

Environmental Studies Certificate Program

Course Catalogue Summer Term 2021

During the summer term 2021, our courses will start and most likely continue online due to the COVID-19 situation. As we are offering courses from different faculties, there might be exceptions where teaching is offered in presence or in hybrid formats. Please check on courses individually.

Please register for courses as soon as possible instead of waiting until April 12th.

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

P 1 Environment and Society: Mandatory Module (Pflichtveranstaltung)

DR. GESA LÜDECKE; PROF. DR. CHRISTOF MAUCH

Lunchtime Colloquium and Reading Course: International Perspectives

Combined with the RCC Lunchtime Colloquium, the Reading Course makes up 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 have to 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 on different topics provided by the course participants.

Please register for both, Lunchtime Colloquium and Reading Course, via LSF. Details will be discussed with registered students as soon as possible.

- **Language:** English
- **ECTS:** 3 ECTS Points
- **Timeframe:** 4 hours per week
- **Dates:** Thursday, 12:30 pm - 4 pm
- **Start date:** 15.04.2021 **End date:** 15.07.2021
- **Location:** online via Zoom and Moodle
- **Work format:** online presentations and reading course
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 14695 & 14696

Elective Modules (Wahlpflichtveranstaltungen)

Environmental History and Society

WP 1 American History, Culture and Society

PROF. DR. UWE LÜBKEN

The History of the Environmental Movement in the United States (Seminar)

The history of the environmental movement in the United States is characterized by ambivalence. Americans were the first to create (now famous) national parks like Yellowstone and Yosemite, yet their functioning depended upon the exclusion of Native Americans. The conservationists of the late nineteenth century laid the groundwork for the modern environmental movement, but it was borne mostly out of economic necessities. In the 1960s, a more diverse movement began to form, but it was predominantly white.

This class will trace the history of the American environmental movement by focusing on key figures such as John Muir and Rachel Carson, by highlighting the impact of disasters such as the infamous “burning river” in Cleveland, the toxic waste crisis in Love Canal, and the Santa Barbara oil spill, and by looking at key moments in the history of this movement like the first Earth Day in April 1970 that brought approx. 20 million Americans to the streets.

- **Language:** English
- **ECTS:** 6 ECTS Points
- **Timeframe:** 2 hours per week
- **Dates:** Mondays, 10 am - 12 pm
- **Start date:** 12.04.2021 **End date:** 12.07.2021
- **Location:** online
- **Work format:** Seminar
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 13683

WP 2 Anthropology

DR. WOLFGANG KAPFHAMMER / PROF. DR. EVELINE DÜRR

Lebenswelten Amazoniens. Ein interaktives Regionalseminar (Seminar)

Dieses Seminar stellt eine besonders attraktive Möglichkeit dar, direkt mit BewohnerInnen des Gebiets Amazoniens in Kontakt zu treten und sich über diesen Hotspot der Environmental Humanities auszutauschen.

Das Seminar wird zum einen in ganz klassischer Weise eine regionale Einführung in die Kultur(en) des Amazonasgebiets und seiner indigenen, mestizischen, afro-indigenen, ländlichen und städtischen Lebenswelten bieten. Neben allgemeinen Fragestellungen zu einer Soziodiversität, die jüngst in Brasilien wieder vermehrt unter politischen Druck gerät, werden wir diesmal das Augenmerk insbesondere auf die sich zuspitzende ökologische Situation in Amazonien richten. All diese Fragen werden wir nicht nur uns selbst, sondern vor allem auch Menschen aus der Region stellen. In einzelnen Sitzungen werden wir per Skype-Schaltung mit (vorrangig) indigenen Angehörigen eines Postgraduierten-Programms des

anthropologischen Instituts der Universität Manaus, Hauptstadt des brasilianischen Bundesstaates Amazonas, sowie VertreterInnen des Centro de Medicina Indígena, einer von Indigenen aus dem Oberen Rio-Negro-Gebiet unterhaltenen kulturellen und medizinischen Begegnungsstätte, konferieren. Wie die Erfahrung der vorangegangenen Versuche einer solchen interaktiven Zusammenarbeit zeigte, liegt der Reiz eines solchen Dialogs nicht zuletzt darin, dass unsere amazonischen GesprächspartnerInnen die Agenda selbst in die Hand nehmen und uns zu einem wohltuenden Perspektivwechsel ermuntern.

- **Language:** German
- **ECTS:** 6 ECTS Points
- **Timeframe:** 2 hours per week
- **Dates:** Tuesdays, 4 pm – 6 pm
Tuesdays, 6 pm – 8 pm (every other week)
- **Start date:** 13.04.2021 **End date:** 13.07.2021
- **Location:** online
- **Work format:** Seminar
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 12841

DR. ALESSANDRO RIPPA / DR. ROGER NORUM / HUIYING NG

Cities and Farms: (re)thinking “urban” and “rural” in the 21st Century (Seminar)

This course provides an interdisciplinary introduction to the study of urban and rural spaces. Cities and farms, villages and forests, are socially, politically, and environmentally contested spaces that are seldom addressed in their relations to one another. This course, on the other hand, will examine urban and rural spaces both historically and cross-culturally, and study how the relation between them has been imagined and incorporated into planning and governance, as well as its impact on community livelihood and the environment. In particular, in this course we introduce some of the theories about how cities and the countryside are formed as distinct, often separate entities, as well as analyses that move beyond such dichotomies. Reading (and watching) the work of anthropologists and human geographers, but also environmental historians and urban planners, we address the unresolved tension between the urban and the rural, and ask fundamental questions for the current times. What is the relation between the "urban" and the "rural"? How has this relation changed over the past decades? How does our understanding of urban and rural spaces shape the ways in which we approach nature and the environment? How does rural-urban migration re-configure both urban and rural environments, imaginaries, and gender roles? What is the future of cities and farms?

Please find more information regarding literature recommendations on LSF (12852).

- **Language:** English
- **ECTS:** 6 ECTS Points
- **Timeframe:** 2 hours per week
- **Dates:** Mondays, 2 pm – 4 pm
- **Start date:** 12.04.2021 **End date:** 12.07.2021
- **Location:** online
- **Work format:** Seminar
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 12852

WP 4 Sociology

DR. ANNA ANTONOVA

Tourist Landscapes: Environment, Society and Tourism (Seminar)

International tourism declined rapidly in 2020 due to the COVID-19 pandemic, yet it remains a key industry reshaping landscapes and communities worldwide. For many regions, tourism creates and sustains vital livelihoods. At the same time, it also has immense impacts on environments and societies around the world. In this seminar, we will take a critical look at the societal and environmental issues arising from a range of tourist practices. We will think about various modes of travel: from globe trotters and sea holidays to dark tourism and ecotourism. Considering case studies from around the world, we will explore a range of issues including: the changes experienced by the environments, cultures, and communities that support tourism; the relationships between different forms of privilege and access to nature via tourism; or the control and commodification of landscapes, cultural heritage, and even disaster. Finally, we will discuss the way that the pandemic has brought these issues to light and debate whether and how the industry could change in the future.

- **Language:** English
- **ECTS:** 6 ECTS Points
- **Timeframe:** 2 SWS
- **Dates:** Tuesdays, 2.30 pm – 4.00 pm
- **Start date:** 13.04.2021 **End date:** 13.07.2021
- **Location:** online
- **Work format:** Seminar
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 14678

Environmental Practice

WP 5 Internship or Practice Seminar

PROF. DR. CHRISTOF MAUCH / DR. GESA LÜDECKE

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
- **Timeframe:** 2h per week
- **Dates:** Tuesdays, 4:15 pm - 5:15 pm
- **Start Date:** 13.04.2021 **End date:** 13.07.2021
- **Location:** online
- **Work format:** Seminar
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 14697

WP 7 Environmental Ethics and Politics

DR. ALEXANDER SCHULAN

Ethics of Financing Adaptation to Climate Change (Seminar)

The public debate in the Global North on the climate crisis is often framed as the avoidance of future adverse effects of climate change. The debate focusses on mitigation measures to reduce anthropogenic emissions of greenhouse gases, to improve the earth's capability to absorb carbon from the atmosphere or to sequester carbon with technical measures. However, already today, mainly persons in the Global South suffer from negative effects of climate change. For example, persons living in small island developing states (SIDS) have to cope with a rising sea level, threatening their live, property and basis of existence. Affected local persons implement adaptation measures to reduce adverse effects of climate change, like constructing dams or move to higher situated areas. Often, local governments and persons are not able to pay for the costs of the necessary adaptation measures. Climate science provides evidence that greenhouse gas emissions emitted by the Global North cause adverse effects of climate change in the Global South today. However, international political efforts to provide adaptation finance are limited. The amount of adaptation finance provided by international donors is currently too low to meet the local needs to adapt to climate change. Even though the available amount of adaptation finance increases, the adaptation finance gap is expected not to decrease, as the pace of climate change and its impacts are expected to increase. A possibility to deal with the adaptation finance gap is to prioritise between different countries when distributing scarce financial means for adaptation. The prioritisation of the distribution of scarce adaptation finance to the Global South raises several normative questions. Criteria for prioritisation of adaptation finance in the debate are vulnerability and efficiency or cost-effectiveness and recently the degree of democratisation of a country.

The seminar introduces the relevant ethical aspects of the distribution of scarce adaptation finance and discusses the criterion of vulnerability as it appeals to the moral intuition that it is right to help those first who are in greatest need, and the criterion of efficiency as it appeals to the moral intuition to maximise adaptation benefits. Also, the seminar deals with the criterion of the degree of democratisation of a country to allocate scarce adaptation finance. In the context of democracy and adaptation, the democratization of local responses to climate change will also be considered as will be special vulnerabilities of small island developing states.

The readings will be provided to the students. An optional source for reading in philosophy and ethics in general is the excellent online reference Stanford Encyclopedia of Philosophy (<https://plato.stanford.edu/>).

- **Language:** English
- **ECTS:** 6 ECTS Points
- **Timeframe:** 2 hours per week
- **Dates:** Mondays, 4:15 pm - 5:45 pm
- **Start date:** 12.04.2021 **End date:** 12.07.2021
- **Location:** online via Moodle and Zoom
- **Work format:** Seminar
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 12901

PROF. DR. MARKUS VOGT

Umweltethik (Lecture)

Mit den 2015 von den Vereinten Nationen beschlossenen „Sustainable Development Goals“ (SDGs) und den ehrgeizigen Klimaschutzzielen von Paris (Dezember 2015) wurde Nachhaltigkeit als verbindliche Grundlage für einen neuen globalen Gesellschaftsvertrag anerkannt. Zugleich zeigt sich, dass Politik, Wirtschaft und Gesellschaft mit der dafür nötigen „Großen Transformation“ radikal überfordert sind. So brechen Grundsatzdebatten über globale und intergenerationelle Gerechtigkeit sowie den Stellenwert kosmopolitischer Ideale angesichts verschärfter Verteilungskämpfe auf. Die Suche nach neuen Orientierungen stellt die Problemlösungskompetenzen und Werte demokratischer Gesellschaften vor eine harte Bewährungsprobe. Auch die Religionen und Kirchen sind herausgefordert, ihr Naturverhältnis zu überdenken. Mit „Laudato si“, der ersten Umweltenzyklika (2015), 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 „Ökothologie“; 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 sozialetischer Sicht; die deutsche Nachhaltigkeitsstrategie 2020.

- **Language:** German
- **ECTS:** 6 ECTS Points
- **Timeframe:** 2 hours per week
- **Dates:** Wednesdays, 10 am – 12 pm
- **Start date:** 14.04.2021 **End date:** 14.07.2021
- **Location:** online
- **Work format:** Lecture
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 01065

PROF. DR. KAREN PITTEL

The Economics of Climate Change and Climate Policy (Lecture + Tutorial)

- **Language:** English
- **ECTS:** 6 ECTS Points
- **Timeframe:** 2h - 4h hours per week
- **Dates:** Mondays, 2 pm – 4 pm (Lecture)
Tuesday, 10 am – 12 pm (Tutorial)
- **Start date:** 12.02.2021 / 13.02.2021 **End date:** 12.07.2021 / 13.07.2021
- **Location:** online
- **Work format:** Lecture + Tutorial
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 05110 (Lecture) & 05111 (Tutorial)

PLEASE NOTE: basic knowledge in micro- and macroeconomics required!

Register on LSF with the “vormerken”-button. Chose “Vorlesungsverzeichnis” in the menu on the left and click through until you find the lecture and tutorial (*Vorlesungsverzeichnis* → *Fakultätsübergreifende Veranstaltungen* → *Rachel Carson Center* → *ESCP* → *Elective Moduls* → *Environmental Politics and Ethics* → *WP07*). Register (vormerken) for both, the lecture and the tutorial, in order to receive all relevant information!

WP 8 Environmental Law

MARIA BEKIARI

Legal Framework of Environmental Pollution (Lecture)

Environmental pollution constitutes one of the biggest and more complex challenges of modern time. Both natural sciences and humanities deal with environmental problems trying to understand their causes and develop effective solutions. In this framework, this course aims to give more light to the environmental pollution from a legal perspective. More precisely, it aims to answer to the following questions: What is the environmental pollution? What are the environmental problems that law has to address? Which are their main characteristics and particularities? What differentiates environmental problems from other types of problems? How has law addressed them? What kind of principles and instruments has it developed in order to control and reduce environmental pollution? What are the shortcomings of the current legal framework and what could be further done? A specific focus will be given to the industrial pollution. At the end of the course, students will get a thorough understanding of the environmental pollution, its aspects, and characteristics, and become familiar with the international, European and German legal framework related to it.

- **Language:** English
- **ECTS:** 6 ECTS Points
- **Timeframe:** 2 SWS
- **Dates:** Thursday, 4 pm – 6 pm
- **Start date:** 15.04.2021 **End date:** 15.07.2021
- **Location:** online
- **Work format:** Lecture
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 12902

Human Ecology and Natural Sciences

WP 10 / 11 Biosciences and Anthropology A / B

PROF. DR. WOLFGANG FRANK, PROF. DR. DARIO LEISTER

Interactions of Plants and Environment (Lecture)

Plants as sessile organisms respond to adverse environmental conditions by a diversity of physiological acclimations. This lecture covers the basics in the interaction of plants with the environment and the specific responses to different kinds of stimuli and stresses. Acclimation mechanisms will be reviewed in depth to be able to teach biochemical and molecular mechanisms in more detail and to reinforce recurring mechanisms. The students will be able to integrate knowledge and deal with the complexity of plant acclimation and to apply these capabilities to more specialized courses. Interaction with the environment becomes an even more important topic in an era of climate changes. Understanding these impacts is one of the goals of this lecture.

- **Language:** English
- **ECTS:** 3 ECTS Points
- **Timeframe:** 2 SWS
- **Dates:** Mondays, 10.00 am – 11.30 am
- **Start date:** 19.04.2021 **End date:** 12.07.2021

- **Location:** online
- **Work format:** Lecture
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 19020

Please note: You can only gain 3 ECTS in this seminar and you need 6 ECTS to complete Content Area 4. Therefore, we would recommend visiting a second 3-ECTS-Seminar during this or the upcoming winter semester in Content Area 4 in order receive 6 ECTS in total.

Please register via LSF AND with envstudies@rcc.lmu.de stating your full name, Matrikelnummer, study program, current Fachsemester and study email.

PROF. DR. ULRICH SCHUMANN
Aviation and Climate (Lecture)

By the example of aviation we will look at the composition of the atmosphere, its climate and how it is influenced by emissions from anthropogenic sources.

Topics:

1. Introduction and overview
 2. Global air traffic and its emissions into the atmosphere
 3. Trace species in the atmosphere
 4. Nitrogen oxides and ozone
 5. Water vapor, contrails and contrail-induced cloud changes
 6. Aerosols and aerosol-induced cloud and ozone changes
 7. Aviation induced climate change, environmentally compatible air transport system, and research topics
- Ends with a test ("Klausur")

The lecture provides insights in applied climate sciences and recent research in physics and chemistry regarding the atmosphere.

- **Language:** English
- **ECTS:** 3 ECTS Points
- **Timeframe:** 2 SWS
- **Dates:** Tuesdays, 3:30 pm – 5 pm
- **Start date:** 20.04.2021 **End date:** 13.07.2021
- **Location:** online
- **Work format:** Lecture
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 17175

Please note: You can only gain 3 ECTS in this seminar and you need 6 ECTS to complete Content Area 4. Therefore, we would recommend visiting a second 3-ECTS-Seminar during this or the upcoming winter semester in Content Area 4 in order receive 6 ECTS in total.

Please register via LSF AND with envstudies@rcc.lmu.de stating your full name, Matrikelnummer, study program, current Fachsemester and study email.

PROF. DR. GISELA GRUPE
Historische Umweltforschung (Lecture)

Thema der Vorlesung ist die anthropogene Landschafts- und Umweltgestaltung im Holozän und die Langzeitwirkung dieser Eingriffe durch vorindustrielle Bevölkerungen. Natur- und kulturwissenschaftliche Erkenntnisse werden in integrativer Weise vorgestellt und die Landschafts- und Umweltentwicklung Europas sowie ausgewählter weiterer Standorte mit Implikationen für zukünftige Generationen nachvollzogen. Die Studierenden erfahren den historischen Hintergrund aktueller Umweltprobleme basierend auf der Nachhaltigkeit vorindustrieller Umwelteingriffe (Bodenexhaustion, Treibhauseffekt, Schwermetallbelastung...) einschließlich der inhaltlichen Ausfüllung von Begriffen wie Nachhaltigkeit und Langzeitrisiko.

- **Language:** German
- **ECTS:** 3 ECTS Points
- **Timeframe:** 2 SWS
- **Dates:** Mondays, 08.15 am – 09.45 am
- **Start date:** 12.04.2021 **End date:** 26.07.2021
- **Location:** online
- **Work format:** Lecture
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 19113

Please note: You can only gain 3 ECTS in this seminar and you need 6 ECTS to complete Content Area 4. Therefore, we would recommend visiting a second 3-ECTS-Seminar during this or the upcoming winter semester in Content Area 4 in order receive 6 ECTS in total.

Please register via LSF AND with envstudies@rcc.lmu.de stating your full name, Matrikelnummer, study program, current Fachsemester and study email.

DR. STOCKENREITER / DR. ZHANG / PROF. DR. STIBOR / PROF. DR. DINGEMANSE
Ökologie (Lecture)

Plants as sessile organisms respond to adverse environmental conditions by a diversity of physiological acclimations. This lecture covers the basics in the interaction of plants with the environment and the specific responses to different kinds of stimuli and stresses. Acclimation mechanisms will be reviewed in depth to be able to teach biochemical and molecular mechanisms in more detail and to reinforce recurring mechanisms. The students will be able to integrate knowledge and deal with the complexity of plant acclimation and to apply these capabilities to more specialized courses. Interaction with the environment becomes an even more important topic in an era of climate changes. Understanding these impacts is one of the goals of this lecture.

- **Language:** German
- **ECTS:** 3 ECTS Points
- **Timeframe:** 2 SWS
- **Dates:** Wednesdays, 8:30 am – 11:30 am
- **Start date:** 12.05.2020 **End date:** 23.06.2020
- **Location:** online
- **Work format:** Lecture
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 19076

Please note: You can only gain 3 ECTS in this seminar and you need 6 ECTS to complete Content Area 4. Therefore, we would recommend visiting a second 3-ECTS-Seminar during this or the upcoming winter semester in Content Area 4 in order receive 6 ECTS in total.

Please register via LSF AND with envstudies@rcc.lmu.de stating your full name, Matrikelnummer, study program, current Fachsemester and study email.

WP 9 / WP 13 Geography A / B

DR. FRANK TRIXLER, DR. KAI-UWE HESS

Geomaterialien in Technik und Umwelt (Lecture + Tutorial)

- **Language:** German
- **ECTS:** 6 ECTS Points
- **Timeframe:** 2 SWS
- **Dates:** Wednesdays, 10 am – 12 pm (Lecture)
Wednesdays, 12 pm – 2 pm (Tutorial)
- **Start date:** 14.04.2021 **End date:** 14.07.2021
- **Location:** online
- **Work format:** Lecture + Tutorial
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 20248 & 20249

Please register via envstudies@rcc.lmu.de stating your full name, Matrikelnummer, study program, current Fachsemester and study email.

PROF. DR. MATTHIAS GARSCHAGEN

Sustainable Management of Resources (Lecture + Tutorial)

This module covers key themes related to Geography and Sustainability. Topics related to the use and management of resources such as resource scarcity of water and energy and their connections with questions of land use receive particular attention. This is complemented by a focus on socio-economic aspects of sustainability and the application of multi- and interdisciplinary perspectives.

- **Language:** German
- **ECTS:** 6 ECTS Points
- **Timeframe:** 2 SWS
- **Dates:** Thursday, 2 pm – 4 pm
Tuesdays, 2 pm – 4 pm
- **Start date:** 15.04.2021 **End date:** 15.07.2021
13.04.2021 **End date:** 13.07.2021
- **Location:** online
- **Work format:** Lecture
- **Registration online:** 29.03.2021 **until** 12.04.2021
- **Belegnummer:** 20189 & 20194

Admission restriction: Unfortunately, we can only offer this course to 5 students enrolled in the ESCP. Please register, not via LSF, but with envstudies@rcc.lmu.de stating your full name, Matrikelnummer, study program, current Fachsemester and study email by March 31. We will choose 5 students by lottery.