

## Environmental Studies Certificate Program Course Catalogue Summer Term 2025

Please register for courses as soon as possible instead of waiting until the very last day of the registration deadline, April 14, 2025.

Please only register for courses that you actually plan to take and that fit your schedule. As a courtesy to your instructors and your fellow students, please inform the instructor of your decision and unenroll via LSF. This allows your instructor to offer your spot to students on the waitlist.

Whenever you email [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de) to inquire about registering for a course, please include your MATRIKELNUMMER in your email!

When it's time to register for exams, please remember to always **REGISTER FOR EXAMS VIA LSF** (even if instructors keep separate lists or tell you otherwise).

# Content | Module Titles

	Environment and Society International Perspectives 6 ECTS	P 1.1 Lunchtime Colloquium International Perspectives 1 2 ECTS	P 1.2 Reading Course International Perspectives 1 1 ECTS	P 1.3 Lunchtime Colloquium International Perspectives 2 2 ECTS	P 1.4 Reading Course International Perspectives 2 1 ECTS	Mandatory 6 ECTS	
Content Area 1	Environmental History and Society 6 ECTS	WP 1 American History, Culture and Society 6 ECTS	WP 2 Anthropology 6 ECTS	WP 3 History of Science 6 ECTS	WP 4 Sociology 6 ECTS	Elective Choose 3 out of 4	
Content Area 2	Environmental Practice 6 ECTS	WP 5 Internship or Practice Seminar 6 ECTS	WP 6 Study Abroad 6 ECTS			Get a total of 6 ECTS in each Content Area you elected	
Content Area 3	Environmental Politics and Ethics 6 ECTS	WP 7 Environmental Ethics and Politics 6 ECTS	WP 8 Environmental Law 6 ECTS				
Content Area 4	Human Ecology and Natural Sciences 6 ECTS	WP 9 Geography A 3 ECTS	WP 10 Biosciences and Anthropology A 3 ECTS	WP 11 Biosciences and Anthropology B 3 ECTS	WP 12 Geology 6 ECTS		WP 13 Geography B 6 ECTS
	Final Project 9 ECTS	WP 14 Exhibition Option 9 ECTS	WP 15 Publication Option 9 ECTS			Choose 1 out of 2 9 ECTS	

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## P 1 Mandatory Module (Pflichtveranstaltung): Environment and Society

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Please register for both the Lunchtime Colloquium and Reading Course via LSF.

DR. ANNA MARIA WALTER

### Lunchtime Colloquium: The Environmental Humanities - International Perspectives

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:** 1 ECTS Point
- **SWS:** 2 hours per week
- **Dates:** Thursday, 12:00 pm - 1:45 pm
- **Start date:** 24.04.2025 **End date:** 17.07.2025
- **Location:** Katholische Hochschulgemeinde (KHG) Leopoldstr. 11, 1. OG.
- **Work format:** Presentations
- **Registration period:** 31.03.2025 until 14.04.2025
- **Belegnummer:** 13154

DR. SUSANNE UNGER

### Reading Course: International Perspectives, Part II

The Reading Course makes up 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 welcome to actively shape both structure and content. Lively discussions are the core of the course, based on weekly presentations by the course participants.

- **Language:** English
- **ECTS:** 2 ECTS
- **SWS:** 2 hours per week
- **Dates:** Thursday, 2 pm - 4 pm
- **Start date:** 08.05.2025 **End date:** 17.07.2025
- **Location:** Katholische Hochschulgemeinde (KHG) Leopoldstr. 11, 1. OG.
- **Work format:** Reading Course
- **Registration period:** 31.03.2025 until 14.04.2025
- **Belegnummer:** 14829

N.B. Due to a scheduling conflict, the Reading Course will meet for the first time on May 8, 2025. A make-up session will be scheduled during the semester.

WP 1 – WP 13: Elective Modules (Wahlpflichtveranstaltungen)

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scholarly engagement, curatorship and experimental exhibitions reactivate historical collections as creative technologies, and so promote the re-imagination of human-environmental relations on a larger scale? The course will be taught in German and English in three sessions: an introduction and two block seminars that consist of museum visits and discussions of readings. The term papers (Hausarbeiten) can be written either in German or English.

- **Language:** English
  - **ECTS:** 6 ECTS
  - **SWS:** 2 hours per week
  - **Dates:** Fr 25.4 12:15-13:45; all day (09:15-14:45) on Fr 23.5; Sa 24.5; Fr 18.7; and Sa 19.7.
  - **Location:** Oettingenstr. 67, Room 131
  - **Work format:** (Block-)Seminar
  - **Registration period:** 31.03.2025 until 14.04.2025
  - **Belegnummer:** 12377
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### WP 3 History of Science

PROF. DR. UWE LÜBKEN  
**Disaster Studies**

This class looks at the origins, the development and the multiple subfields of disaster studies from a humanities and social-science perspective. Emphasis will be laid upon when, how and why a scholarly interest in (natural) disasters arose, on key analytical terms such as vulnerability and resilience, and on the importance of categories like race, class gender, and able-bodiedness. We will focus on disaster memory (and the lack thereof), on cultural representations of destructive events, and the economic dimension of catastrophes (risk, insurance, “disaster capitalism”). Finally, we will look at the intersections of climate change and disaster as evidenced for example in processes of displacement and migration. One guiding question of this seminar will be: “How natural are natural disasters?”

- **Language:** English
  - **ECTS:** 6 ECTS
  - **SWS:** 2 SWS
  - **Dates:** Thursday, 10:15-11:45
  - **Start Date:** 24.04.2025 **End date:** 27.07.2025
  - **Location:** Leopoldstr. 11 A-B - 415
  - **Work format:** Seminar
  - **Registration period:** 31.03.2025 until 14.04.2025
  - **Belegnummer:** 14807
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## WP 4 Sociology

The following 2 courses are **only** offered as a bundle:

Das Modul bietet einen Überblick über theoretische Ansätze zur Erklärung sowie über empirische Herangehensweisen zur Erforschung von Strukturen und Dynamiken sozialer Ungleichheit. In den Veranstaltungen werden verschiedene Dimensionen sozialer Ungleichheit berücksichtigt. Auch Fragen des internationalen Vergleichs und der globalen Ungleichheit werden behandelt. Es werden auch mögliche Ansätze zum Abbau von sozialen Ungleichheiten diskutiert. Das Modul besteht aus je einer Vorlesung von Prof. Pfeffer und Prof. Brüderl. In die jeweilige Vorlesung sind Übungen eingebaut. Zugleich gibt es punktuell gemeinsame Veranstaltungen um die beiden Teile zu integrieren.

PROF. DR. JOSEF BRÜDERL

**Soziale Ungleichheit** (Vorlesung)

- **Language:** German
- **ECTS:** 4 ECTS
- **SWS:** 2 hours per week
- **Dates:** Wednesday, 8:15– 09:45
- **Start date:** 23.04.2025 **End date:** 23.07.2025
- **Location:** Geschw.-Scholl-Pl. 1 (B) - B 006
- **Work format:** Lecture
- **Registration period:** Please email [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de) by April 10th to register!
- **Belegnummer:** 15183

PROF. DR. FABIAN PFEFFER

**Soziale Ungleichheit** (Übung)

- **Language:** German
- **ECTS:** 2 ECTS
- **SWS:** 2 hours per week
- **Dates:** Mondays, 10:15 - 11:45
- **Start date:** 21.04.2025 **End date:** 21.07.2025
- **Location:** Geschw.-Scholl-Pl. 1 (B) - B 006
- **Work format:** Tutorial
- **Registration period:** Please email [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de) by April 10th to register!
- **Belegnummer:** 15184

The following 2 courses are **only** offered as a bundle:

Gegenstand der Vorlesung und der zugehörigen Tafelübung sind Opportunitäten, Anreize und strukturelle Hemmnisse von Entscheidungen familialer Akteure. Diese werden anhand ausgewählter empirischer Evidenz für klassische familiäre Übergänge bzw. Erwerbsübergänge adressiert, wobei jeweils theoretische Fundierungen und empirische Analysemethoden erläutert und Daten- und Methodenlimitationen aufgezeigt werden. Wo möglich, werden Lebensverlaufsperspektiven eingenommen sowie Kohortenvergleiche, aber auch querschnittliche Vergleiche nach Regionen und Familiensubgruppen sowie nach Geschlecht vorgenommen. Dynamische Randbedingungen des Familien- und Erwerbslebens wie Digitalisierungsprozesse, politisch-rechtlicher Wandel, Wandel von Arbeitsmärkten, Wohnverhältnisse und Fachkräfteengpässe werden in ihren Handlungsbezügen diskutiert.

Ziel der Vorlesung ist, Studierenden einen Überblick über soziologische Forschungsfragen und -befunde an der Schnittstelle der beiden Lebensbereiche und Systeme Familie und Arbeitsmarkt sowie wissenschaftliche Zugänge zu denselben zu bieten.

DR. CHRISTINA BOLL

**Soziale Ungleichheit (Vorlesung)**

- **Language:** German
- **ECTS:** 4 ECTS
- **SWS:** 2 hours per week
- **Dates:** Tuesday, 10:15 - 11:45
- **Start date:** 23.04.2025 **End date:** 23.07.2025
- **Location:** Geschw.-Scholl-Pl. 1 (M) - M 105
- **Work format:** Lecture
- **Registration period:** Please email [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de) by April 10th to register!
- **Belegnummer:** 15236

PROF. DR. FABIAN PFEFFER

**Soziale Ungleichheit (Übung)**

- **Language:** German
- **ECTS:** 2 ECTS
- **SWS:** 2 hours per week
- **Dates:** Mondays, 18:15 - 19:45
- **Start date:** 21.04.2025 **End date:** 21.07.2025
- **Location:** TBA
- **Work format:** Tutorial
- **Registration period:** Please email [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de) by April 10th to register!
- **Belegnummer:** 15237

**The following 2 courses are **only** offered as a bundle:**

UNIV. PROF. DR. DIANA RIEGER

**Einführung in die Kommunikationswissenschaft 2 (Lecture)**

Die Vorlesung für Studierende des zweiten Fachsemesters führt in die Grundlagen der Kommunikationswissenschaft ein und stellt ausgewählte Fachgebiete mit ihren zentralen Fragestellungen, Theorien, Forschungsmethoden und empirischen Befunden vor. Im zweiten Teil der Einführungsvorlesung stehen Forschungsansätze der Kommunikationswissenschaft im Fokus, die sich aus einer Mikroperspektive mit Medienhalten, Medienrezeption und Medienwirkungen beschäftigen. Zudem werden kognitions- und sozialpsychologische Grundlagen vermittelt, die für das Verständnis kommunikationswissenschaftlicher Modelle erforderlich sind. Anhand klassischer Studien und aktueller Beispiele aus der Forschung wird die Entwicklung von Theorien und Methoden des Fachs verdeutlicht. Die Vorlesung schließt an die Einführung in die Kommunikationswissenschaft I an.

- **Language:** German
- **ECTS:** 3 ECTS
- **SWS:** 2 hours per week
- **Dates:** Tuesday, 10:15 - 11:45
- **Start date:** 29.04.202 **End date:** 22.07.2025
- **Location:** Oettingenstr. 67 (B) - B 001
- **Work format:** Lecture
- **Registration:** Please email [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de) by **March 24** to register!
- **Belegnummer:** 15303

DR. BERNHARD GOODWIN, ANTONIA MARKIEWITZ  
**Kommunikationsberufe 2** (Seminar)

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. Studierende im BA-Hauptfach-Studiengang Kommunikationswissenschaft müssen im Laufe ihrer ersten beiden Fachsemester zwanzig Punkte für den Besuch von Veranstaltungen aus dieser Reihe sammeln. Dabei erhalten sie für jede besuchte Veranstaltung einen Punkt.

Mehr Informationen zu den einzelnen Veranstaltungen unter: <http://www.ifkw.uni-muenchen.de/studium/praxisorientierung/kommunikationsberufe/index.html>  
Die verbindliche Anmeldung zu den Veranstaltungen erfolgt über <https://sirius.ifkw.uni-muenchen.de/kobe/index.php>

- **Language:** German
- **ECTS:** 3 ECTS
- **SWS:** 2 hours per week
- **Dates:** Tuesday 16:15 - 17:45, Wednesday 12:15 - 13:45  
On Wed, April 30, the course meets 16:00-20:00
- **Start date:** 23.04.2025 **End date:** 16.07.2025
- **Location:** Oettingenstr. 67 (B) - B 001
- **Work format:** Seminar
- **Registration period:** Please email [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de) by **March 24** to register!
- **Belegnummer:** 15302

PROF. DR. Anna SOPHIE KÜMPEL-UNKEL  
**Medienwirkungsforschung**

Die Vorlesung führt in zentrale Ansätze und Theorien der Medienwirkungsforschung ein. Dabei geht es nicht primär um die Frage, ob Medien wirken, sondern wie und unter welchen Bedingungen sie dies tun. Entsprechend werden neben zentralen Ansätzen und Theorien zur Medienwirkung auch ausgewählte Aspekte von Mediennutzung und Informationsverarbeitung in den Blick genommen. Die Studierenden erhalten nicht nur einen Überblick über die „Klassiker“ der Medienwirkungsforschung, sondern auch darüber, ob und inwiefern die entsprechenden Ansätze und Theorien auch in modernen (digitalen) Medienumgebungen noch Bestand haben.

- **Language:** German
- **ECTS:** 3 ECTS
- **SWS:** 2 hours per week
- **Dates:** Thursdays, 10:15 - 11:45
- **Start date:** 23.04.2025 **End date:** 16.07.2025
- **Location:** Oettingenstr. 67 (B) - B 001
- **Work format:** Lecture
- **Registration period:** Please email [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de) by **March 24** to register!
- **Belegnummer:** 15334

PROF. DR. CONSTANZE ROSSMANN  
**Forschungsfeld Aktuelle Themen der Kommunikationswissenschaft**

- **Language:** German
- **ECTS:** 3 ECTS
- **SWS:** 2 hours per week

- **Dates:** TBA
- **Start date:** 23.04.2025 **End date:** 16.07.2025
- **Location:** TBA
- **Work format:** Lecture
- **Registration period:** Please email [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de) **by March 24** to register!
- **Belegnummer:** 15338

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## Content Area 2: Environmental Practice

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Compared to the other three content areas, CA 2 offers the fewest module options. If you choose to complete CA 2, we recommend pairing the Tuesday Discussion with either an internship (in Germany or abroad) or an extended excursion. Please note that excursions are not available every semester and often only have limited spots for certificate students.

### WP 5 Internship or Practice Seminar

DR. SUSANNE UNGER

#### **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 (NGOs), 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 are also invited to join the discussion with the students.

- **Language:** English
- **ECTS:** 3 ECTS
- **SWS:** 2 hours per week
- **Dates:** Tuesday, 16:30 17:30
- **Start Date:** 29.04.2025 **End date:** 22.07.2025
- **Location:** RCC, Leopoldstraße 11a, Room 415
- **Work format:** Seminar
- **Registration period:** 31.03.2025 **until** 14.04.2025
- **Belegnummer:** 14830

### WP 6 Environmental Practice

DR. SUSANNE UNGER

#### **Internship**

Students have the opportunity to complete an internship in an environmentally relevant field any semester and can earn 3 ECTS credits for it. As an assessment requirement, a report of 8,000 to a maximum of 12,000 characters must be submitted at the end of the internship.

If you are interested in an earning credit for an internship, please contact [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de) in advance to discuss the scope and objectives.

DR. JONATAN PALMPLAD, LENA ENGEL

## **An Environmental History of Today's Slovenia – Seminar incl. Excursion**

This course deals with material, cultural, intellectual, and political environmental history of the area of today's Slovenia, linking long-term (mainly since the early modern period) and chronologically shorter insights. The state of research requires that the presentation of the general Central European situation on many of these topics be followed by case studies from Slovenia. The course focuses on two environmental macroregions: (1) the Slovenian Alps and the Pre-Alps, to give students insights into the similarities and differences between the southeastern Alps on the one hand and the Alps south of Munich, which are more familiar to them, and (2) the Dinaric Karst of Slovenia as a karstic region characterized by a high degree of landscape evolution complexity, where the western science of karstology began to develop. The course consists of three days of lectures in Munich in July 2025 and four days of fieldwork (+2 travel days) in Slovenia in early September 2025. Transportation, accommodation and some meals are paid for by the RCC.

- **Language:** English
- **ECTS:** 3 ECTS
- **SWS:** 2h per week
- **Start Date:** 18-20 July, 10:00-16:00 (tbc) at the RCC, Excursion: 1-6 September (transportation, accommodation and some meals are paid for by the RCC)
- **Location:** TBD
- **Work format:** Seminar
- **Registration period:** 31.03.2025 until 14.04.2025
- **Belegnummer:** XXX

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## Content Area 3: Environmental Politics and Ethics

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### WP 7 Environmental Ethics and Politics

UNIV. PROF. DR. MARKUS VOGT

#### **Umweltethik. Reflexionen zum Mensch-Natur-Verhältnis im Anthropozän (Lecture)**

Klimawandel, Biodiversitätsverlust und Kipppunkte im globalen Wasserhaushalt sind Indizien für ein neue erdgeschichtliche Epoche, in der der Mensch zum „Ingenieur des Erdsystems“ geworden ist. Politik, Wirtschaft und Gesellschaft sind mit der nötigen „Großen Transformation“ im Anspruch der 2015 beschlossenen „Sustainable Development Goals“ radikal überfordert. So brechen Grundsatzdebatten über das Naturverhältnis der „expansiven Moderne“, ökologische, globale und intergenerationelle Gerechtigkeit sowie den Stellenwert kosmopolitischer Ideale angesichts verschärfter Verteilungskämpfe auf. Auch die Religionen und Kirchen sind herausgefordert, ihr Naturverhältnis zu überdenken. Mit „Laudato si“, der ersten Umweltenzyklika (2015), und „Laudate Dominum“, dem Apostolischen Schreiben zum Klimawandel (2023), hat sich die katholische Kirche intensiv in die Debatte eingemischt. Gegenstand der Vorlesung sind u.a.: Diagnosen zur ökologischen Lage der Welt; die neue erdgeschichtliche Epoche des „Anthropozän“: empirische Grundlagen und philosophische Kritik; Begründungsmodelle der Umweltethik; die normative Logik der Nachhaltigkeit und die häufigsten moraltheoretischen Kurzschlüsse der Debatte; Resilienz und Risikoethik; Humanökologie und Schöpfungsspiritualität in „Laudato si“; interreligiöse Perspektiven einer „Ökotheologie“; Tierethik; Postwachstumsgesellschaft und Handlungsmodelle für eine postfossile Gesellschaft; Bioökonomie und Ethik der Innovation; nachhaltige Konsum- und Lebensstile in liberalen Gesellschaften, Bildung für Nachhaltigkeit; „transformative Wissenschaft“; Fridays4Future aus sozialem ethischer Sicht; Kontroversen um die deutsche Energiewende.

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

- **SWS:** 2h per week
- **Dates:** Wednesday, 10:15– 11:45
- **Start date:** 23.04.2025      **End date:** 23.07.2025
- **Location:** Geschw.-Scholl-Pl. 1 (D) - M 114
- **Work format:** Lecture
- **Registration period:** 31.03.2025                      **until** 14.04.2025
- **Belegnummer:** 01072

## WP 8 Environmental Law

DR. MICHAEL NEUREITER

### Health Policy

The course introduces students to the fundamentals of public policy analysis. It focuses on helping students understand what public policy analysis is and provides them with a toolkit of practical and applied methods for analyzing public policy issues and professionally communicating results in writing. Specifically, it introduces students to policy research and modeling techniques for analyzing complex, real-world issues involving uncertainty, complexity, ethical controversy, and multiple actors with diverse interests. Although the class emphasizes rational methods of analysis from economics, it also provides students with an understanding of the variety of approaches real-world policy analysis may entail.

- **Language:** English
- **ECTS:** 6 ECTS
- **SWS:** 2h per week
- **Dates:** Tuesday, 12:15 – 13:45
- **Start date:** 29.04.2025      **End date:** 22.07.2025
- **Location:** Oettingenstr. 67, Room 169
- **Work format:** Seminar
- **Registration period:** 31.03.2025                      **until** 14.04.2025
- **Belegnummer:** 15129

LAURA LINDNER

### Klimapolitik - Policy-Analyse eines interdisziplinären Politikfelds

The course introduces students to the fundamentals of public policy analysis. It focuses on helping students understand what public policy analysis is and provides them with a toolkit of practical and applied methods for analyzing public policy issues and professionally communicating results in writing. Specifically, it introduces students to policy research and modeling techniques for analyzing complex, real-world issues involving uncertainty, complexity, ethical controversy, and multiple actors with diverse interests. Although the class emphasizes rational methods of analysis from economics, it also provides students with an understanding of the variety of approaches real-world policy analysis may entail.

- **Language:** German
- **ECTS:** 6 ECTS
- **SWS:** 2h per week
- **Dates:** Wednesday, 12:15– 13:45
- **Start date:** 23.04.2025      **End date:** 23.07.2025
- **Location:** Oettingenstr. 67, [U139](#)
- **Work format:** Seminar
- **Registration period:** 31.03.2025                      **until** 14.04.2025
- **Belegnummer:** 15064

## Content Area 4: Human Ecology and Natural Sciences

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### WP 9 Geography A

UNIV. PROF. DR. GORDON WINDER/UNIV. PROF. DR. HENRIKE RAU/UNIV. PROF. DR. MATTHIAS GARSCHAGEN/ UNIV. PROF. DR. JOHANNES GLÜCKLER  
**Sustainable Management of Resources** (Lecture)

This module is intended to look into key themes related to Geography and Sustainability. In particular, issues related to resources, such as resource scarcity of water, energy, phosphorous will be studied in relation to land use. A multi- and interdisciplinary perspective is taken to look into these themes. In particular, the following themes will be presented and elaborated upon:

- Sustainable water management
- Sustainable energy management
- Sustainable land use
- Sustainable nutrient management

A special focus will be set on the analysis of socio-economic aspects of sustainability.

- **Language:** English
- **ECTS:** 3 ECTS
- **SWS:** 2 hours per week
- **Dates:** Thursdays, 14:15 – 15:45
- **Start date:** 24.04.2025                      **End date:** 24.07.2025
- **Location:** TBD
- **Work format:** Lecture
- **Registration period:** 31.03.2025                      **until** 14.04.2025
- **Belegnummer:** 14816

Please do **not** register for this course via LSF: Instead, please email: [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de)

**Please note:** You can only earn 3 ECTS in this seminar and you need a total of 6 ECTS to complete Content Area 4. We therefore recommend that you attend another seminar that's also worth 3 ECTS during the summer semester or the upcoming winter semester in Content Area 4, thus allowing you to complete the content area.

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### WP 10 / 11 Biosciences and Anthropology A / B

DR. IOANNIS MOUSTAKIS  
**Boden-Pflanze-Atmosphäre-Kontinuum** (Lecture)

The module consists of the lecture "*Soil-Plant-Atmosphere Continuum*" with the following content:

- Soil hydraulic and chemical properties: retention curve, saturated and unsaturated hydraulic conductivity, cation exchange capacity (CEC), retardation.
- Richards equation, convection-dispersion equation, heat transport equation.
- Radiation and energy balance at the (Earth's) surface, equations of motion, characteristics of near-surface turbulence.
- Experimental determination and modeling of energy and mass balance in the atmospheric boundary layer.
- Photosynthesis: influencing factors, C3-C4-CAM metabolisms, water and carbon balance of plants and ecosystems.
- Plant growth and ecosystem models.

- Global biogeochemical cycles.
- Soil physics, plant ecology, and micrometeorological measurement techniques.

- **Language:** English
- **ECTS:** 3 ECTS
- **SWS:** 2 hours per week
- **Dates:** Tuesday, 14:15 – 15:45
- **Start date:** 29.04.2025                      **End date:** 22.07.2025
- **Location:** TBD
- **Work format:** Lecture
- **Registration period:** 31.03.2025                      **until** 14.04.2025
- **Belegnummer:** 14818

**Please note:** You can only earn 3 ECTS in this seminar and you need 6 ECTS to complete Content Area 4. We therefore recommend that you attend another seminar that's also worth 3 during the summer semester or the upcoming winter semester in Content Area 4, thus allowing you to complete the content area.

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## WP 12 Geology

As of March 18th, we unfortunately do not know if this course bundle will be offered again this semester. Please check the course catalog regularly for updates if you wish to take this course, or contact us at [envstudies@rcc.lmu.de](mailto:envstudies@rcc.lmu.de).