape both structure and content. Lively discussions form the core of the course, based on weekly presentations by course participants.

- **Language:** English
- **ECTS:** 1 ECTS Point
- **SWS:** 2 hours per week
- **Dates:** Thursdays, 2 pm – 4 pm
- **Start date:** 17.10.2024 **End date:** 06.02.2025
- **Location:** Leopoldstr. 11a, Room 415
- **Course format:** Seminar
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 14877

WP 1 – WP 37: Elective Modules (Wahlpflichtveranstaltungen)

Humans in the Environment

WP 1 Topics and Themes in Environment and Society

DR. ANNA ANTONOVA, DR. HANNA STRAB-SENOLE

One Book – Many Worlds: Exhibition Studio

The Exhibition Studio invites students to take part in individual creative projects and a series of skills workshops leading up to a collective exhibition based on Amitav Ghosh's novel, *Gun Island*. After having read the novel, students participate in regular meetings developing and implementing ideas to artistically communicate themes addressed in the novel. In the first couple of sessions, students will discuss the novel from an environmental humanities perspective, identify topics they are interested in and develop a concept for their public exhibit, either individually or in small teams. In mid-November, Amitav Ghosh will be at the RCC and students will get the chance to participate in a workshop session organised jointly with the MVHS and the Ökologische Bildungszentrum (ÖBZ), targeted at the general public (Attention: Tuesday, 19 November). Throughout December and January, students will participate in different skills workshops and have the time to work independently on the creation of their exhibit. Towards the end of the semester, we will start preparing the exhibition of students' works, which will be opened in the beginning of April at the ÖBZ.

Students are invited to attend the "One Book – Many Worlds" project's lectures offered at the RCC's Lunchtime Colloquium throughout the semester. For other events offered in the project "One Book – Many Worlds: Munich reads *Gun Island* by Amitav Ghosh," please visit the project website.

- **Language:** English
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Fridays, 9:30 am – 1pm
- **Location:** Leopoldstr. 11, A-B, Room 415
- **Course format:** Seminar
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 14994

WP 2 Environment and Comparative Literature

DR. AMY MOHR

New Orleans Literature and Culture

- **Language:** English
 - **ECTS:** 6 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Fridays, 10 am – 12 pm
 - **Location:** Schellingstraße 5, Room 003
 - **Course format:** Seminar
 - **Online registration period:** 23.09.2024 – 04.10.2024
 - **Course catalog no:** 13620
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Neoliberalism in North American Climate Fiction

In this seminar, students will explore the connections between US climate fiction and the US dominant ideology. The class will have three theoretical objectives. First, we will discuss the environmental emergency and its impact. Second, we will define climate fiction and learn about ecocriticism as an approach in literary criticism. Third, the class will learn what is neoliberalism, how it functions as an ideology, and how it influences cultural production. We will mainly focus on climate fiction novels and short stories however the class will be encouraged to discuss other media that concerns the environmental emergency and is influenced by neoliberal ideology. We will discuss the manifestation of this ideology in texts written and published in North America, but will also debate its further global impact. All texts and media covered will be contemporary (published in the 21st century). Individual sessions will be modelled as a seminar, starting with a short presentation and followed by the class participating in a discussion. Each week, a text (a chapter or excerpt of a novel, a short story, or a secondary text) will be assigned and students will be expected to read before class and discuss in class. The complete reading list will be available before the start of the semester.

- **Language:** English
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Mondays, 4 pm – 6 pm
- **Location:** Schellingstraße 3 (R), Room R U104B
- **Course format:** Seminar
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 13563

WP 3 Sociological Fields

DR: VICTORIA SCHWARZ-VON-GRODDECK

Einführung in die Organisationssoziologie

If you are unable to register via LSF but want to attend this lecture, please write to envstudies@rcc.lmu.de and we will try to sign you up via the “Restplatzvergabe.”

Die Vorlesung führt in die Spezialdisziplin „Organisationssoziologie“ ein. Anhand aktueller Themen, wie Digitalisierung und technischer Fortschritt, wie Entscheidungsmöglichkeiten unter komplexen Bedingungen, Skandalisierung und Moralisierung von Organisationshandeln oder auch dem Diskurs um Work-Life-Balance werden organisationssoziologische Arbeits- und Forschungsgebiete mit ihren jeweiligen Entwicklungslinien und Begriffen vorgestellt und kritisch beleuchtet. Die Vorlesung gewährt Einblick in die aktuellen Diskussionen des Fachs und liefert gleichzeitig einen angemessenen Überblick über die gesamte fachliche Entwicklung.

- **Language:** German
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Mondays, 12 pm – 2 pm
- **Location:** Geschwister-Scholl-Pl. 1 (M) - M 014
- **Course format:** Lecture and “Tafelübung”
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 15188

WP 4 Environmental Anthropology I

PROF. DR: THOMAS REINHARDT

Jenseits des Menschen: Ethnologie und Posthumanismus

Angesichts der Herausforderungen des Anthropozäns haben in den letzten Jahren Verweise auf das „Posthumane“ deutlich zugenommen. Der Posthumanismus fordert nicht nur dazu auf, das Verhältnis von Menschen | Umwelt(en) | Technologien grundsätzlich zu überdenken, er beantwortet auch die Frage nach der Natur des Menschen und den Grundlagen seiner politischen und ethischen Subjektivität in radikal neuer Weise, indem er Pilze, Wälder, Roboter oder Bakterien mit Subjektivität und Handlungsmacht ausstattet und sie dem Menschen als handlungsfähige Selbst zur Seite stellt. Das Seminar wird die konzeptuelle Bandbreite einer mehr-als-menschlichen Ethnologie ausloten und verschiedene theoretische Zugänge zur Erforschung von Menschen und Nicht-Menschen nach der ontologischen Wende eröffnen (neuer Materialismus, NaturenKulturen, agentieller Realismus, Afrofuturismus, Object Oriented Ontology etc.).

- **Language:** German
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Wednesdays, 10 am – 12 pm
- **Location:** Oettingenstr. 67 (C) - C 007
- **Course format:** Seminar
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 12395

DR: WOLFGANG KAPFHAMMER

The Great Symmetrization”: Die erstaunliche Renaissance des Animismus als transformatives Konzept

Ich weiß nicht, warum man immer von einer abgesonderten Menschheit spricht. Gehören Tiere, Pflanzen und Steine, Gestirne und Lüfte nicht auch zur Menschheit und ist sie nicht ein bloßer Nervenknotten, in den unendlich verschiedenlaufende Fäden sich kreuzen?“ (Novalis; Randbemerkungen zu Friedrich Schlegels „Ideen“ 1799).

Eigentlich ist es ein Ereignis für unsere Disziplin, dass ein angestaubter religionsethnologischer Schlüsselbegriff heutzutage wieder einen romantischen, ja utopistischen Beiklang annimmt und weit über die Grenzen des Fachs hinaus Wirkung zeigt. Der Animismus, also das Leben in einem intersubjektiven und personalisierten Universum, wurde von dem französischen Anthropologen Philippe Descola wieder in die Diskussion eingebracht und gilt heutzutage vielen als Gegenpol zur hegemonialen Kosmologie der Moderne. Das Seminar setzt sich kritisch mit der Position des neuen Animismus in der Theoriebildung innerhalb der Ethnologie, sowie mit seiner Rolle als Heilsweg aus der planetarischen Umweltkrise auseinander. Es geht um die Frage, ob die „Great Symmetrization“ (Pierre Charbonnier), also die Begegnung vor-moderner und moderner Ontologien auf Augenhöhe, den transformatorischen Hoffnungen, die in sie gesetzt werden, gerecht werden kann.

- **Language:** German
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Thursdays, 4 pm – 6 pm
- **Location:** Oettingenstr. 67 - 061
- **Course format:** Seminar
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 12399

WP 31: Sociology and Society

LAILA SCHMITT

Gender Inequality in Education, Work and Wealth

Anwesenheitspflicht in der 1. Veranstaltungsstunde! Sollten Sie aus triftigen Gründen nicht teilnehmen können, so informieren Sie den/die Dozenten/Dozentin rechtzeitig. Unentschuldigtes Fehlen in der 1. Veranstaltungsstunde bedeutet automatisch den Verlust des Kursplatzes. Attendance during the first session is mandatory in order to stay registered for the course. If you have a valid reason for missing the first session, please contact the instructor beforehand. Any unexcused absences will result in being dropped from the course.

This course focuses on the profound disparities between genders across educational achievement, labor market outcomes, and wealth distribution. It explores the theoretical underpinnings and empirical evidence surrounding gender inequalities, emphasizing quantitative research methods. Students will discuss how gender inequality in education manifests through differences in access to schooling, academic achievement, and higher education opportunities. In the labor market, they will analyze occupational segregation, wage gaps, and career advancement barriers. The course also addresses wealth disparities stemming from differences in income, savings, and investment opportunities. Throughout the course, students will critically evaluate the factors contributing to these disparities and examine their implications for social policy and practice. By the end of the course, students will possess a comprehensive understanding of gender inequality dynamics in contemporary society and an appreciation for the methodological tools necessary to assess these issues rigorously.

- **Language:** English
- **ECTS:** 6 ECTS Points (not 9 ECTS, as stated in LSF)
- **SWS:** 2 hours per week
- **Dates:** Mondays, 4 pm – 6 pm
- **Location:** Konradstr. 6 - 209
- **Course format:** Seminar
- **Online registration period:** 1. Fachsemester: 02.10.2024-04.10.2024, höhere Fachsemester: 10.09.24 - 17.09.2024
- **Course catalog no:** 15244

Environmental Practice

WP 5 Academic Practice in Environmental Studies

DR ANNA-MARIA WALTER
Tuesday Discussion

This course introduces students to a wide variety of fields, both academic and beyond, in which environmental practitioners are active. Each session will provide participants with the opportunity to meet speakers who function as heads of environmental foundations, as members of environmental research institutions, green businesses, environmental non-governmental organizations (ENGOS), or as representatives of the Ministry of Environment. The course is discussion-based and requires students to actively participate in each class. International fellows and staff from the Rachel Carson Center for Environment and Society will also be invited to join the discussion with the students.

- **Language:** English
 - **ECTS:** 3 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Tuesdays, 4:30 pm – 5:45 pm
 - **Start Date:** 17.10.2024 **End date:** 06.02.2025
 - **Location:** Leopoldstr. 11a, Room 415
 - **Course format:** Seminar
 - **Online registration period:** 23.09.2024 – 04.10.2024
 - **Course catalog no:** 14879
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WP 32 Exploring Local Environmental Practice

DR ANNA-MARIA WALTER

Workshop - Visualising the Environment

Priority will be given to students who won't already have participated in this year's Winter Workshop with Dr. Pouliot. Students who wish to participate send a mail to: Anna-Maria.Walter@rcc.lmu.de. Allocation of places takes place October 8!

A **limited** number of MA and certificate students can participate in a three-day workshop at Studienhaus Gut Schönwag, 22-24 November, 2024, with visiting professor Alison Pouliot, mycologist and environmental photographer. Through theoretical discussions and lots of practical exercises we aim to critically reflect on how we 'perceive', understand and interpret the environment and environmental issues, thinking behind how we visualise, materialise, mediate, translate, and communicate.

- **Language:** English
 - **ECTS:** 3 ECTS Points
 - **SWS:** 2 hours per week
 - **Start Date:** 22.11.2024 **End date:** 24.11.2024
 - **Location:** Gut Schönwag in Wessobrunn
 - **Course format:** Seminar/Workshop
 - **Online registration period:** 23.09.2024 – 04.10.2024
 - **Course catalog no:** 14921
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Environment and Responsibility

WP 7: Climate Change and Society

PROF. DR. UWE LÜBKEN
Climate Change and Society

This course will trace the intersections between climate, climate change and society. We will look at climatic variations before human activities had a global impact on the climate by interrogating developments such as the Little Ice Age and the Year without a Summer. We will discuss the concept of the Anthropocene and other theoretical attempts to come to terms with the climate crisis. Also, this course will look at various aspects growing out of this crisis like climate denialism, tensions and conflicts as a result of diminishing resources, migration and displacement triggered by sudden or long-term environmental changes, climate anxiety and climate fiction.

- **Language:** English
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Mondays, 10:00 am – 12 am
- **Location:** TBD
- **Course format:** Seminar
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 14804

PROF. DR. UWE LÜBKEN
“On Foot”: Walking through the history of North America

This seminar interrogates the history of walking in North America as an everyday practice, a mode of mobility, a form of protest, and an embodied activity tied in multiple ways to categories such as class, race, gender, age, and able-bodiedness. We will trace the origins of human bipedalism, look at the importance of walking in pre-modern, non-motorized societies, and scrutinize how the transportation revolution (trains, streetcars, automobiles) has literally pushed pedestrians to the margins. Walking, it seemed, had become an obsolete form of mobility in an ever-increasing sedentary society (as vividly exemplified in the movie “Wall-E”). Walking, however, has also developed into a form of protest against the steadily growing strains of modern life. John Muir walked “A Thousand Miles” to the gulf when he could have taken the train. More recently, walking has witnessed a renaissance as an important component of healthy lifestyles, as a sport and leisure activity (hiking, running), and as an integral part of attempts to create sustainable cities.

- **Language:** English
 - **ECTS:** 3 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Wednesdays, 12 pm – 2 pm
 - **Location:** Richard-Wagner-Straße 10, D114
 - **Course format:** Seminar
 - **Online registration period:** 23.09.2024 – 04.10.2024
 - **Course catalog no:** 13615
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WP 8 Foundation Course: Communication Science

This module consists of TWO parts (Lecture and the seminar below). Students need to complete BOTH to earn the full number of ECTS points.

The registration period for the department of communication science is October 1-4, 2024.

PROF. DR. MARIO HAIM

Einführung in die Kommunikationswissenschaft I (Lecture)

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:** 2 hours per week
- **Dates:** Monday, 12 pm – 2 pm
- **Start date:** 14.10.2024 **End date:** 03.02.2025
- **Location:** Oettingerstr. 67 (B) - B 001 every week, except for 03.02.2025.
Geschwister-Scholl-Pl. 1 (B) - B 201
- **Course format:** Lecture
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 15002

DR BERNHARD GOODWIN, ANTONIA MARKIEWITZ

Kommunikationsberufe I (Seminar)

The registration period for the department of communication science is October 1-4, 2024.

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:** 2 hours per week
- **Dates:** TBD
- **Start date:** 17.10.2024 **End date:** 07.02.2025
- **Location:** TBD
- **Course format:** Seminar
- **Online registration period:** **see above**
- **Course catalog no:** 15003

WP 33 Environments, Planning and Policy

PROF. DR. UWE LÜBKEN

Dams and the Environment: Origins, Promises, Impacts, Future

This seminar traces the long-lasting and severe impact of large dams around the globe. Storing water behind earthen and concrete walls has served to produce energy, to facilitate navigation, to protect against flooding and to “conserve” water for agricultural and urban demands. These gigantic infrastructural devices have fascinated not only engineers but also intellectuals, filmmakers, and millions of visitors. Dams were at the focus of geopolitical and military conflicts. For many developing states, they symbolized beacons of modernity.

In the process of dam construction, however, entire villages have been flooded (and sometimes reappeared) and its inhabitants, quite often indigenous populations, displaced. Also, the creation of dams, and in particular high dams, often came at the cost of devastating environmental consequences. More recently, environmentalists have argued for the removal of dams, in some cases successfully.

- **Language:** English
- **ECTS:** 6 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Mondays, 4 pm – 6 pm
- **Location:** Leopoldstr. 11 A - B, 415
- **Course format:** Seminar
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 13690

Sustainability and Environmental Sciences

WP 9 Geographical Sustainability

PROF. DR. HENRIKE RAU, PROF. DR. GORDON WINDER, PROF. DR. JOHANNES GLÜCKLER, PROF. DR. MATTHIAS GARSCHAGEN

Geography and Sustainability (Lecture)

To register for this course, please email envstudies@rcc.lmu.de before September 30, 2024.

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/English
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Tuesdays, 2pm – 4pm
- **Location:** Richard-Wagner-Str. 10 - D 114
- **Course format:** Lecture
- **Online registration period:** **see above**
- **Course catalog no:** 20170

WP 10 Marine Biology

DR. OLIVER VOIGT

Marine Biology (Lecture)

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.

Important: In order to be able to follow the lecture and to pass the exam, prior knowledge in the field of biology is a prerequisite (e.g., know what Cnidaria or Proifera are)! If you do not have this kind of knowledge, we recommend that you attend an introductory lecture before choosing this lecture.

- **Language:** English
 - **ECTS:** 3 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Tuesdays, 2pm – 4pm
 - **Location:** Richard-Wagner-Str. 10 - D 102
 - **Course format:** Lecture
 - **Online registration period:** 23.09.2024 – 04.10.2024
 - **Course catalog no:** 20418
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WP 11 Foundations Course: Organismic Biology

PROF. DR. FRANK WOLFGANG, PROF. DR. PETER GEIGENBERGER, PROF. DR. CAROLIN HAUG, PROF. DR. JOACHIM HAUG, PROF. DR. GUDRUN KADEREIT, PROF. DR. ANDREAS KLINGL, PROF. DR. DARIO LEISTER, PROF. DR. SILKE WERTH

Vielfalt des Lebens – Tree of life (Lecture)

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.

(BA-Level)

- **Language:** German
 - **ECTS:** 6 ECTS Points
 - **SWS:** 4 hours per week
 - **Dates:** Thursdays, 10:30am – 12 pm and Fridays, 12 pm – 1:30 pm
 - **Location:** Großhaderner Str. 2 (B) - Gr. Biologie B00.019
 - **Course format:** Lecture
 - **Online registration period:** 23.09.2024 – 04.10.2024
 - **Course catalog no:** 19085
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WP 12 Foundations Course: Ecology, Behavioral and Evolutionary Biology

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

Grundlagen der Ökologie, Verhaltensbiologie und Evolutionsbiologie (Lecture)

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).

Course registration takes place via [moodle](#), not via LSF. Please enter the registration key “EvoEco23” to register, and notify envstudies@rcc.lmu.de of your enrollment.

- **Language:** German
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Friday, 08:30 am – 10 am
- **Start date:** 18.10.2024 **End date:** 07.02.2025
- **Location:** Großhaderner Str. 2 (B) - Gr. Biologie B00.019
- **Course format:** Lecture
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 19096

WP 13 Environmental Geobiology

PROF. DR. WILLIAM ORSI, DR. GONZALO GOMEZ-SAEZ

Global Cycles: Lecture (Lecture)

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 an 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 may also be suggested by the students.

This module consists of TWO parts (lecture and tutorial). Students need to complete BOTH parts to earn the full number of ECTS points.

- **Language:** English
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Monday, 2 pm – 4 pm
- **Start date:** 14.10.2024 **End date:** 03.02.2025
- **Location:** Richard-Wagner-Str. 10 - D 016
- **Course format:** Lecture
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 20411

PROF. DR. WILLIAM ORSI, DR. GONZALO GOMEZ-SAEZ
Global Cycles: Tutorial (Tutorial)

- **Language:** English
- **ECTS:** 3 ECTS Points
- **SWS:** 2 hours per week
- **Dates:** Monday, 4 pm – 6 pm
- **Start date:** 14.10.2022 **End date:** 03.02.2025
- **Location:** Richard-Wagner-Str. 10 - D 016
- **Course format:** Tutorial
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** 20412

WP 14 Global Change and the Earth System

PROF. DR. JULIA PONGRATZ
Klimawandel und das Erdsystem (Lecture)

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:** German
 - **ECTS:** 3 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Tuesday, 10 am – 12 pm
 - **Start date:** 15.10.2024 **End date:** 04.02.2025
 - **Location:** Richard-Wagner-Str. 10 - D 116
 - **Course format:** Lecture
 - **Online registration period:** 23.09.2024 – 04.10.2024
 - **Course catalog no:** 20151
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WP 35 Theoretical and Applied Hydrology

UNIV. PROF. DR. MARIANELA FADER

Theoretische und angewandte Hydrologie (Lecture)

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 abundancy 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:** Tuesday, 12 pm - 2 pm
 - **Start date:** 15.10.2024 **End date:** 04.02.2025
 - **Location:** Luisenstr. 37 (C) – C 024
 - **Course format:** Lecture
 - **Online registration period:** 23.09.2024 – 04.10.2024
 - **Course catalog no:** 20154
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WP 36 Natural Hazards

PROF. DR. LUKAS LEHNERT

Naturgefahren - Ursachen, Folgen, Handlungsoptionen (Lecture)

**RCC students may only register for the lecture, the seminar is not open to them.
To register for this course, please email envstudies@rcc.lmu.de before September 30, 2024.**

Vorlesung mit folgenden Inhalten:

- Hazard-, Risiko- und Katastrophenforschung
- Gefahren und Risikoanalyse
- Frequenz und Magnitude natürlicher Prozesse
- Entstehung von Naturgefahren durch:
 - meteorologische/hydrologische/glaziologische Prozesse (z.B. Tropische Wirbelstürme, Hitze-/Kältewellen, Überschwemmung, Dürre, Sturm-/ Sturzfluten, Permafrostschmelze)
 - geologische/geomorphologische Prozesse (z.B. Erdbeben, Vulkaneruption, Bodenerosion)
 - biologische Prozesse (z.B. Epidemien & Waldbrände)
- Ursachen, Folgen und Handlungsmöglichkeiten (Fallbeispiele)
- Naturkatastrophenmanagement: Vorhersage, Prävention und Bewältigung von Naturkatastrophen
- Einflüsse von Naturgefahren auf gesellschaftliche Prozesse
- Rolle, Aufgaben und Möglichkeiten der Geographie in der Katastrophenforschung

Lernziele: Die Absolventen dieses Moduls verfügen über vertiefte wissenschaftliche Kenntnisse zu Naturgefahren. Die anhand von Fallbeispielen untermauerten Kenntnisse erstrecken sich über ein weites Spektrum von methodischen wie inhaltlichen Fragestellungen und schließen die menschliche Beeinflussung der Gefahren sowie ihre Quantifizierung ein.

- **Language:** German
 - **ECTS:** 3 ECTS Points
 - **SWS:** 2 hours per week
 - **Dates:** Mondays, 12 pm – 2 pm
 - **Location:** Richard-Wagner-Str. 10 - D 105
 - **Course format:** Lecture
 - **Online registration period:** 23.09.2024 – 30.09.2024
 - **Course catalog no:** 20167
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WP 37 Evolutionary Ecology

PROF. DR. NIELS DINGEMANSE, PROF. DR. HERWIG STIBOR
Evolutionary Ecology

Content: 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.

MOODLE ENROLMENT KEY: EvoEco_2122

- **Language:** English
 - **ECTS:** 6 ECTS Points
 - **SWS:** 4 hours per week
 - **Dates:** Mondays 8:30 am - 10 am, Tuesdays 08:30 am - 10 am
 - **Start date:** 14.10.2024 **End date:** 04.02.2025
 - **Location:** Großhaderner Str. 2 (B) - Kl. Biologie 2
 - **Course format:** Lecture
 - **Online registration period:** 23.09.2024 – 04.10.2024
 - **Course catalog no:** 19440
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Final Project Module: Thesis / Creative Project

WP 38/39 Final Project

DR. SUSANNE B. UNGER

Final Project Colloquium (Colloquium)

The Final Project Colloquium addresses students in their final semester who want to pursue their final project. At this event, students present their project ideas to each other. The colloquium offers opportunities to discuss any open questions regarding methodology, research focus, etc. It also lets participants gain insight into what kind of topics fellow students are working on for their final projects, and to reflect on the interdisciplinary character of the program.

- **Language:** English
- **ECTS:** 1 ECTS Point
- **SWS:** 2 hours per week
- **Date:** Monday, 21.10.2024, 2 – 4pm, other meeting times TBA
- **Location:** Leopoldstr. 11a, Room 244
- **Course format:** Workshop
- **Online registration period:** 23.09.2024 – 04.10.2024
- **Course catalog no:** TBA