

Modulhandbuch für den Studiengang Transformation Studies (universitäres Profil), Master of Arts, Prüfungsordnung 2024

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Module 14078 Master Thesis

assign to: Total Account

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14078	Mandatory

Modul Title	Master Thesis Masterarbeit
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Jaeger-Erben, Melanie
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	30
Learning Outcome	<p>The student can independently and critically deal with a problem of a theoretical or applied nature in the field of transformation studies within a set deadline, and propose scientifically founded solutions in this regard.</p> <p>They are able to present the results of their academic work in front of an audience, to recognise interrelationships in a specific research area and to respond to questions that may arise in this context.</p>
Contents	<p>The Master's examination consists of the written thesis and an oral examination.</p> <p>The topic of the Master's thesis is to be agreed upon by the candidate and a thesis supervisor from BTU. The student has the right to propose a thesis topic. This must be related to the chosen field of specification (socio-cultural, socio-economic and -institutional, socio-technical).</p>
Recommended Prerequisites	none
Mandatory Prerequisites	Students who have completed at least 72 LP in the Master Transformation Studies program at the time of registration can be admitted to the Master's thesis. The achievements must include the successful completion of at least two compulsory modules (see study and examination regulations) as well as the module Study Project.
Forms of Teaching and Proportion	Seminar - 30 hours per week per semester Self organised studies - 450 hours
Teaching Materials and Literature	Abhängig vom jeweilig definierten Thema
Module Examination	Continuous Assessment (MCA)

Assessment Mode for Module Examination	<ul style="list-style-type: none">• written thesis (75%)• defence (25%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	110304 Colloquium Medienwissenschaftliches Forschungskolloquium (für Bachelor- und Masterkandidaten) - 2 Hours per Term

Module 13922 Introduction to Transformation Studies

assign to: Mandatory Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13922	Mandatory

Modul Title	Introduction to Transformation Studies Einführung in Transformation Studies
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Jaeger-Erben, Melanie
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	Those who complete the module are prepared for the challenges of science in a changing world characterised by numerous upheavals and crises. They have in-depth knowledge of various concepts of transformation, for example in the context of megatrends such as post-industrialisation (decarbonisation, dematerialisation), digitalisation, postmodernism, in the context of political agendas such as Sustainable Development Goals, Climate Goals, Just Transitions and in the context of increasing polarisation about futures and development goals. They are familiar with transformation science, transformative research, transformation induction and transformative knowledge and are able to analyse transformation discourses and develop their own science-based position. They are able to use the Pecha Kucha method and write a paper review.
Contents	The 21st century with its multiple crises and disruptions is considered the age of the Great Transformation. Transformation describes specific forms of comprehensive change of far-reaching social, cultural and (infra-) structural system changes. In this context, it is crucial that questions of design and possibilities of control, for example through ex-novation, innovation, revolution or evolution, of these radical, structural and non-linear processes of upheaval in societies are researched and understood. The module aims to sensitize students to the complexity of transformation as a normative-strategic and analytical concept and, in the sense of transformation science (as distinct from transformative science), to introduce them to the knowledge of how transformation can be defined, conceptualised and researched and to provide them with tools for understanding and observing transformation.

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Brand, U. (2016). How to get out of the multiple crisis? Contours of a critical theory of social-ecological transformation. <i>Environmental Values</i>, 25(5), 503-525. • Shrivastava, P. et al. (2020) Transforming Sustainability Science to Generate Positive Social and Environmental Change Globally • Elmqvist, T. et al. (2029) Sustainability and resilience for transformation in the urban century • Bennett, N. J. (2019) Just Transformations to Sustainability • Scoones, I. et al. (2018) Transformations to Sustainability • Olsson, P. et al. (2014) Sustainability transformations: a resilience perspective • Patterson, J. et al. (2016) Exploring the governance and politics of transformations towards sustainability • Leal Filho, W. et al. (2018) The role of transformation in learning and education for sustainability
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • 3 Reflections of session content, 1000 words each (10% each). • 2 paper reviews, 2000 words each (20% each) • 1 group presentation as Pecha Kucha, 6:40 minutes each (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none"> • Lecture/ Seminar Introduction to Transformation Studies
Components to be offered in the Current Semester	No assignment

Module 13923 Transformation Theories

assign to: Mandatory Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13923	Mandatory

Modul Title	Transformation Theories Transformationstheorien
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Jaeger-Erben, Melanie
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	Upon successful completion, students will have profound knowledge of various theories of transformation and their origins. They engage in discussions and reflections on diverse theories, such as the theory of societal nature relations, social-ecological transformation, the great transformation, various collapse theories, and theories of real utopias and performative critique. They are able to contextualize these theories within the present time and engage in debates regarding pertinent evaluation criteria essential for transformations in the face of pressing crises, such as the climate catastrophe, biodiversity loss, and overexploitation of land. Furthermore, they comprehend the complexity of designing transformative solutions on a global scale and analyzing the different roles, including those of the state and niche actors. They can apply conceptual perspectives such as the multi-level perspective, the ecosystem approach or evolutionary innovation theory.
Contents	Transformation theories are relatively young in the history of science. Thus far, theory formation has mainly been concerned with the reproduction of social order. In contrast, due to the accumulating crises of our time, the scientific community is now called upon to further explore transformation and engage in theory building. This module aims to introduce students to existing transformation theories and discuss various approaches, for example, the differentiation of theories into transformation "by design" (as seen in the multi-level perspective or intervention approaches); "by disaster" (as in collapse theories); and transformation through real utopias and performative critique. In particular, the module emphasizes questions surrounding how transformations can be reflected, made accessible, justified, narrated or critiqued.

Recommended Prerequisites	Knowledge of the contents of module <ul style="list-style-type: none"> • 13922 Introduction to Transformation Studies
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Feola, G. Societal transformation in response to global environmental change: A review of emerging concepts. <i>Ambio</i> 44, 376–390 (2015). https://doi.org/10.1007/s13280-014-0582-z • S.E. Park, N.A. Marshall, E. Jakku, A.M. Dowd, S.M. Howden, E. Mendham, A. Fleming, Informing adaptation responses to climate change through theories of transformation, <i>Global Environmental Change</i>, Volume 22, Issue 1, 115-126, • Brand, U. (2016) “Transformation” as a new critical orthodoxy. The strategic use of the term “transformation” does not prevent multiple crises. <i>Gaia</i> 25(1): 23–27. • Persson, L., Carney Almroth, C. D. Collins, S. Cornell, C. de Wit, M. Diamond, P. Fantke, M. Hassellöv, M. MacLeod, M. Ryberg, P. Søgaard Jørgensen, P. Villarrubia-Gómez, Z. Wang, und M. Hauschild. 2022. Outside the safe operating space of the planetary boundary for novel entities. <i>Environmental Science & Technology</i> 56(3): 1510–1521. • Polanyi, K. (1944). <i>The Great Transformation</i>. Frankfurt a. M.: Suhrkamp. • Wright, E. O. (2017) <i>Real Utopias</i>. Sage
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • comparative theory essay, 5000 words, (40%) • 3 protocols of a theory reading circle, 1500 words each, (20% each).
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none"> • 510550 Transformation Theories (Vorlesung/ Seminar)
Components to be offered in the Current Semester	510550 Lecture/Seminar Transformation Theories - 4 Hours per Term

Module 13924 Transformation: Design and Methodologies

assign to: Mandatory Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13924	Mandatory

Modul Title	Transformation: Design and Methodologies
	Transformationsdesign und Methoden der Transformationsforschung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Jaeger-Erben, Melanie
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>Upon successful completion students have gained a comprehensive understanding of scientific-theoretical and methodological foundations of transformation research. They gained theoretical and practical knowledge of basic qualitative and quantitative methods of empirical research, such as exploratory data analysis, open coding, case comparison.</p> <p>Students acquired knowledge and practical experience in using specific formats of transformational science and transformative research, such as real-world experiments/labs, citizen science and transdisciplinarity. They have methodological competences in the development of research questions, methodological designs, presentation of results. Students have acquired inter- and transdisciplinary skills.</p>
Contents	<p>The module offers an introduction to and an overview of relevant methodological foundations of transformation research and transformative research. Basic qualitative and quantitative methods of empirical research, such as exploratory data analysis, open coding, case comparison or case studies are taught. Students conduct their own short studies in small groups during the module in order to apply what they have learned. The focus is on transdisciplinary methods and participatory formats.</p>
Recommended Prerequisites	<p>Knowledge of the contents of module</p> <ul style="list-style-type: none"> • 13922 <i>Introduction to Transformation Studies</i>
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Exercise - 2 hours per week per semester

	Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Hadorn, G. H., Hoffmann-Riem, H., Biber-Klemm, S., Grossenbacher-Mansuy, W., Joye, D., Pohl, C., ... & Zemp, E. (Eds.). (2008). <i>Handbook of transdisciplinary research</i> (Vol. 10, pp. 978-1). Dordrecht: Springer. Philipp, T., & Schmohl, T. (2023). <i>Handbook Transdisciplinary Learning</i> . Berlin: transcript.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Written study design, 1500-2000 words (20%)• 2 reflections/ theoretical memos on analysis sessions, 1500-2000 words (10% per reflection/ memo, 20% in total)• Pecha Kucha presentation on results, 7 min, or podcast, 20 min (30%)• Written test (multiple choice), 20 min (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	planned for the Master Transformation Studies
Module Components	<ul style="list-style-type: none">• Seminar Transformation Methodologies• Exercise Transformation Design
Components to be offered in the Current Semester	No assignment

Module 41514 Study Project

assign to: Mandatory Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	41514	Mandatory

Modul Title	Study Project Studienprojekt
Department	Faculty 2 - Environment and Natural Sciences
Responsible Staff Member	Prof. Dr. rer. nat. Beckmann, Michael
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	12
Learning Outcome	Within a study project the students work in details on a selected topic of preferably interdisciplinary nature. The main scope is the development of problem-solving skills by means of information gathering as well as the application of theoretical knowledge acquired in more formal classes. Students will organize their scientific research related to data acquisition, data analysis.
Contents	A study includes a project report with all factual information about the work in the project.
Recommended Prerequisites	Depending on the project topic knowledge in mathematics/statistics and/or social as well as natural sciences is advantageous.
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Consultation - 1 hours per week per semester Self organised studies - 345 hours
Teaching Materials and Literature	To be named by supervisor.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	Written project report with all factual information about the work (as hard copy and digital form) and a presentation. <ul style="list-style-type: none"> • Written report, 20-30 pages (75%) • Presentation of results (25%)
Evaluation of Module Examination	Performance Verification – graded

Limited Number of Participants	none
Remarks	None
Module Components	• 240215 Study project Study Project
Components to be offered in the Current Semester	240215 Study project Study Project

Module 12983 Climate Change and Migration

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	12983	Compulsory elective

Modul Title	Climate Change and Migration Klimawandel und Migration
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Associate Prof. (Univ. Damaskus) Dr. agr. Ibrahim, Bachar
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	After completion of this module, students will have a solid understanding of Climate Change and its impacts, especially on vulnerable countries. Students will further have the knowledge about various concepts and logical arguments linking climate change and migration.
Contents	<p>Part "Climate Change"</p> <ul style="list-style-type: none"> • Observations of change in the climate system • Critically assess the role of human activities in modern climate change • Assess future climate change scenarios and their potential impact on the Earth • climate change agenda and how this agenda impact on policy • Identify the Impacts and related Adaptation masures <p>Part "Migration"</p> <ul style="list-style-type: none"> • The potential link between climate change, migration, • The Task of defining 'climate refugee' • climate change contribution to the refugee problems • Gaps in the international legal framework • Individual and Collective Action on Mitigation <p>Lectures will be given live online and afterwards uploaded as a PDF on the moodle For the exercise, students have to solve a given problem. Students have to select a topic on moodle and register in the given table (maximum of 4 students per group).</p>
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Environment, forced migration and social vulnerability, T. Afifi, J. Jäger - 2010 - Springer • Climate change, human security and violent conflict: challenges for societal stability, J. Scheffran, M. Brzoska, H.G. Brauch, P.M. Link... - 2012 • People on the move in a changing climate: The regional impact of environmental change on migration, E. Piguët, F. Laczko - 2013 • Global migration governance, A. Betts - 2011 • Disentangling migration and climate change, T. Faist, J. Schade - 2013 - Springer • Climate change and migration: security and borders in a warming world, G. White – 2011- Oxford University Press
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Oral Exam, 30 min. (50%) • Two presentations on the a scientific topic (each 25%) <p>A pass mark is only achieved by obtaining at least 50% of the grade for each part of the module. The examination as well as the seminar part have to be passed (at least 50% in each) to pass the module.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	An annual excursion pertaining to the module may be organised. <i>Complementary Module in Master Environmental and Resource Management.</i>
Module Components	<ul style="list-style-type: none"> • Lecture • Seminar • Examination
Components to be offered in the Current Semester	<p>520223 Lecture Climate Change and Migration - 2 Hours per Term</p> <p>520224 Seminar Climate Change and Migration - 2 Hours per Term</p>

Module 13655 Un/DisCIPLining Knowledge: Technology, Science, and Society in Transformation

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13655	Compulsory elective

Modul Title	Un/DisCIPLining Knowledge: Technology, Science, and Society in Transformation Epistemischer Ungehorsam: Technik, Wissenschaft und Gesellschaft im Wandel
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	By the end of the module students are able to develop a research question within the academic field of Science and Technology Studies and create and present a research design, as well as identify and make use of appropriate sources of empirical material for your analysis, furthermore to identify, select and compare appropriate concepts and methods relating to an interdisciplinary research field and analyse changes in fields of science and technology with respect to knowledge forms.
Contents	This module presents central theories and approaches developed in Science and Technology Studies. The module focuses on questions about disciplining and undisciplining knowledge, the corresponding epistemic and ontological perspectives and the political economy of science. It explores concepts being concerned about shifting concepts of disciplinarity, such as interdisciplinarity, transdisciplinarity or postdisciplinarity.
Recommended Prerequisites	Knowledge from the courses <ul style="list-style-type: none"> • Technik in Wissenschaft und Gesellschaft • Philosophy of Science in Practice
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester

	Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature and learning materials are given in the course description.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• short scientific essay, max. 4000 words (45%)• scientific review, max. 2500 words (40%)• presentation, max. 15 minutes (15%) <p>The oral part of the examination can be done digitally or as a virtual meeting if the conditions for an examination in presence are not given.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	German-speaking teachers are available if required. Further information on this can be found in the course description.
Module Components	<ul style="list-style-type: none">• Seminar - 4 SWS
Components to be offered in the Current Semester	No assignment

Module 13656 What Material Culture? Transformative Processes in Technology and Art

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13656	Compulsory elective

Modul Title	What Material Culture? Transformative Processes in Technology and Art Welche materielle Kultur? Transformative Prozesse in Technik und Kunst
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After participating in this module, students understand theories on new materialism and object theories, as well as visualization and experimental techniques. They master media and creative technical skills, and can complete planning and execution of a project is successfully.
Contents	The question "What material culture?" has been raised since the 1990s with the emergence of the current of "new materialism". From various disciplinary perspectives, questions are asked about the relationships of humans to technology, nature and the environment in digital and analog space, and proposals for a new location are developed. This module represents a cross-sectional module that teaches basic cultural studies methods and theories for a disciplinarily heterogeneous group of students. Experimental formats in technology studies and in the arts will be explored and tested in practice. Special attention is paid to the exploration of transformative processes in urban public spaces, gardens and parks, current industrial sites (ports, open- cast mining) or industrial wastelands. A concept of student research in the sense of moving teaching and learning is implemented here.
Recommended Prerequisites	Interest in media technology and creativity techniques
Mandatory Prerequisites	none

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	To be announced during the first class meeting.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• project outline (20%)• presentation, 15 minute (20%)• written documentation of the project work, 2500-3000 words (60%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Lecture/Seminar - 4 SWS
Components to be offered in the Current Semester	No assignment

Module 13705 Sociology of Sustainable Development

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13705	Compulsory elective

Modul Title	Sociology of Sustainable Development Soziologie der nachhaltigen Entwicklung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13706 Justice and Diversity in Environmental Change

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13706	Compulsory elective

Modul Title	Justice and Diversity in Environmental Change
	Gerechtigkeit und Diversität im Kontext von Umweltveränderungen
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Jaeger-Erben, Melanie
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<ul style="list-style-type: none"> • Acquiring a profound understanding of different concepts on social justice and diversity in the context of environmental change, climate change and sustainable development. • Discussing and critically reflecting upon current issues related to environmental justice, such as resource conflicts, land-use change or environmental movements. • Methodological skills in reading and discussing academic texts, preparing Pecha Kucha presentations, and recording scientific podcasts.
Contents	<p>Environmental problems have the capacity to affect all of us. However, certain communities are disproportionately exposed to environmental hazards, such as air pollution. Also, some regions of the world (will) suffer much more from the implications of climate change. Environmental problems thus do not affect us all equally, or in the same way. Nor do we have equal power to decide solutions to these problems, or to take the necessary action to solve them. This unequal positioning, which often impose the greatest burdens upon marginalised, disadvantaged and less powerful populations, forms the central premise of environmental justice research and activism. The goal of this module is to gain a comprehensive understanding of social justice, environmental justice and diversity in environmentalism. The course introduces concepts such as environmental racism, climate justice, ecofeminism, and indigenous perspectives on environmental change. The theoretical perspectives introduced are applied to various environmental movements and resource conflicts all over the world.</p>

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Exercise - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Bell, K. (Ed.) (2021). Diversity and Inclusion in Environmentalism, Routledge. • Holifield, R., Chakraborty, J., Walker, G. (Eds.) (2018). The Routledge Handbook of Environmental Justice, Routledge. • Lele, S. et al. (Eds.) (2019). Rethinking environmentalism: Linking justice, sustainability, and diversity (Vol. 23). MIT Press. • Williams, J. (2021). Climate change is racist. Race, privilege and struggle for climate justice. Icon Books. <p>Further literature will be announced during class.</p>
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Reading assignments, 1.500-2.000 words (20%) • Reflections on sessions, 1.500-2.000 words (20%) • Pecha Kucha presentation, 6:40 Min (30%) • written test (multiple choice) (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	50
Remarks	none
Module Components	<ul style="list-style-type: none"> • Exercise Theoretical approaches to Justice and Diversity in Environmental Change • Seminar Justice and Diversity research and methods in the context of Environmental Change
Components to be offered in the Current Semester	No assignment

Module 13739 Anthropos in the Anthropocene

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13739	Compulsory elective

Modul Title	Anthropos in the Anthropocene Anthropos im Anthropozän
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13899 Urban Transformation / Urban Studies

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13899	Compulsory elective

Modul Title	Urban Transformation / Urban Studies Urban Transformation / Urban Studies
Department	Faculty 6 - Architecture, Civil Engineering and Urban Planning
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13904 Heritage and Transformation in Regional and Urban Studies

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13904	Compulsory elective

Modul Title	Heritage and Transformation in Regional and Urban Studies
	Kulturerbe und Transformation in der Regional- und Stadtforschung
Department	Faculty 6 - Architecture, Civil Engineering and Urban Planning
Responsible Staff Member	Prof. Dr. rer. pol. Gailing, Ludger
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>The aims of this module are:</p> <ul style="list-style-type: none"> • To understand regional and urban transformation processes and controversies around heritage in terms of e.g. spatial planning, governance and politics, built environment, socio-cultural, architectural traditions in the context of transformation processes. • To develop knowledge of the interfaces between heritage studies and regional and urban studies. • To critically interrogate “heritage” as a concept and its position in regional and urban development, grasping the interplay between material, cultural, economic and political dimensions in the making of regions and cities around the world
Contents	<p>Heritage is central to contemporary towns, cities and regions today. From industrial sites, through ancient ruins, to festivals heritage can be understood in terms of constituent elements of a city or region or it can be used more expansively to the city/ region in general as a spatial-cultural quality of e.g. an urban centre or regional landscape. Urban/ landscape heritage is central to policy, planning and politics, becoming embroiled in approaches to and conflicts over urbanisation, deindustrialisation, tourism, social and cultural identities and urban/ regional democracy. This module examines the spatial politics and geographies of heritage from regional and urban perspectives in the context of transformation processes. We consider how heritage can become central to overlapping discourses on these transformation</p>

processes as well as on identities, built environment, urban/ regional history and plans for the future of towns, cities and regions. We consider how heritage can contribute to spatial inequalities and conflicts over public space, identity, community and economic development. We engage critically with concepts of urban and regional heritage from their emergence in mid-20th century Europe. Empirically, we focus on diverse global contexts, in both the Global North (e.g. Western Europe, post-socialist countries) and South (Africa, Asia).

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	The bibliography will be presented in class.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • 20% Presentation (15 minutes per student) • 80% Research paper (3000-3500 words including references)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<i>Seminar Heritage and Transformation in Regional and Urban Studies</i>
Components to be offered in the Current Semester	640603 Seminar Heritage and Transformation in Regional and Urban Studies - 4 Hours per Term

Module 13927 Concepts of Social Criticism and Social Transformation

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13927	Compulsory elective

Modul Title	Concepts of Social Criticism and Social Transformation Konzepte von Gesellschaftskritik und sozialer Transformation
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Dr. phil. habil. Havlin, Tetiana
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<ul style="list-style-type: none"> • Students are familiar with historical discourses as well as theoretical concepts on social change, social criticism and social transformation in Political Theory and Social Philosophy including perspectives from Critical Theory, Radical Democratic Theory, Political Epistemology and Political Philosophy. • Students can apply these concepts in their own research and are able to use these concepts to analyse real-life examples. • Students are able to understand and critically examine 'classical' as well as contemporary texts. • Students can articulate and present their own perspective on course contents in an academically adequate and sound manner. • Students are able to write academically and are capable to orally present their ideas convincingly in an academic context.
Contents	<p>The module gives an overview of the development, critique and application of concepts of social criticism and social transformation. We will discuss the formation of key concepts and ideas such as "progress", "emancipation", "reform" and "revolution" in the Age of Enlightenment as well as their appropriation and subsequent critique in theoretical movements such as Critical Theory, Postmodernism and Postcolonialism.</p> <p>The module will then focus on contemporary ideas of social criticism and social change in Critical Theory, Radical Democratic Theory, Political Epistemology, Feminist Philosophy, Abolitionism and (possibly) other strands of the current theory landscape. We will explore how the approaches discussed may serve as building blocks for a theory of the transformation of contemporary societies in light of current economic</p>

and ecological crises and/or for the description of current blockades and impediments for such a transformation. Additionally, we will ask how the concepts discussed relate to conceptions of transformation in sociology and transformation science.

Recommended Prerequisites	Students have knowledge of at least one of the following modules <ul style="list-style-type: none">• 13922 Introduction to Transformation Studies• 13932 Transformation Theories
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature and teaching materials will be provided on moodle at start of the semester.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• One oral presentation (10 to 15 minutes) (10%)• Three writing assignments (750 to 1500 words per assignment) (30%)• A final essay (5000 to 10000 words) (60%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Seminar Critical Theories of Social Transformation
Components to be offered in the Current Semester	No assignment

Module 13945 Europe in Transformation

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13945	Compulsory elective

Modul Title	Europe in Transformation Europa im Wandel
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13946 Mobility and Digitalisation

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13946	Compulsory elective

Modul Title	Mobility and Digitalisation Mobilität und Digitalisierung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Dr. phil. habil. Havlin, Tetiana
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>This module provides sociological and cultural theory perspectives on the nexus between digitalization and mobility specifically in the context of current societal transformations.</p> <p>In the course of semester, students learn</p> <ul style="list-style-type: none"> • to understand current transformations of economy, society and politics, • to reflect on how both institutions and everyday settings are co-constituted by specific patterns of mobility, both in the international and domestic realms. • to understand and explain the central basic and advanced theoretical positions in the context of sociology of mobility, migration and digital cultures (cross-border mobilities, social inclusion and exclusion, postcolonialism, postsocialism, global and transnational relations) • to analyse and compare texts and apply their theories to social phenomena • to reflect their own positionality within the nexus mobilities and digitalization. • to present these positions and analyses in a concise manner
Contents	<p>This module provides sociological and cultural theory perspectives on the nexus between digitalization and mobility specifically in the context of current societal transformations.</p>

It teaches a variety of central theories and texts concerned with hierarchies and freedoms at the nexus of mobilities and digitalization. Digital technologies and networks change our perception of the world and our place therein. For example, digital technologies change borders, passport systems, work arrangements as well as how friendship and family networks organize their cross-border mobilities. They create new hierarchies, but also new freedoms. This module provides insights in how to analyse mobilities and digital culture from a critical sociological perspective sensitive to power, colonialities, hybridity, entanglement and difference. Digital mobility and immobility becomes understood as part of a complex global settings which spans beyond national boundaries.

Students will be introduced to a number of specialized research areas of research with reference to digitalization, digital cultures, migration, mobility and ethnicity/racialization research as well as further theories of social inequality. From a non-essentialist perspective, these address digitally generated and perpetuated social placement processes in relation to "race", class, gender, dis/ability and discuss their implications for privilege and disadvantage as well as the unequal distribution of life chances in the digital age on the basis of empirical examples.

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature will be provided in the moodle at the beginning of the semester
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ol style="list-style-type: none"> 1. Oral presentation 15 min (40%) 2. Essay: 10-15 pages (30 %) 3. Participation in exercises and discussions (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14148 Media in Transformation - Media Theory and Analysis

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14148	Compulsory elective

Modul Title	Media in Transformation - Media Theory and Analysis Medien im Wandel - Medientheorie und -analyse
Department	Faculty 1 - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology
Responsible Staff Member	Prof. Dr. phil. Petersen, Christer
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	After successfully completing the module, students have in-depth knowledge of methods for analysing text-based, visual and audiovisual formats. They are able to apply these methods in the context of media theory issues and thus gain a deeper understanding of analog and digital media communication. In addition they are able to critically analyze and theoretically model the changing social functions and effects of the media.
Contents	In-depth introduction to the methods of film and text analysis, methodology of media and cultural theory, as well as the philosophy and sociology of new and old, digital and analog media in their various forms and formats.
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Joachim Friedmann: Storytelling for Media: Introduction to the Theory and Practice of Narrative Design. München, Tübingen: UVK 2021. • Niklas Luhmann: Reality of the Mass Media. Hoboken, N.J.: Blackwell Publishers 2000. • Material is available for download on the Internet. More information at the beginning of course.

Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Successful completion of an essay of 10-20 pages or practical/project work of corresponding scope (60%)• Presentation of a research topic or a project work, approx. 20 minutes (40%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Seminar: Media in Transformation - Media Theory and Analysis Current Description
Components to be offered in the Current Semester	No assignment

Module 14466 Fit4Future Summer School

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14466	Compulsory elective

Modul Title	Fit4Future Summer School Fit4Future Sommerschule
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 37106 Social Change and Continuity

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	37106	Compulsory elective

Modul Title	Social Change and Continuity Sozialer Wandel und Kontinuität
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 37404 Culture and Globalisation

assign to: Specific Modules of Sociocultural Transformation

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	37404	Compulsory elective

Modul Title	Culture and Globalisation Kultur und Globalisierung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 11284 Advanced Studies of International Environmental Law

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	11284	Compulsory elective

Modul Title	Advanced Studies of International Environmental Law
	Internationales Umweltrecht für Fortgeschrittene
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. jur. Albrecht, Eike
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>After completing the module, students should be able to:</p> <ul style="list-style-type: none"> • Understand international environmental law and its role in the management of global environmental problems, • Identify and critically analyse issues pertaining to international environmental disputes, • Apply international environmental law in specific concrete cases, • Comprehend and evaluate the significance of international environmental law in protecting the environment and fostering international relations. <p>After completing the seminar, students will:</p> <ul style="list-style-type: none"> • Understand the way in which international agreements are achieved, • Understand the role various international actors play in decision making, • Have an understanding of the relevant actors who contribute to the outcome of international agreements, • Be able to make clear and convincing statements (orally and in written form), • Understand international decision-making procedures after playing an active role in a (simulated) negotiation process, • Have improved their skills in effectively arguing their case in relation to the topics discussed in class.
Contents	<p>Lecture: Advanced Studies of International Environmental Law</p> <ul style="list-style-type: none"> • Introduction to international law and international environmental law • Creation and development of international environmental law

- Implementation and enforcement strategies of international environmental agreements
- International environmental agreements with respect to the following topics:
 - Biodiversity (Biodiversity Convention/CITES/WHC).
 - Marine environment (Convention on the Law of the Sea)
 - Climate change (Climate Change Convention/Kyoto Protocol/Paris Agreement)
 - Ozone depletion (Convention for Protecting Ozone Layer/Montreal Protocol)
 - Toxic/hazardous substances (Basel Convention on Hazardous Waste)
 - Citizens rights to information, public participation and access to Justice

Seminar: International Negotiations and Environmental Decision-Making

- Challenges of international negotiations with a focus on climate change
- Actors of global environmental governance and international environmental decision-making
- State participation in global environmental governance
- The role of non-state actors in environmental decision-making and negotiations
- Simulation (role play) of an international conference (2 groups with maximum 35 students)

At the beginning of the semester, the students will be prepared to participate in a simulation of a multilateral negotiation process. (Climate Conference Simulation Groups). Each student in the simulation group will take the role of a relevant international player such as a country, an NGO, the private sector, or a subsidiary body. Participants will be required to prepare (in written and oral form) an assigned country/organisation engaged in the international environmental negotiation process to actively participate in the final role-play.

Recommended Prerequisites

Knowledge of the content of module:

- 41201 *International Environmental Law*

Mandatory Prerequisites

none

Forms of Teaching and Proportion

Lecture - 2 hours per week per semester
Seminar - 2 hours per week per semester
Self organised studies - 120 hours

Teaching Materials and Literature

- Birnie/Boyle/Redgwell, *International Law and the Environment*, 4th edition, Oxford University Press, 2021
- Knopp/Epstein/Hoffmann, *International and European Environmental Law with Reference to German Environmental Law – A Guide for International Study Programs*, 2nd edition, Berlin 2019

- Albrecht, Egute, Wanki, Ezeamama (Eds.), International environmental law (IEL) – Agreements and introduction. 6th expanded and updated edition, 2022.
- IPCC, 2022: Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.001.
- IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3-24 <https://doi.org/10.1017/9781009157940.001>.

Additional literature will be announced in class and made available on the Moodle page of the course.

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- **Written Exam, 120 minutes** (maximum 40 points)

And

Climate Conference Simulation Group:

- Paper for preparation of the climate conference, 2 pages (maximum 15 points)
- Simulation of a climate conference, 10 SWS (maximum 25 points)

or

Weekly seminars Group:

- 10 pages essay submission on topics related to environmental negotiations and decision-making (maximum 40 points)

To pass (grade 4,0) the module, students need to earn a minimum of 40 points.

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

none

Remarks

none

Module Components

- Lecture: Advanced Studies in International Environmental Law
- Seminar: International Negotiations and Environmental Decision-Making (including COTT COP blocked seminars)

Components to be offered in the
Current Semester

- Examination: Advanced Studies in International Environmental Law

520211 Lecture

Advanced Studies of International Environmental Law - 2 Hours per
Term

520219 Seminar

International Negotiations and Environmental Decision-Making - 2 Hours
per Term

520216 Examination

Advanced Studies of International Environmental Law - 2 Hours per
Term

Module 12983 Climate Change and Migration

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	12983	Compulsory elective

Modul Title	Climate Change and Migration Klimawandel und Migration
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Associate Prof. (Univ. Damaskus) Dr. agr. Ibrahim, Bachar
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	After completion of this module, students will have a solid understanding of Climate Change and its impacts, especially on vulnerable countries. Students will further have the knowledge about various concepts and logical arguments linking climate change and migration.
Contents	<p>Part "Climate Change"</p> <ul style="list-style-type: none"> • Observations of change in the climate system • Critically assess the role of human activities in modern climate change • Assess future climate change scenarios and their potential impact on the Earth • climate change agenda and how this agenda impact on policy • Identify the Impacts and related Adaptation masures <p>Part "Migration"</p> <ul style="list-style-type: none"> • The potential link between climate change, migration, • The Task of defining 'climate refugee' • climate change contribution to the refugee problems • Gaps in the international legal framework • Individual and Collective Action on Mitigation <p>Lectures will be given live online and afterwards uploaded as a PDF on the moodle For the exercise, students have to solve a given problem. Students have to select a topic on moodle and register in the given table (maximum of 4 students per group).</p>
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Environment, forced migration and social vulnerability, T. Afifi, J. Jäger - 2010 - Springer • Climate change, human security and violent conflict: challenges for societal stability, J. Scheffran, M. Brzoska, H.G. Brauch, P.M. Link... - 2012 • People on the move in a changing climate: The regional impact of environmental change on migration, E. Piguët, F. Laczko - 2013 • Global migration governance, A. Betts - 2011 • Disentangling migration and climate change, T. Faist, J. Schade - 2013 - Springer • Climate change and migration: security and borders in a warming world, G. White – 2011- Oxford University Press
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Oral Exam, 30 min. (50%) • Two presentations on the a scientific topic (each 25%) <p>A pass mark is only achieved by obtaining at least 50% of the grade for each part of the module. The examination as well as the seminar part have to be passed (at least 50% in each) to pass the module.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	An annual excursion pertaining to the module may be organised. <i>Complementary Module in Master Environmental and Resource Management.</i>
Module Components	<ul style="list-style-type: none"> • Lecture • Seminar • Examination
Components to be offered in the Current Semester	<p>520223 Lecture Climate Change and Migration - 2 Hours per Term</p> <p>520224 Seminar Climate Change and Migration - 2 Hours per Term</p>

Module 13109 Philosophy of Technology and Nature

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13109	Compulsory elective

Modul Title	Philosophy of Technology and Nature Technik- und Naturphilosophie
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>After passing the module, students should:</p> <ul style="list-style-type: none"> • understand main philosophical theories of “nature” • interrogate the concept of “nature” and to expose its numerous ideological and cultural manifestations. • identify the main ethical dimensions of “nature”, and their crosscultural and political dimensions. • gain insight into reading, writing, and visual practices about “nature” and understand the power of narratives and storytelling to shape our environmental present and future.
Contents	<p>What is “nature”? Is “nature” the same in all times and cultures? Is the “nature”/culture distinction still worth drawing? This module seeks to answer these and other questions, by approaching “nature” with various grounded historical and contemporary philosophical approaches. The module has two parts: „How to talk about “nature”?“ and „Living in the Anthropocene: concepts, models, and narratives in the climate crisis debate.“</p> <p>The module provides an overview on how “nature” reveals itself in various environmental debates. For example, the concept of “nature” was differently interpreted in ancient times, compared to modern contemporary cultures. We will probe the different usage, the scope of historical and cross-cultural depth, the semantics, the imageries, and finally, the logical coherence of “nature” concepts. This variety of topics means that the assigned readings will draw from a wide range of sources.</p> <p>With respect to handle current ecological and technocultural problems, a conscious reflection about “nature” seems to be required. Thus,</p>

the module should be also seen, in part, as a way to gain insight into reading and writing about “nature”. In this module, we will demonstrate the power of narratives and storytelling to understand and shape our environmental present and future.
Participation in the accompanying excursion is requested.

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	See course material in moodle.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • One short essay, max. 2 pages (20%) • Two reviews, max. 5 pages (each 25%) • 2 oral group presentations, about 15 min OR weekly submitted written answers to one short question on the topical readings to be determined by the instructor (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	Lectures and seminars in the corresponding field.
Components to be offered in the Current Semester	No assignment

Module 13234 Communication of Science and Technology

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13234	Compulsory elective

Modul Title	Communication of Science and Technology Wissenschafts- und Technikkommunikation
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13356 Global Change and Legal Response

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13356	Compulsory elective

Modul Title	Global Change and Legal Response Rechtsfragen Globaler Änderungsprozesse
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. jur. Albrecht, Eike
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>After completing the module, students are able to:</p> <ul style="list-style-type: none"> • Understand principles and procedures of international law and its role in the management of global changes, • Identify and critically analyse issues pertaining to international disputes, • Apply international law in specific concrete cases in the field of selected areas of global change • Comprehend and evaluate the significance of international law in managing global change processes. • Understand the way in which international agreements are achieved in specific areas, • Understand the role various international actors play in decision making, • Apply their understanding of international law and its implementation at the national level, • Demonstrate a basic outline of the key challenges, the relevant actors and the legal response
Contents	<ul style="list-style-type: none"> • Introduction to the principles, procedures and main actors in international law • Overview of the most relevant global changes (Climate Change; Loss of Biodiversity; Loss of Agricultural Land; Digitalisation; Migration; Waste; Chemical Substances; Rare substances (e.g. phosphor, etc.) • Outlook to developments of the future and its legal response
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Birnie/Boyle/Redgwell, International Law and the Environment, 4th edition, Oxford University Press, 2021 • Knopp/Epstein/Hoffmann, International and European Environmental Law with Reference to German Environmental Law – A Guide for International Study Programs, 2nd edition, Berlin 2019 • Albrecht, Egute, Wanki, Ezeamama (Eds.), International environmental law (IEL) – Agreements and introduction. 6th expanded and updated edition, 2022. • IPCC, 2022: Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.001. • IPCC, 2023. Climate Change 2023: Synthesis Report - Summary for Policymakers [Arias, P., Bustamante, M., Elgizouli, I., Flato, G., Howden, M., Méndez, C., Pereira, J., Pichs-Madruga, R., Rose, S.K., Saheb, Y., Sánchez, R., Ürge-Vorsatz, D., Xiao, C., Yassaa, N. (eds.)]. IPCC, Geneva, Switzerland • IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3-24 https://doi.org/10.1017/9781009157940.001. • German Advisory council on Global Change (2019): Towards our Common Digital Future. Berlin. WGBU. https://www.wbgu.de/en/publications/publication/towards-our-common-digital-future
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Written Exam, 120 minutes (maximum 40 points) • Presentation, 15 min. (maximum 20 points) <p>In the beginning of the semester the students choose one topic of determined areas of global change for group work and presentation To pass (grade 4,0) the module, students need to earn a minimum of 30 points.</p>
Evaluation of Module Examination	Performance Verification – graded

Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Lecture: Global Change and Legal Response• Seminar: Will be announced during the lecture• Examination: Global Change and Legal Response
Components to be offered in the Current Semester	No assignment

Module 13656 What Material Culture? Transformative Processes in Technology and Art

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13656	Compulsory elective

Modul Title	What Material Culture? Transformative Processes in Technology and Art Welche materielle Kultur? Transformative Prozesse in Technik und Kunst
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After participating in this module, students understand theories on new materialism and object theories, as well as visualization and experimental techniques. They master media and creative technical skills, and can complete planning and execution of a project is successfully.
Contents	The question "What material culture?" has been raised since the 1990s with the emergence of the current of "new materialism". From various disciplinary perspectives, questions are asked about the relationships of humans to technology, nature and the environment in digital and analog space, and proposals for a new location are developed. This module represents a cross-sectional module that teaches basic cultural studies methods and theories for a disciplinarily heterogeneous group of students. Experimental formats in technology studies and in the arts will be explored and tested in practice. Special attention is paid to the exploration of transformative processes in urban public spaces, gardens and parks, current industrial sites (ports, open- cast mining) or industrial wastelands. A concept of student research in the sense of moving teaching and learning is implemented here.
Recommended Prerequisites	Interest in media technology and creativity techniques
Mandatory Prerequisites	none

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	To be announced during the first class meeting.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• project outline (20%)• presentation, 15 minute (20%)• written documentation of the project work, 2500-3000 words (60%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Lecture/Seminar - 4 SWS
Components to be offered in the Current Semester	No assignment

Module 13659 Sustainability and Digitalisation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13659	Compulsory elective

Modul Title	Sustainability and Digitalisation Digitalisierung und Nachhaltigkeit
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13717 Decarbonisation of Industrial Processes

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13717	Compulsory elective

Modul Title	Decarbonisation of Industrial Processes Dekarbonisierung von Industrieprozessen
Department	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13795 Market Integration of Renewable Energies and Sector Coupling

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13795	Compulsory elective

Modul Title	Market Integration of Renewable Energies and Sector Coupling Marktintegration erneuerbarer Energien und Sektorenkopplung
Department	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
Responsible Staff Member	Prof. Dr. rer. nat. Ragwitz, Mario
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>The course gives a comprehensive overview of all relevant aspects of market integration of renewable energies including quantitative modelling based on the model PyPSA. Based on a detailed characterisation of the challenges of market integration the different flexibility options available within modern energy systems will be introduced and their impact on the market outcome will be assessed quantitatively. Furthermore, regulatory and policy choices will be addressed.</p> <p>After attending the module "Market Integration of Renewable Energies and Sector Coupling" the student will have a deeper understanding of the challenges and options of the integration of renewable energies into energy markets. Furthermore, the student will be familiar with the definition of sector coupling and the various technologies and organisational options for the integration of energy sectors. Students will understand the impact of the regulatory framework and technology choices on the market integration of renewable energies and will be able to apply methods and tools for analysis of energy markets.</p>
Contents	<ul style="list-style-type: none"> • Scenarios for the development of future energy systems • Definition and challenges of market integration of renewable energies • Instruments for market-based investment decisions and dispatch of renewable energies • Technology options for the integration of energy sectors • Flexibility options on the supply and demand side and based on based on storage technologies

- Value of flexibility at the energy market
- The role of grid infrastructures for the market integration of renewable energies
- Python Programming Fundamentals: Introduction to reading and writing Python code, focusing on important programming concepts necessary for energy modeling.
- Introduction to simulation and optimisation techniques in energy system modelling
- Methodologies for analyzing and managing datasets
- Policies for renewable energy sources in the power sector

Recommended Prerequisites

Participation at

- module 35303 - "Power System Economics I" and
- module 35401 - "Power System Economics II"

is strongly recommended

Mandatory Prerequisites

none

Forms of Teaching and Proportion

Lecture - 2 hours per week per semester
Exercise - 2 hours per week per semester
Seminar - 2 hours per week per semester
Self organised studies - 90 hours

Teaching Materials and Literature

- Script (slides)
- Reference books
- Agora Energiewende. 2018. Energiewende 2030: The Big Picture – Megatrends, Targets, Strategies and a 10-Point Agenda for the Second Phase of Germany's Energy Transition. Impulse. Berlin
- IEA (2022), World Energy Outlook 2022, IEA, Paris <https://www.iea.org/reports/world-energy-outlook-2022>
- IEA (2011), Integration of Renewables, IEA, Paris <https://www.iea.org/reports/integration-of-renewables>
- Winkler (2016)): Market integration of renewables in the electricity sector – impact on electricity markets and renewable support policy as well as interactions with system flexibility, Dissertation, University of Freiburg.
- JRC – Joint Research Centre (2020): Towards net-zero emissions in the EU energy system by 2050 – Insights from scenarios in line with the 2030 and 2050 ambitions of the European Green Deal. EUR 29981 EN. Publications Office of the European Union, Luxembourg, doi:10.2760/081488.
- Wietschel, M.; Held, A.; Pfluger, B.; Ragwitz, M. (2020): Energy integration across electricity, heating & cooling and the transport sector – Sector coupling. Fraunhofer ISI Working Paper Sustainability and Innovation, No. S 08/2020
- Energy sector magazines

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- Written examination, 60 minutes OR oral examination, 30 minutes (the lecturer decides and informs at the beginning of the course) 60 %
- 2 Seminar works including presentation (duration 15 minutes, presentation ca. 10 slides) 40 %

Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	20
Remarks	none
Module Components	<ul style="list-style-type: none">• VL Market Integration of Renewable Energies and Sector Coupling• Proj Market Integration of Renewable Energies and Sector Coupling
Components to be offered in the Current Semester	No assignment

Module 13796 Just Energy Transition

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13796	Compulsory elective

Modul Title	Just Energy Transition Energiewende gerecht gestalten
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13907 Anthropocene and Law

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13907	Compulsory elective

Modul Title	Anthropocene and Law Anthropozän und Recht
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. publ. Dr. h. c. Knopp, Lothar
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>As a result of participating in this module, you have</p> <ul style="list-style-type: none"> • knowledge of the Anthropocene concept as a proclaimed new geological age within the context of law <p>You are able</p> <ul style="list-style-type: none"> • to classify the Anthropocene concept in the sustainability discourse or to critically contrast it, • to critically question whether the state and its organization can cope with the Anthropocene, • derive potential consequences of the Anthropocene concept for the legal system, • to develop a one-semester study project based on what you have learned, • to create a well-founded presentation and to carry out a written elaboration on a context-related question.
Contents	The (none-legal) anthropocene concept and (legal) questions and answers: reducing human impact on the natural environment (mitigation); human adaptation to environmental changes; Possibilities and limits of technological influence on nature/environment, e.g. through geoengineering; Consequences of the Anthropocene concept for the legal organization of women and men in the state.
Recommended Prerequisites	none
Mandatory Prerequisites	none

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature and learning materials are given in the course description and will be announced within the first class meeting.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• project proposal, max. 3 pages (25 %)• final presentation, 15-25 min (15 %)• project report, min. 12 pages (60 %)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• NN - Lecture Anthropocene and Law• NN - Seminar Anthropocene and Law
Components to be offered in the Current Semester	No assignment

Module 13925 Alternative Economies

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13925	Compulsory elective

Modul Title	Alternative Economies Alternative Ökonomien
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Jaeger-Erben, Melanie
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	Upon successful completion, students will have a solid overview on heterodox economic theories (including feminist, post-Keynesian, ecological and political economy perspectives), and understand how they differ from neoclassical economics. They are skilled in discussing and critically reflecting upon the opportunities, limitations and the applicability of different economic concepts presented in class. Students will acquire methodological skills in researching, reading and discussing academic literature.
Contents	The multiple crises we are currently facing – in relation to climate, biodiversity, democracy, or social inequalities – require different economic perspectives and practices. In lectures and seminars, students will learn about the limits of the dominant neoclassical paradigm and gain an overview on heterodox economic schools. They will be introduced to concepts such as degrowth, care economy, economic democracy or social entrepreneurship. At the same time, this course will critically analyse fundamental aspects of current economies, such as money, growth, profits, work or the relation to nature, and discuss practical examples of alternative economies.
Recommended Prerequisites	Knowledge of the contents of module • 13922 <i>Introduction to Transformation Studies</i>
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester

Self organised studies - 120 hours

Teaching Materials and Literature

- Chang, H.-J. (2014). Economics: The User's Guide. Bloomsbury Publishing.
- Bauhardt, C. (2014). Solutions to the crisis? The Green New Deal, Degrowth, and the Solidarity Economy: Alternatives to the capitalist growth economy from an ecofeminist economics perspective. Ecological Economics 102, 60-68. <https://doi.org/10.1016/j.ecolecon.2014.03.015>
- The Foundational Economy Collective (2022). Foundational Economy. The infrastructure of everyday life. Manchester University Press.
- Raworth, K. (2017). Doughnut economics: seven ways to think like a 21st-century economist. London: Random House Business Books.
- Wellbeing Economy Alliance (2020). Wellbeing Economics for the COVID-19 recovery. Ten principles to build back better. Briefing Paper, https://serval.unil.ch/resource/serval:BIB_C2D492EC73DF.P001/REF.
- Kallis, G. et al. (2018). Research on Degrowth. Annual Review of Environment and Resources. 43:4.1–4.26. <https://doi.org/10.1146/annurev-environ-102017-025941>

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- Participation and reflection notebook, 1,500-2,000 words (30%)
- 4 short tests in class, 10 min. each (40%)
- Poster presentation in groups (15 min.) (30%)

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

40

Remarks

Module with limited number of participants - Registration two weeks prior to the commencement of lectures!

Module Components

none

Components to be offered in the Current Semester

510551 Lecture
Heterodox economic theories - 2 Hours per Term
510552 Seminar
Exploring cases of alternative economies - 2 Hours per Term

Module 13953 Economic Perspectives on Climate Neutrality

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13953	Compulsory elective

Modul Title	Economic Perspectives on Climate Neutrality Ökonomische Perspektiven der Klimaneutralität
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Hirschl, Bernd
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>Participants learn about different economic perspectives on climate neutrality.</p> <p>They will be able to describe different economic levels and distinguish their specifics: the individual, company, systemic, regional, macroeconomic and global levels.</p> <p>They will understand different CO2 accounting methods and be able to compare them.</p> <p>They know the relevant framework conditions and influencing factors that affect the economics of climate neutrality, including the political framework as well as technological and social influencing factors.</p>
Contents	<p>Among other things:</p> <ul style="list-style-type: none"> • Basics of climate neutrality - terms, concepts, political framework • macroeconomic aspects (e.g. costs, benefits, damages etc.) • economic aspects (e.g. economic efficiency in the context of political framework) • Distributional and equity aspects, social dimension (e.g. distribution of costs and benefits among different social groups, conception of relevant levies, investor-user dilemmas) • Regional economic effects (e.g. value-added and employment effects on site and prerequisites for this) • Systemic aspects and infrastructures (e.g. economic evaluation and sustainability of relevant infrastructures) • Energy economy in transition (including new actors and business models)
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Slides and working materials/literature will be announced in the lecture
Module Examination	Final Module Examination (MAP)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• 120 min written examination
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	20
Remarks	Please register your participation by email with the department before the start of the semester
Module Components	<ul style="list-style-type: none">• lecture with integrated seminar elements and exercises• examination
Components to be offered in the Current Semester	No assignment

Module 13957 Behavioural Economics

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13957	Compulsory elective

Modul Title	Behavioural Economics
	Verhaltensökonomie
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. oec. habil. Schnellenbach, Jan
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After completing this module, students will be able to apply behavioural economic models to analyse individual decisions. They can integrate psychological research approaches into economic models. They can independently develop and master advanced research approaches in the field of behavioural economics and have a solid understanding of the basics of empirical, including experimental, research methods in the field of behavioural economics. Furthermore, they will be able to critically analyse and evaluate economic policy proposals with a behavioral economics perspective.
Contents	<ul style="list-style-type: none"> • Homo Economicus: The economic concept of human behaviour • The economic theory of moral action • Behavioural anomalies: an overview • Bounded rationality • Dealing with risk and uncertainty • Prospect theory • Heuristics: Curse or blessing? • Fairness and social norms • Economic happiness research • Behavioural political economy • Behavioural public economics
Recommended Prerequisites	Good knowledge of microeconomics.
Mandatory Prerequisites	No successful participation in the corresponding discontinued module 11814 Behavioral Economics.

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Foundational literature: <ul style="list-style-type: none">• Angner, E. (2012). A Course in Behavioral Economics, Houndmills: Palgrave Macmillan.• Additional literature will be announced during the lecture. In the exercise: <ul style="list-style-type: none">• Wilkinson, N. and Klaes, M. (2012), An Introduction to Behavioral Economics. 2nd edition, Houndmills: Palgrave Macmillan.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Term paper with a maximum of 15.000 characters incl. spaces (roughly 6 pages), 50 points• Final exam, 40 minutes, 50 points.
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	This module is a successor module to the module „Behavioral Economics (11814)". Students who have already passed the module cannot take the module "Behavioral Economics (13957)" again.
Module Components	Behavioral Economics (Lecture) Behavioral Economics (Exercise)
Components to be offered in the Current Semester	No assignment

Module 13958 Economics of Innovation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13958	Compulsory elective

Modul Title	Economics of Innovation Innovationsökonomik
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. oec. habil. Schnellenbach, Jan
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Each winter semester even year
Credits	6
Learning Outcome	Students will understand how innovation can be explained from a microeconomic perspective. They will know the economic, institutional, and psychological prerequisites for entrepreneurial innovation. Upon successful completion of the module, students will be able to critically assess under which circumstances innovative entrepreneurial actions are positively evaluated and potentially eligible for economic policy support.
Contents	Innovation in the history of economic theory; Types of innovation; Competition and innovation; Organizational aspects of innovation; Political and institutional prerequisites for innovation; Diffusion of innovations; Innovation and economic growth; Innovations and societal welfare.
Recommended Prerequisites	Good knowledge of microeconomics.
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	G.M. Swann, The Economics of Innovation: An Introduction, Elgar, 2013 as well as additional articles and book chapters announced during the lecture
Module Examination	Continuous Assessment (MCA)

Assessment Mode for Module Examination	<ul style="list-style-type: none">• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50%)• Exam, 40 minutes, which can also be conducted digitally (50%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	No offer in the winter semester 2025/26.
Module Components	Innovation Economics Lecture - 2 hours per week Innovation Economics Exercise - 2 hours per week
Components to be offered in the Current Semester	No assignment

Module 13959 Law and Economics

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13959	Compulsory elective

Modul Title	Law and Economics Recht und Wirtschaft
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. oec. habil. Schnellenbach, Jan
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Each winter semester odd year
Credits	6
Learning Outcome	Students will gain an overview of the field of economic analysis of law, which involves analyzing legal rules from the perspective of economic theory. It focuses on the interaction of legal norms with the actions of private households and companies, as well as the impact of constitutional law on government actions. Students should learn to analyze legal norms in terms of their efficiency and economic effects, including microeconomic efficiency, as well as growth and distribution effects. They should also be able to assess why specific legal norms have developed historically as we know them today.
Contents	<ol style="list-style-type: none"> 1. Fundamentals of the theory of private property rights <ol style="list-style-type: none"> a) Historical development of private property b) Theories of the emergence of private property rights c) Economic analysis of common-pool resources d) Property rights in intangible assets 2. Economic analysis of contract law <ol style="list-style-type: none"> a) Complete and incomplete contracts b) Moral hazard and adverse selection c) Efficient responses to contract breaches 3. Economic analysis of tort law <ol style="list-style-type: none"> a) The Coase theorem b) Economic analysis of liability rules 4. Economic analysis of criminal law <ol style="list-style-type: none"> a) Differentiating between tort law and criminal law b) Deterrence effects of criminal law c) Optimal deterrence effects 5. Constitutional economics

- a) Fundamentals of the economic theory of public law
- b) Empirical analysis of the economic effects of constitutional rules

Recommended Prerequisites	Basic knowledge of microeconomics
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	H. Schäfer and C. Ott, Lehrbuch der ökonomischen Analyse des Zivilrechts, 5th edition, Heidelberg: Springer, 2012 Additional articles and book chapters announced during the lecture
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50% of the total grade)• Exam, 40 minutes (50% of the total grade)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	None
Module Components	Law & Economics Lecture - 2 hours per week Law & Economics Exercise - 2 hours per week
Components to be offered in the Current Semester	No assignment

Module 13960 Transformation: Law, Governance, Ethical Foundations

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13960	Compulsory elective

Modul Title	Transformation: Law, Governance, Ethical Foundations
	Transformation: Recht, Governance, ethische Grundlagen
Department	ZfRV - Centre for Law and Administration
Responsible Staff Member	Prof. Dr. jur. Albrecht, Eike
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>After completing the module, students are able to:</p> <ul style="list-style-type: none"> • Understand different kinds of transformation such as digital and sustainable transformation, • Understand the debate on transformation and social change in sociology, cultural studies, economics, social anthropology, • Critically strengths and weaknesses of different policy instruments such as economic instruments, regulatory law, self-regulation and informational instruments, • Discuss normative criteria for determining the overall objectives against which the effectiveness of instruments can be assessed (such as human rights or the Paris climate target), • Comprehend and evaluate the significance of the interdependencies of different human sciences and their contribution to sustainability science. • Understand the role of different legislative actors (including at EU level) • Have improved their skills in effectively arguing their case in relation to the topics discussed in class.
Contents	<p>Lecture: Transformation: Law, Governance, Ethical Foundations</p> <ul style="list-style-type: none"> • Introduction to research on transformation and social change in various disciplines of human sciences • Legal and ethical debate on objectives in terms of sustainability and digitalization, with a special focus on human rights and different concepts of freedom

- Strengths and weaknesses of various policy instruments (that necessarily have a legal shape – such as regulatory law, economic instruments, informational instruments, etc.)
- Special focus on the role of economic instruments
- Contribution of environmental litigation (especially climate litigation) to legal transformation processes
- Interaction of sustainable and digital transformation
- Challenges of EU legislation with a focus on sustainable and digital transformation
- Actors of EU sustainability governance and EU decision-making
- The role of non-state actors in sustainability and digitalization decision-making and negotiations
- Simulation (role play) of a legislation process (2 groups with maximum 35 students) or essay writing based on a topic discussed during the seminar

In the beginning of the semester the students choose to attend either a weekly seminar (2 hours per week) or take part in a simulation of a EU legislation process. Each student in this simulation group will take the role of a relevant EU player such as a DG of the COM, or an NGO, or another body. Participants will be required to prepare (in written and oral form) an assigned topic of EU sustainability or digitalization law in order to actively participate in the final role play.

Student in the weekly seminar (1 group with maximum 35 students) will attend seminars on a weekly basis and will be given topics for essay writing based on the topics discussed during the seminar. These essays have to be researched, articulated, and submitted independently by each student in the weekly seminar group.

Recommended Prerequisites

Knowledge of the content of module:
• 41201 *International Environmental Law*

Mandatory Prerequisites

none

Forms of Teaching and Proportion

Lecture - 2 hours per week per semester
Seminar - 2 hours per week per semester
Self organised studies - 120 hours

Teaching Materials and Literature

- Ekardt, Sustainability: Transformation, Governance, Ethics, Law, Springer, 2020
- Scholz, Environmental Literacy in Science and Society: From Knowledge to Decisions, Cambridge University Press, 2011

Additional literature will be announced in class and made available on the Moodle page of the course.

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- Written Exam, 60 minutes (maximum 40 points)

And

- Simulation Group:
 - Paper for preparation of the EU legislation process, 2 pages (maximum 15 points)

- Simulation of the legislation process, 10 SWS (maximum 25 points)

Or

- Weekly seminars Group:
 - 10 pages essay submission on topics related to environmental negotiations and decision-making (maximum 40 points)

To pass (grade 4,0) the module, students need to earn a minimum of 40 points.

Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	In the event that the module cannot be taught or examined according to this description (e.g., for infection control reasons), the alternatives communicated on relevant platforms (e.g., on the module homepage or Moodle) shall apply.
Module Components	Summerterm: NN - Lecture Transformation: Law, Governance, Ethical Foundations NN - Seminar Transformation: Law, Governance, Ethical Foundations
Components to be offered in the Current Semester	No assignment

Module 14069 Biomass and Bioenergy

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14069	Compulsory elective

Modul Title	Biomass and Bioenergy Biomasse und Bioenergie
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Hirschl, Bernd
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	Students are able to understand the multifunctionality of biomass and know the various pathways of biomass conversion into energy. They are prepared to have critical knowledge regarding biomass cultivation for energy generation by discussing social and environmental concerns, like land use or the competition with food chains. After attending the module, students have expertise in interpreting and presenting scientific texts.
Contents	Sustainable energy generation is seen as one of the largest present challenges of our society. The module "Biomass and Bioenergy" will discuss climate neutral energy systems, where biomass is a sustainable carbon neutral source of energy. This module is highly interdisciplinary. Topics will include: <ul style="list-style-type: none"> • Overview on biomass production (agriculture and forestry) • Biomass residual waste • Energy conversion technologies • Social and ecological aspects of biomass use • Current bioenergy policies
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	The following literature can be used for preparation:

- Book: Kaltschmitt, M., ed. (2018) Energy from Organic Materials (Biomass). A Volume in the Encyclopedia of Sustainability Science and Technology, 1439 p. Springer DOI:<https://doi.org/10.1007/978-1-4939-7813-7>
- Book: Srivastava, N., Verma, B. & Mishra, P.K., eds. 2023. Agroindustrial Waste for Green Fuel Application. Springer DOI:<https://doi.org/10.1007/978-981-19-6230-1>
- Journal “Biomass and Bioenergy” (Elsevier)
- Journal “Sustainable Energy Technologies and Assessments” (Elsevier)

Module Examination

Prerequisite + Final Module Examination (MAP)

Assessment Mode for Module Examination

Prerequisite:

- Presentation (15 minutes + discussion)

Final Module Examination:

- Written exam, 120 min

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

none

Remarks

Not offered in **summer semester 2026**.

Module Components

- Seminar: Biomass and Bioenergy
- Examination: Biomass and Bioenergy

Components to be offered in the Current Semester

538909 Examination
Biomass and Bioenergy (Wiederholungsprüfung)

Module 14132 Multidimensional Approaches for Technology Assessment

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14132	Compulsory elective

Modul Title	Multidimensional Approaches for Technology Assessment Multidimensionale Ansätze für Technikfolgenabschätzung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. pol. habil. Lee, Roh Pin
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>Students know about a range of technology assessment approaches, methodologies and tools to facilitate the evaluation of decarbonization & sustainability transformation options along socio-technological-economical-ecological-political (<i>STEEP</i>) dimensions.</p> <p>On completion of the module, students are able to:</p> <ul style="list-style-type: none"> • Demonstrate a deep understanding of the multidimensional aspects and systemic interactions in the transformation of energy- and carbon-intensive industries; • Gain familiarity with a range of qualitative and quantitative methodologies in conducting technology assessment; • Design and conduct studies to analyze the opportunities and challenges which will be associated with the transformation of energy- and carbon-intensive industries along multiple dimensions; • Identify, assess and evaluate appropriate sources of information and critically reflect on the methodologies commonly implemented for technology assessment and their usefulness/weaknesses.
Contents	<p>Course coverage:</p> <ul style="list-style-type: none"> • Relevance and development of technology assessment; • Common methodological approaches and their usefulness/weakness; • Data and approaches for assessment (e.g., primary vs. secondary; qualitative vs. quantitative); • Methodologies for socio-political evaluations, techno-economic evaluations and ecological evaluations;

	<ul style="list-style-type: none"> • Application on a case study to assess multidimensional opportunities and challenges associated with the transformation of a specific sector and derive implications along the <i>STEEP</i> dimensions based on assessment results.
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 1 hours per week per semester Exercise - 1 hours per week per semester Study project - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Lee, R.P., Meyer, B., Huang, Q.L, Voss, R. 2020. Sustainable waste management for zero waste cities in China: potential, challenges and opportunities. <i>Clean Energy</i>, 4(3): 169 – 201. • Lee, R.P. 2019. Alternative carbon feedstock for the chemical industry? – Assessing the challenges posed by the human dimension in the carbon transition, <i>Journal of Cleaner Production</i>, 219: 786-796. • Lee, R. P., Tschoepe, M., Voss, R. 2021. Perception of chemical recycling and its role in the transition towards a circular carbon economy: A case study in Germany. <i>Waste Management</i>, 125: 280-292. • Voss, R., Lee, R.P., Seidl, L., Keller, F., Fröhling, M. 2021. Global warming potential and economic performance of gasification-based chemical recycling and incineration pathways for residual municipal solid waste treatment in Germany. <i>Waste Management</i>, 134: 206 – 219. • Keller, F., Lee, R.P., Meyer, B. 2020. Life cycle assessment of global warming potential, resource depletion and acidification potential of fossil, renewable and secondary feedstock for olefin production in Germany. <i>Journal of Cleaner Production</i>, 250: 119484. • Lee, R.P., Scheibe, A. 2020. The politics of a carbon transition: An analysis of political indicators for a transformation in the German chemical industry, <i>Journal of Cleaner Production</i>, 244: 118629. <p>Further materials are provided via Moodle (including lecture slides and additional materials including videos, readings etc.)</p>
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Individual component (E-assessment), 60-90 min - 50% • Group Project - Part 1: Create a scientific poster (Analysis of e.g., a scientific article, industry report, case study, ...) - 25% • Group Project - Part 2: Presentation, 15min - 25%
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none"> • Lectures & Exercises • Projects

**Components to be offered in the
Current Semester**

510602 Lecture/Seminar
Multidimensional Approaches for Technology Assessment - 4 Hours per
Term

Module 14288 Psychology of Entrepreneurship and Change

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14288	Compulsory elective

Modul Title	Psychology of Entrepreneurship and Change Psychologie des Unternehmertums und Wandels
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. Urbig, Diemo
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After completing this module, students will understand how basic psychological theories of decision making under uncertainty, complex interdependence, and intertemporal dynamics help explain the behavior of individuals who drive change, such as entrepreneurs, innovators and social activists. They will have developed a basic understanding of key psychological and behavioral economic theories related to decision-making under risk and ambiguity. Identify and explain critical thinking and decision-making patterns in the work context. Students will be able to apply theories to real-world situations.
Contents	In this module, we venture into the specifics of a wide range of decision-making theories. We travel through a diverse collection of seminal theories, including many that have formed the basis of Nobel Prize-winning research. We emphasize the interdisciplinary application of insights to ensure that students from a variety of disciplines can absorb and apply the knowledge gained in this module to their own professional decision-making scenarios. The literature is presented in the lecture and students can afterwards read the literature in depth. The topics include: <ul style="list-style-type: none"> • Satisficing and dual process theories • Risk aversion and ambiguity aversion • Prospect theory and loss aversion • Mental accounting and choice bracketing • Risk reduction strategies: Hedging, learning, and real options • Time preferences

- Status-quo, escalation of commitment, and the not-invented-here effect
- Personal initiative, sensation seeking, and entrepreneurship
- Rational herding and individually irrational learning
- Nash equilibrium and individually irrational cooperation

The concepts and theories are presented in lectures.
Students practice their theory application skills by presenting and discussing critical issues and applications of these theories in seminar.

Recommended Prerequisites

none

Mandatory Prerequisites

No successful participation in modules "13811 Behavioral Resource Management" and "13514 Individuals in Transformation Processes".

Forms of Teaching and Proportion

Lecture - 2 hours per week per semester
Seminar - 2 hours per week per semester
Self organised studies - 120 hours

Teaching Materials and Literature

- Antons, D., & Piller, F. T. (2015). Opening the black box of "Not Invented Here": Attitudes, decision biases, and behavioral consequences. *Academy of Management Perspectives*, 29(2), 193-217.
- Bernardo, A. E., & Welch, I. (2001). On the evolution of overconfidence and entrepreneurs. *Journal of Economics & Management Strategy*, 10(3), 301-330.
- Bönnte, W., Urbig, D. (2019) *Connecting People and Knowledge: Knowledge Spillovers, Cognitive Biases, and Entrepreneurship* (Chapter 34). In: E. E. Lehmann, M. Keilbach (eds.), *From Industrial Organization to Entrepreneurship*. Springer, pp. 385-397.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462.
- Ellsberg, D. (1961). Risk, ambiguity, and the savage axioms. *The Quarterly Journal of Economics*, 75(4), 643-669.
- Evans, J. S. B., & Stanovich, K. E. (2013). Dual-process theories of higher cognition: Advancing the debate. *Perspectives on Psychological Science*, 8(3), 223-241.
- Fehr, E., & Schmidt, K. M. (1999). A theory of fairness, competition, and cooperation. *The Quarterly Journal of Economics*, 114(3), 817-868.
- Fox, C. R., & Tversky, A. (1995). Ambiguity aversion and comparative ignorance. *The Quarterly Journal of Economics*, 110(3), 585-603.
- Frederick, S., Loewenstein, G., & O'donoghue, T. (2002). Time discounting and time preference: A critical review. *Journal of Economic Literature*, 40(2), 351-401.
- Kahneman, D., Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. *Econometrica*, 47, 278.
- Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. *Psychological Bulletin*, 127(2), 267-286.
- Ostrom, E. (2000). Collective action and the evolution of social norms. *Journal of Economic Perspectives*, 14(3), 137-158.

- Read, D., Loewenstein, G., Rabin, M., Keren, G., & Laibson, D. (2000). Choice bracketing. In S. Barbera, P. Hammond, & C. Seidl (Eds.), *Elicitation of Preferences* (pp. 171–202). Springer.
- Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of Risk and Uncertainty*, 1(1), 7-59.
- Simon, H. A. (1955). A behavioural model of rational choice. *The Quarterly Journal of Economics*, 69(1), 99-118.
- Staw, B. M. (1981). The escalation of commitment to a course of action. *Academy of Management Review*, 6(4), 577-587.
- Thaler, R. (1985). Mental accounting and consumer choice. *Marketing Science*, 4(3), 199-214.
- Trigeorgis, L., & Reuer, J. J. (2017). Real options theory in strategic management. *Strategic Management Journal*, 38(1), 42-63:
- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 5(2), 207-232.
- Tversky, A., & Kahneman, D. (1991). Loss aversion in riskless choice: A reference-dependent model. *The Quarterly Journal of Economics*, 106(4), 1039-1061.

Module Examination

Final Module Examination (MAP)

Assessment Mode for Module Examination

- Written exam, 90 min, a third of the exam is specific to Bachelor-level and Master-level programs, with Master-level programs focusing on the reading of the original articles and Bachelor-level programs focusing on the lecture and tutorials only
- Bonus points of up to 10% for a graded theory-application paper (essay, 1200 to 1500 words)

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

none

Remarks

none

Module Components

Lecture/exercise/examination

Components to be offered in the Current Semester

530903 Examination
Psychology of Entrepreneurship and Change (Wiederholungsprüfung)

Module 14466 Fit4Future Summer School

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14466	Compulsory elective

Modul Title	Fit4Future Summer School Fit4Future Sommerschule
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14494 The Political Economy of Transformation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14494	Compulsory elective

Modul Title	The Political Economy of Transformation Die politische Ökonomie der Transformation
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14495 Optimization in Business Transformation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14495	Compulsory elective

Modul Title	Optimization in Business Transformation Optimierung der Unternehmensumwandlung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. pol. Xie, Lin
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	By the end of this course, students will be able to: <ol style="list-style-type: none"> 1. Understand Optimization Concepts 2. Formulate and Solve Optimization Problems 3. Apply Optimization to Business Scenarios 4. Utilize Optimization Tools and Software 5. Develop Critical Thinking and Analytical Skills 6. Connect Optimization with Business Transformation Goals
Contents	<ul style="list-style-type: none"> • Foundations of Optimization in Business • Linear Optimization Techniques • Integer Programming • Network Optimization • Standort- und Tourenplanung • Business Applications and Transformation
Recommended Prerequisites	<ul style="list-style-type: none"> • basic mathematical knowledge is desired, such as the content of Module 11112 <i>Mathematik IT-1</i>
Mandatory Prerequisites	None
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Winston W. L. Operations Research: Applications and Algorithms, fourth edition, Thomson, 2004

	Further materials are provided via Moodle (including lecture slides and additional materials including videos, readings etc.)
Module Examination	Final Module Examination (MAP)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Written Test, 90 minutes <p>Bonus points (10 % of total points) can be earned through the group assignment and will be added to your final score only if you pass the written test.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	150
Remarks	<i>Module with limited number of participants - Registration two weeks prior to the commencement of lectures!</i>
Module Components	Lecture and Exercise
Components to be offered in the Current Semester	531001 Lecture Optimization in Business Transformation - 2 Hours per Term 531002 Exercise Optimization in Business Transformation - 2 Hours per Term 531003 Examination Optimization in Business Transformation

Module 14498 International Marketing

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziokulturelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14498	Compulsory elective

Modul Title	International Marketing
	Internationales Marketing
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 11284 Advanced Studies of International Environmental Law

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	11284	Compulsory elective

Modul Title **Advanced Studies of International Environmental Law**

Internationales Umweltrecht für Fortgeschrittene

Department Faculty 5 - Business, Law and Social Sciences

Responsible Staff Member Prof. Dr. jur. Albrecht, Eike

Language of Teaching / Examination English

Duration 1 semester

Frequency of Offer Every summer semester

Credits 6

Learning Outcome

After completing the module, students should be able to:

- Understand international environmental law and its role in the management of global environmental problems,
- Identify and critically analyse issues pertaining to international environmental disputes,
- Apply international environmental law in specific concrete cases,
- Comprehend and evaluate the significance of international environmental law in protecting the environment and fostering international relations.

After completing the seminar, students will:

- Understand the way in which international agreements are achieved,
- Understand the role various international actors play in decision making,
- Have an understanding of the relevant actors who contribute to the outcome of international agreements,
- Be able to make clear and convincing statements (orally and in written form),
- Understand international decision-making procedures after playing an active role in a (simulated) negotiation process,
- Have improved their skills in effectively arguing their case in relation to the topics discussed in class.

Contents

Lecture: Advanced Studies of International Environmental Law

- Introduction to international law and international environmental law
- Creation and development of international environmental law

- Implementation and enforcement strategies of international environmental agreements
- International environmental agreements with respect to the following topics:
 - Biodiversity (Biodiversity Convention/CITES/WHC).
 - Marine environment (Convention on the Law of the Sea)
 - Climate change (Climate Change Convention/Kyoto Protocol/Paris Agreement)
 - Ozone depletion (Convention for Protecting Ozone Layer/Montreal Protocol)
 - Toxic/hazardous substances (Basel Convention on Hazardous Waste)
 - Citizens rights to information, public participation and access to Justice

Seminar: International Negotiations and Environmental Decision-Making

- Challenges of international negotiations with a focus on climate change
- Actors of global environmental governance and international environmental decision-making
- State participation in global environmental governance
- The role of non-state actors in environmental decision-making and negotiations
- Simulation (role play) of an international conference (2 groups with maximum 35 students)

At the beginning of the semester, the students will be prepared to participate in a simulation of a multilateral negotiation process. (Climate Conference Simulation Groups). Each student in the simulation group will take the role of a relevant international player such as a country, an NGO, the private sector, or a subsidiary body. Participants will be required to prepare (in written and oral form) an assigned country/organisation engaged in the international environmental negotiation process to actively participate in the final role-play.

Recommended Prerequisites

Knowledge of the content of module:

- 41201 *International Environmental Law*

Mandatory Prerequisites

none

Forms of Teaching and Proportion

Lecture - 2 hours per week per semester
Seminar - 2 hours per week per semester
Self organised studies - 120 hours

Teaching Materials and Literature

- Birnie/Boyle/Redgwell, *International Law and the Environment*, 4th edition, Oxford University Press, 2021
- Knopp/Epstein/Hoffmann, *International and European Environmental Law with Reference to German Environmental Law – A Guide for International Study Programs*, 2nd edition, Berlin 2019

- Albrecht, Egute, Wanki, Ezeamama (Eds.), International environmental law (IEL) – Agreements and introduction. 6th expanded and updated edition, 2022.
- IPCC, 2022: Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.001.
- IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3-24 <https://doi.org/10.1017/9781009157940.001>.

Additional literature will be announced in class and made available on the Moodle page of the course.

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- **Written Exam, 120 minutes** (maximum 40 points)

And

Climate Conference Simulation Group:

- Paper for preparation of the climate conference, 2 pages (maximum 15 points)
- Simulation of a climate conference, 10 SWS (maximum 25 points)

or

Weekly seminars Group:

- 10 pages essay submission on topics related to environmental negotiations and decision-making (maximum 40 points)

To pass (grade 4,0) the module, students need to earn a minimum of 40 points.

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

none

Remarks

none

Module Components

- Lecture: Advanced Studies in International Environmental Law
- Seminar: International Negotiations and Environmental Decision-Making (including COTTCOP blocked seminars)

Components to be offered in the
Current Semester

- Examination: Advanced Studies in International Environmental Law

520211 Lecture

Advanced Studies of International Environmental Law - 2 Hours per Term

520219 Seminar

International Negotiations and Environmental Decision-Making - 2 Hours per Term

520216 Examination

Advanced Studies of International Environmental Law - 2 Hours per Term

Module 12983 Climate Change and Migration

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	12983	Compulsory elective

Modul Title	Climate Change and Migration Klimawandel und Migration
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Associate Prof. (Univ. Damaskus) Dr. agr. Ibrahim, Bachar
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	After completion of this module, students will have a solid understanding of Climate Change and its impacts, especially on vulnerable countries. Students will further have the knowledge about various concepts and logical arguments linking climate change and migration.
Contents	<p>Part "Climate Change"</p> <ul style="list-style-type: none"> • Observations of change in the climate system • Critically assess the role of human activities in modern climate change • Assess future climate change scenarios and their potential impact on the Earth • climate change agenda and how this agenda impact on policy • Identify the Impacts and related Adaptation masures <p>Part "Migration"</p> <ul style="list-style-type: none"> • The potential link between climate change, migration, • The Task of defining 'climate refugee' • climate change contribution to the refugee problems • Gaps in the international legal framework • Individual and Collective Action on Mitigation <p>Lectures will be given live online and afterwards uploaded as a PDF on the moodle For the exercise, students have to solve a given problem. Students have to select a topic on moodle and register in the given table (maximum of 4 students per group).</p>
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Environment, forced migration and social vulnerability, T. Afifi, J. Jäger - 2010 - Springer • Climate change, human security and violent conflict: challenges for societal stability, J. Scheffran, M. Brzoska, H.G. Brauch, P.M. Link... - 2012 • People on the move in a changing climate: The regional impact of environmental change on migration, E. Piguët, F. Laczko - 2013 • Global migration governance, A. Betts - 2011 • Disentangling migration and climate change, T. Faist, J. Schade - 2013 - Springer • Climate change and migration: security and borders in a warming world, G. White – 2011- Oxford University Press
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Oral Exam, 30 min. (50%) • Two presentations on the a scientific topic (each 25%) <p>A pass mark is only achieved by obtaining at least 50% of the grade for each part of the module. The examination as well as the seminar part have to be passed (at least 50% in each) to pass the module.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	An annual excursion pertaining to the module may be organised. <i>Complementary Module in Master Environmental and Resource Management.</i>
Module Components	<ul style="list-style-type: none"> • Lecture • Seminar • Examination
Components to be offered in the Current Semester	<p>520223 Lecture Climate Change and Migration - 2 Hours per Term</p> <p>520224 Seminar Climate Change and Migration - 2 Hours per Term</p>

Module 13356 Global Change and Legal Response

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13356	Compulsory elective

Modul Title	Global Change and Legal Response Rechtsfragen Globaler Änderungsprozesse
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. jur. Albrecht, Eike
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>After completing the module, students are able to:</p> <ul style="list-style-type: none"> • Understand principles and procedures of international law and its role in the management of global changes, • Identify and critically analyse issues pertaining to international disputes, • Apply international law in specific concrete cases in the field of selected areas of global change • Comprehend and evaluate the significance of international law in managing global change processes. • Understand the way in which international agreements are achieved in specific areas, • Understand the role various international actors play in decision making, • Apply their understanding of international law and its implementation at the national level, • Demonstrate a basic outline of the key challenges, the relevant actors and the legal response
Contents	<ul style="list-style-type: none"> • Introduction to the principles, procedures and main actors in international law • Overview of the most relevant global changes (Climate Change; Loss of Biodiversity; Loss of Agricultural Land; Digitalisation; Migration; Waste; Chemical Substances; Rare substances (e.g. phosphor, etc.) • Outlook to developments of the future and its legal response
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Birnie/Boyle/Redgwell, International Law and the Environment, 4th edition, Oxford University Press, 2021 • Knopp/Epstein/Hoffmann, International and European Environmental Law with Reference to German Environmental Law – A Guide for International Study Programs, 2nd edition, Berlin 2019 • Albrecht, Egute, Wanki, Ezeamama (Eds.), International environmental law (IEL) – Agreements and introduction. 6th expanded and updated edition, 2022. • IPCC, 2022: Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.001. • IPCC, 2023. Climate Change 2023: Synthesis Report - Summary for Policymakers [Arias, P., Bustamante, M., Elgizouli, I., Flato, G., Howden, M., Méndez, C., Pereira, J., Pichs-Madruga, R., Rose, S.K., Saheb, Y., Sánchez, R., Ürge-Vorsatz, D., Xiao, C., Yassaa, N. (eds.)]. IPCC, Geneva, Switzerland • IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3-24 https://doi.org/10.1017/9781009157940.001. • German Advisory council on Global Change (2019): Towards our Common Digital Future. Berlin. WGBU. https://www.wbgu.de/en/publications/publication/towards-our-common-digital-future
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Written Exam, 120 minutes (maximum 40 points) • Presentation, 15 min. (maximum 20 points) <p>In the beginning of the semester the students choose one topic of determined areas of global change for group work and presentation To pass (grade 4,0) the module, students need to earn a minimum of 30 points.</p>
Evaluation of Module Examination	Performance Verification – graded

Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Lecture: Global Change and Legal Response• Seminar: Will be announced during the lecture• Examination: Global Change and Legal Response
Components to be offered in the Current Semester	No assignment

Module 13907 Anthropocene and Law

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13907	Compulsory elective

Modul Title	Anthropocene and Law Anthropozän und Recht
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. publ. Dr. h. c. Knopp, Lothar
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>As a result of participating in this module, you have</p> <ul style="list-style-type: none"> • knowledge of the Anthropocene concept as a proclaimed new geological age within the context of law <p>You are able</p> <ul style="list-style-type: none"> • to classify the Anthropocene concept in the sustainability discourse or to critically contrast it, • to critically question whether the state and its organization can cope with the Anthropocene, • derive potential consequences of the Anthropocene concept for the legal system, • to develop a one-semester study project based on what you have learned, • to create a well-founded presentation and to carry out a written elaboration on a context-related question.
Contents	The (none-legal) anthropocene concept and (legal) questions and answers: reducing human impact on the natural environment (mitigation); human adaptation to environmental changes; Possibilities and limits of technological influence on nature/environment, e.g. through geoengineering; Consequences of the Anthropocene concept for the legal organization of women and men in the state.
Recommended Prerequisites	none
Mandatory Prerequisites	none

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature and learning materials are given in the course description and will be announced within the first class meeting.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• project proposal, max. 3 pages (25 %)• final presentation, 15-25 min (15 %)• project report, min. 12 pages (60 %)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• NN - Lecture Anthropocene and Law• NN - Seminar Anthropocene and Law
Components to be offered in the Current Semester	No assignment

Module 13925 Alternative Economies

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13925	Compulsory elective

Modul Title	Alternative Economies Alternative Ökonomien
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Jaeger-Erben, Melanie
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	Upon successful completion, students will have a solid overview on heterodox economic theories (including feminist, post-Keynesian, ecological and political economy perspectives), and understand how they differ from neoclassical economics. They are skilled in discussing and critically reflecting upon the opportunities, limitations and the applicability of different economic concepts presented in class. Students will acquire methodological skills in researching, reading and discussing academic literature.
Contents	The multiple crises we are currently facing – in relation to climate, biodiversity, democracy, or social inequalities – require different economic perspectives and practices. In lectures and seminars, students will learn about the limits of the dominant neoclassical paradigm and gain an overview on heterodox economic schools. They will be introduced to concepts such as degrowth, care economy, economic democracy or social entrepreneurship. At the same time, this course will critically analyse fundamental aspects of current economies, such as money, growth, profits, work or the relation to nature, and discuss practical examples of alternative economies.
Recommended Prerequisites	Knowledge of the contents of module • 13922 <i>Introduction to Transformation Studies</i>
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester

Self organised studies - 120 hours

Teaching Materials and Literature

- Chang, H.-J. (2014). Economics: The User's Guide. Bloomsbury Publishing.
- Bauhardt, C. (2014). Solutions to the crisis? The Green New Deal, Degrowth, and the Solidarity Economy: Alternatives to the capitalist growth economy from an ecofeminist economics perspective. Ecological Economics 102, 60-68. <https://doi.org/10.1016/j.ecolecon.2014.03.015>
- The Foundational Economy Collective (2022). Foundational Economy. The infrastructure of everyday life. Manchester University Press.
- Raworth, K. (2017). Doughnut economics: seven ways to think like a 21st-century economist. London: Random House Business Books.
- Wellbeing Economy Alliance (2020). Wellbeing Economics for the COVID-19 recovery. Ten principles to build back better. Briefing Paper, https://serval.unil.ch/resource/serval:BIB_C2D492EC73DF.P001/REF.
- Kallis, G. et al. (2018). Research on Degrowth. Annual Review of Environment and Resources. 43:4.1–4.26. <https://doi.org/10.1146/annurev-environ-102017-025941>

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- Participation and reflection notebook, 1,500-2,000 words (30%)
- 4 short tests in class, 10 min. each (40%)
- Poster presentation in groups (15 min.) (30%)

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

40

Remarks

Module with limited number of participants - Registration two weeks prior to the commencement of lectures!

Module Components

none

Components to be offered in the Current Semester

510551 Lecture
Heterodox economic theories - 2 Hours per Term
510552 Seminar
Exploring cases of alternative economies - 2 Hours per Term

Module 13953 Economic Perspectives on Climate Neutrality

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13953	Compulsory elective

Modul Title	Economic Perspectives on Climate Neutrality Ökonomische Perspektiven der Klimaneutralität
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Hirschl, Bernd
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>Participants learn about different economic perspectives on climate neutrality.</p> <p>They will be able to describe different economic levels and distinguish their specifics: the individual, company, systemic, regional, macroeconomic and global levels.</p> <p>They will understand different CO2 accounting methods and be able to compare them.</p> <p>They know the relevant framework conditions and influencing factors that affect the economics of climate neutrality, including the political framework as well as technological and social influencing factors.</p>
Contents	<p>Among other things:</p> <ul style="list-style-type: none"> • Basics of climate neutrality - terms, concepts, political framework • macroeconomic aspects (e.g. costs, benefits, damages etc.) • economic aspects (e.g. economic efficiency in the context of political framework) • Distributional and equity aspects, social dimension (e.g. distribution of costs and benefits among different social groups, conception of relevant levies, investor-user dilemmas) • Regional economic effects (e.g. value-added and employment effects on site and prerequisites for this) • Systemic aspects and infrastructures (e.g. economic evaluation and sustainability of relevant infrastructures) • Energy economy in transition (including new actors and business models)
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Slides and working materials/literature will be announced in the lecture
Module Examination	Final Module Examination (MAP)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• 120 min written examination
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	20
Remarks	Please register your participation by email with the department before the start of the semester
Module Components	<ul style="list-style-type: none">• lecture with integrated seminar elements and exercises• examination
Components to be offered in the Current Semester	No assignment

Module 13957 Behavioural Economics

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13957	Compulsory elective

Modul Title	Behavioural Economics Verhaltensökonomie
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. oec. habil. Schnellenbach, Jan
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After completing this module, students will be able to apply behavioural economic models to analyse individual decisions. They can integrate psychological research approaches into economic models. They can independently develop and master advanced research approaches in the field of behavioural economics and have a solid understanding of the basics of empirical, including experimental, research methods in the field of behavioural economics. Furthermore, they will be able to critically analyse and evaluate economic policy proposals with a behavioral economics perspective.
Contents	<ul style="list-style-type: none"> • Homo Economicus: The economic concept of human behaviour • The economic theory of moral action • Behavioural anomalies: an overview • Bounded rationality • Dealing with risk and uncertainty • Prospect theory • Heuristics: Curse or blessing? • Fairness and social norms • Economic happiness research • Behavioural political economy • Behavioural public economics
Recommended Prerequisites	Good knowledge of microeconomics.
Mandatory Prerequisites	No successful participation in the corresponding discontinued module 11814 Behavioral Economics.

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Foundational literature: <ul style="list-style-type: none">• Angner, E. (2012). A Course in Behavioral Economics, Houndmills: Palgrave Macmillan.• Additional literature will be announced during the lecture. In the exercise: <ul style="list-style-type: none">• Wilkinson, N. and Klaes, M. (2012), An Introduction to Behavioral Economics. 2nd edition, Houndmills: Palgrave Macmillan.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Term paper with a maximum of 15.000 characters incl. spaces (roughly 6 pages), 50 points• Final exam, 40 minutes, 50 points.
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	This module is a successor module to the module „Behavioral Economics (11814)". Students who have already passed the module cannot take the module "Behavioral Economics (13957)" again.
Module Components	Behavioral Economics (Lecture) Behavioral Economics (Exercise)
Components to be offered in the Current Semester	No assignment

Module 13958 Economics of Innovation

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13958	Compulsory elective

Modul Title	Economics of Innovation Innovationsökonomik
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. oec. habil. Schnellenbach, Jan
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Each winter semester even year
Credits	6
Learning Outcome	Students will understand how innovation can be explained from a microeconomic perspective. They will know the economic, institutional, and psychological prerequisites for entrepreneurial innovation. Upon successful completion of the module, students will be able to critically assess under which circumstances innovative entrepreneurial actions are positively evaluated and potentially eligible for economic policy support.
Contents	Innovation in the history of economic theory; Types of innovation; Competition and innovation; Organizational aspects of innovation; Political and institutional prerequisites for innovation; Diffusion of innovations; Innovation and economic growth; Innovations and societal welfare.
Recommended Prerequisites	Good knowledge of microeconomics.
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	G.M. Swann, The Economics of Innovation: An Introduction, Elgar, 2013 as well as additional articles and book chapters announced during the lecture
Module Examination	Continuous Assessment (MCA)

Assessment Mode for Module Examination	<ul style="list-style-type: none">• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50%)• Exam, 40 minutes, which can also be conducted digitally (50%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	No offer in the winter semester 2025/26.
Module Components	Innovation Economics Lecture - 2 hours per week Innovation Economics Exercise - 2 hours per week
Components to be offered in the Current Semester	No assignment

Module 13959 Law and Economics

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13959	Compulsory elective

Modul Title	Law and Economics Recht und Wirtschaft
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. oec. habil. Schnellenbach, Jan
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Each winter semester odd year
Credits	6
Learning Outcome	Students will gain an overview of the field of economic analysis of law, which involves analyzing legal rules from the perspective of economic theory. It focuses on the interaction of legal norms with the actions of private households and companies, as well as the impact of constitutional law on government actions. Students should learn to analyze legal norms in terms of their efficiency and economic effects, including microeconomic efficiency, as well as growth and distribution effects. They should also be able to assess why specific legal norms have developed historically as we know them today.
Contents	<ol style="list-style-type: none"> 1. Fundamentals of the theory of private property rights <ol style="list-style-type: none"> a) Historical development of private property b) Theories of the emergence of private property rights c) Economic analysis of common-pool resources d) Property rights in intangible assets 2. Economic analysis of contract law <ol style="list-style-type: none"> a) Complete and incomplete contracts b) Moral hazard and adverse selection c) Efficient responses to contract breaches 3. Economic analysis of tort law <ol style="list-style-type: none"> a) The Coase theorem b) Economic analysis of liability rules 4. Economic analysis of criminal law <ol style="list-style-type: none"> a) Differentiating between tort law and criminal law b) Deterrence effects of criminal law c) Optimal deterrence effects 5. Constitutional economics

- a) Fundamentals of the economic theory of public law
- b) Empirical analysis of the economic effects of constitutional rules

Recommended Prerequisites	Basic knowledge of microeconomics
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	H. Schäfer and C. Ott, Lehrbuch der ökonomischen Analyse des Zivilrechts, 5th edition, Heidelberg: Springer, 2012 Additional articles and book chapters announced during the lecture
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50% of the total grade)• Exam, 40 minutes (50% of the total grade)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	None
Module Components	Law & Economics Lecture - 2 hours per week Law & Economics Exercise - 2 hours per week
Components to be offered in the Current Semester	No assignment

Module 13960 Transformation: Law, Governance, Ethical Foundations

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13960	Compulsory elective

Modul Title	Transformation: Law, Governance, Ethical Foundations Transformation: Recht, Governance, ethische Grundlagen
Department	ZfRV - Centre for Law and Administration
Responsible Staff Member	Prof. Dr. jur. Albrecht, Eike
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>After completing the module, students are able to:</p> <ul style="list-style-type: none"> • Understand different kinds of transformation such as digital and sustainable transformation, • Understand the debate on transformation and social change in sociology, cultural studies, economics, social anthropology, • Critically strengths and weaknesses of different policy instruments such as economic instruments, regulatory law, self-regulation and informational instruments, • Discuss normative criteria for determining the overall objectives against which the effectiveness of instruments can be assessed (such as human rights or the Paris climate target), • Comprehend and evaluate the significance of the interdependencies of different human sciences and their contribution to sustainability science. • Understand the role of different legislative actors (including at EU level) • Have improved their skills in effectively arguing their case in relation to the topics discussed in class.
Contents	<p>Lecture: Transformation: Law, Governance, Ethical Foundations</p> <ul style="list-style-type: none"> • Introduction to research on transformation and social change in various disciplines of human sciences • Legal and ethical debate on objectives in terms of sustainability and digitalization, with a special focus on human rights and different concepts of freedom

- Strengths and weaknesses of various policy instruments (that necessarily have a legal shape – such as regulatory law, economic instruments, informational instruments, etc.)
- Special focus on the role of economic instruments
- Contribution of environmental litigation (especially climate litigation) to legal transformation processes
- Interaction of sustainable and digital transformation
- Challenges of EU legislation with a focus on sustainable and digital transformation
- Actors of EU sustainability governance and EU decision-making
- The role of non-state actors in sustainability and digitalization decision-making and negotiations
- Simulation (role play) of a legislation process (2 groups with maximum 35 students) or essay writing based on a topic discussed during the seminar

In the beginning of the semester the students choose to attend either a weekly seminar (2 hours per week) or take part in a simulation of a EU legislation process. Each student in this simulation group will take the role of a relevant EU player such as a DG of the COM, or an NGO, or another body. Participants will be required to prepare (in written and oral form) an assigned topic of EU sustainability or digitalization law in order to actively participate in the final role play.

Student in the weekly seminar (1 group with maximum 35 students) will attend seminars on a weekly basis and will be given topics for essay writing based on the topics discussed during the seminar. These essays have to be researched, articulated, and submitted independently by each student in the weekly seminar group.

Recommended Prerequisites

Knowledge of the content of module:
• 41201 *International Environmental Law*

Mandatory Prerequisites

none

Forms of Teaching and Proportion

Lecture - 2 hours per week per semester
Seminar - 2 hours per week per semester
Self organised studies - 120 hours

Teaching Materials and Literature

- Ekardt, Sustainability: Transformation, Governance, Ethics, Law, Springer, 2020
- Scholz, Environmental Literacy in Science and Society: From Knowledge to Decisions, Cambridge University Press, 2011

Additional literature will be announced in class and made available on the Moodle page of the course.

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- Written Exam, 60 minutes (maximum 40 points)

And

- Simulation Group:
 - Paper for preparation of the EU legislation process, 2 pages (maximum 15 points)

- Simulation of the legislation process, 10 SWS (maximum 25 points)

Or

- Weekly seminars Group:
 - 10 pages essay submission on topics related to environmental negotiations and decision-making (maximum 40 points)

To pass (grade 4,0) the module, students need to earn a minimum of 40 points.

Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	In the event that the module cannot be taught or examined according to this description (e.g., for infection control reasons), the alternatives communicated on relevant platforms (e.g., on the module homepage or Moodle) shall apply.
Module Components	Summerterm: NN - Lecture Transformation: Law, Governance, Ethical Foundations NN - Seminar Transformation: Law, Governance, Ethical Foundations
Components to be offered in the Current Semester	No assignment

Module 14288 Psychology of Entrepreneurship and Change

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14288	Compulsory elective

Modul Title	Psychology of Entrepreneurship and Change Psychologie des Unternehmertums und Wandels
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. Urbig, Diemo
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After completing this module, students will understand how basic psychological theories of decision making under uncertainty, complex interdependence, and intertemporal dynamics help explain the behavior of individuals who drive change, such as entrepreneurs, innovators and social activists. They will have developed a basic understanding of key psychological and behavioral economic theories related to decision-making under risk and ambiguity. Identify and explain critical thinking and decision-making patterns in the work context. Students will be able to apply theories to real-world situations.
Contents	<p>In this module, we venture into the specifics of a wide range of decision-making theories. We travel through a diverse collection of seminal theories, including many that have formed the basis of Nobel Prize-winning research. We emphasize the interdisciplinary application of insights to ensure that students from a variety of disciplines can absorb and apply the knowledge gained in this module to their own professional decision-making scenarios.</p> <p>The literature is presented in the lecture and students can afterwards read the literature in depth.</p> <p>The topics include:</p> <ul style="list-style-type: none"> • Satisficing and dual process theories • Risk aversion and ambiguity aversion • Prospect theory and loss aversion • Mental accounting and choice bracketing • Risk reduction strategies: Hedging, learning, and real options • Time preferences

- Status-quo, escalation of commitment, and the not-invented-here effect
- Personal initiative, sensation seeking, and entrepreneurship
- Rational herding and individually irrational learning
- Nash equilibrium and individually irrational cooperation

The concepts and theories are presented in lectures.
Students practice their theory application skills by presenting and discussing critical issues and applications of these theories in seminar.

Recommended Prerequisites	none
Mandatory Prerequisites	No successful participation in modules "13811 Behavioral Resource Management" and "13514 Individuals in Transformation Processes".
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Antons, D., & Piller, F. T. (2015). Opening the black box of "Not Invented Here": Attitudes, decision biases, and behavioral consequences. <i>Academy of Management Perspectives</i>, 29(2), 193-217. • Bernardo, A. E., & Welch, I. (2001). On the evolution of overconfidence and entrepreneurs. <i>Journal of Economics & Management Strategy</i>, 10(3), 301-330. • Bönte, W., Urbig, D. (2019) <i>Connecting People and Knowledge: Knowledge Spillovers, Cognitive Biases, and Entrepreneurship</i> (Chapter 34). In: E. E. Lehmann, M. Keilbach (eds.), <i>From Industrial Organization to Entrepreneurship</i>. Springer, pp. 385-397. • Crant, J. M. (2000). Proactive behavior in organizations. <i>Journal of Management</i>, 26(3), 435-462. • Ellsberg, D. (1961). Risk, ambiguity, and the savage axioms. <i>The Quarterly Journal of Economics</i>, 75(4), 643-669. • Evans, J. S. B., & Stanovich, K. E. (2013). Dual-process theories of higher cognition: Advancing the debate. <i>Perspectives on Psychological Science</i>, 8(3), 223-241. • Fehr, E., & Schmidt, K. M. (1999). A theory of fairness, competition, and cooperation. <i>The Quarterly Journal of Economics</i>, 114(3), 817-868. • Fox, C. R., & Tversky, A. (1995). Ambiguity aversion and comparative ignorance. <i>The Quarterly Journal of Economics</i>, 110(3), 585-603. • Frederick, S., Loewenstein, G., & O'donoghue, T. (2002). Time discounting and time preference: A critical review. <i>Journal of Economic Literature</i>, 40(2), 351-401. • Kahneman, D., Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. <i>Econometrica</i>, 47, 278. • Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. <i>Psychological Bulletin</i>, 127(2), 267-286. • Ostrom, E. (2000). Collective action and the evolution of social norms. <i>Journal of Economic Perspectives</i>, 14(3), 137-158.

- Read, D., Loewenstein, G., Rabin, M., Keren, G., & Laibson, D. (2000). Choice bracketing. In S. Barbera, P. Hammond, & C. Seidl (Eds.), *Elicitation of Preferences* (pp. 171–202). Springer.
- Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of Risk and Uncertainty*, 1(1), 7-59.
- Simon, H. A. (1955). A behavioural model of rational choice. *The Quarterly Journal of Economics*, 69(1), 99-118.
- Staw, B. M. (1981). The escalation of commitment to a course of action. *Academy of Management Review*, 6(4), 577-587.
- Thaler, R. (1985). Mental accounting and consumer choice. *Marketing Science*, 4(3), 199-214.
- Trigeorgis, L., & Reuer, J. J. (2017). Real options theory in strategic management. *Strategic Management Journal*, 38(1), 42-63:
- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 5(2), 207-232.
- Tversky, A., & Kahneman, D. (1991). Loss aversion in riskless choice: A reference-dependent model. *The Quarterly Journal of Economics*, 106(4), 1039-1061.

Module Examination

Final Module Examination (MAP)

Assessment Mode for Module Examination

- Written exam, 90 min, a third of the exam is specific to Bachelor-level and Master-level programs, with Master-level programs focusing on the reading of the original articles and Bachelor-level programs focusing on the lecture and tutorials only
- Bonus points of up to 10% for a graded theory-application paper (essay, 1200 to 1500 words)

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

none

Remarks

none

Module Components

Lecture/exercise/examination

Components to be offered in the Current Semester

530903 Examination
Psychology of Entrepreneurship and Change (Wiederholungsprüfung)

Module 14466 Fit4Future Summer School

assign to: Specific Modules of Socioeconomic and Institutional Transformation
Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14466	Compulsory elective

Modul Title	Fit4Future Summer School Fit4Future Sommerschule
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14494 The Political Economy of Transformation

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14494	Compulsory elective

Modul Title	The Political Economy of Transformation Die politische Ökonomie der Transformation
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14495 Optimization in Business Transformation

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14495	Compulsory elective

Modul Title	Optimization in Business Transformation Optimierung der Unternehmensumwandlung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. pol. Xie, Lin
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	By the end of this course, students will be able to: <ol style="list-style-type: none"> 1. Understand Optimization Concepts 2. Formulate and Solve Optimization Problems 3. Apply Optimization to Business Scenarios 4. Utilize Optimization Tools and Software 5. Develop Critical Thinking and Analytical Skills 6. Connect Optimization with Business Transformation Goals
Contents	<ul style="list-style-type: none"> • Foundations of Optimization in Business • Linear Optimization Techniques • Integer Programming • Network Optimization • Standort- und Tourenplanung • Business Applications and Transformation
Recommended Prerequisites	<ul style="list-style-type: none"> • basic mathematical knowledge is desired, such as the content of Module 11112 <i>Mathematik IT-1</i>
Mandatory Prerequisites	None
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Winston W. L. Operations Research: Applications and Algorithms, fourth edition, Thomson, 2004

	Further materials are provided via Moodle (including lecture slides and additional materials including videos, readings etc.)
Module Examination	Final Module Examination (MAP)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Written Test, 90 minutes <p>Bonus points (10 % of total points) can be earned through the group assignment and will be added to your final score only if you pass the written test.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	150
Remarks	<i>Module with limited number of participants - Registration two weeks prior to the commencement of lectures!</i>
Module Components	Lecture and Exercise
Components to be offered in the Current Semester	531001 Lecture Optimization in Business Transformation - 2 Hours per Term 531002 Exercise Optimization in Business Transformation - 2 Hours per Term 531003 Examination Optimization in Business Transformation

Module 14498 International Marketing

assign to: Specific Modules of Socioeconomic and Institutional Transformation
Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14498	Compulsory elective

Modul Title	International Marketing
	Internationales Marketing
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14870 Resourcing in Entrepreneurship

assign to: Specific Modules of Socioeconomic and Institutional Transformation

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14870	Compulsory elective

Modul Title	Resourcing in Entrepreneurship Ressourcenmobilisierung im Gründungsprozess
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Scheidgen, Katharina
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	Successfully completing this course means, that students are able to work through and critically evaluate scientific papers and theoretical concepts. They have an analytical understanding of typical challenges entrepreneurs face in acquiring resources, especially financial resources, and are able to apply the theoretical concepts discussed in the seminar to a wide range of practical problems. They can not only identify, understand and see through common challenges, conflicts, and troubles throughout the entrepreneurship process, but also discuss, evaluate, and question research findings and scientific debates. Furthermore, students are able to write concise and theoretically grounded essays.
Contents	No doubt, Silicon Valley is one of the world's leading hubs for technological innovation. Pioneering companies like Google, Facebook or PayPal were founded by visionary entrepreneurs with growth ambition. Yet, despite the myth of a solitary genius tinkering in her garage, such entrepreneurial activities and innovations are only possible if diverse actors work together in manifold ways. Here, a <i>major challenge</i> becomes apparent: Although such entrepreneurial activities require manifold, comprehensive resources to work on innovative ideas, develop new products and grow an organization, in most cases, entrepreneurs do not possess all necessary resources. Hence, resourcing becomes an outstandingly important challenge for entrepreneurs—and in particular, the mobilization of financial resources. Investors are hesitant to invest in newly founded ventures, as their survival and success is highly uncertain. In this course, we discuss diverse approaches to resource acquisition from a research-

based perspective, for example discussing the role of entrepreneurial ecosystems in providing such financial resources, and of networks in acquiring them.

This module strongly focuses on research.

Recommended Prerequisites	<ul style="list-style-type: none"> • Experience in working with scientific texts (e.g. as part of the Bachelor's thesis), overview of qualitative and quantitative research methods
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • This module strongly focuses on research.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Presentation, 15 minutes (30%) • Essay I, max. 5 pages (Mid-term; 35%) • Essay II, max. 5 pages (End; 35%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	30
Remarks	<i>Module with limited number of participants - Registration two weeks prior to the commencement of lectures!</i>
Module Components	<ul style="list-style-type: none"> • Seminar 530503
Components to be offered in the Current Semester	No assignment

Module 12983 Climate Change and Migration

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	12983	Compulsory elective

Modul Title	Climate Change and Migration Klimawandel und Migration
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Associate Prof. (Univ. Damaskus) Dr. agr. Ibrahim, Bachar
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	After completion of this module, students will have a solid understanding of Climate Change and its impacts, especially on vulnerable countries. Students will further have the knowledge about various concepts and logical arguments linking climate change and migration.
Contents	<p>Part "Climate Change"</p> <ul style="list-style-type: none"> • Observations of change in the climate system • Critically assess the role of human activities in modern climate change • Assess future climate change scenarios and their potential impact on the Earth • climate change agenda and how this agenda impact on policy • Identify the Impacts and related Adaptation masures <p>Part "Migration"</p> <ul style="list-style-type: none"> • The potential link between climate change, migration, • The Task of defining 'climate refugee' • climate change contribution to the refugee problems • Gaps in the international legal framework • Individual and Collective Action on Mitigation <p>Lectures will be given live online and afterwards uploaded as a PDF on the moodle For the exercise, students have to solve a given problem. Students have to select a topic on moodle and register in the given table (maximum of 4 students per group).</p>
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Environment, forced migration and social vulnerability, T. Afifi, J. Jäger - 2010 - Springer • Climate change, human security and violent conflict: challenges for societal stability, J. Scheffran, M. Brzoska, H.G. Brauch, P.M. Link... - 2012 • People on the move in a changing climate: The regional impact of environmental change on migration, E. Piguët, F. Laczko - 2013 • Global migration governance, A. Betts - 2011 • Disentangling migration and climate change, T. Faist, J. Schade - 2013 - Springer • Climate change and migration: security and borders in a warming world, G. White – 2011- Oxford University Press
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Oral Exam, 30 min. (50%) • Two presentations on the a scientific topic (each 25%) <p>A pass mark is only achieved by obtaining at least 50% of the grade for each part of the module. The examination as well as the seminar part have to be passed (at least 50% in each) to pass the module.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	An annual excursion pertaining to the module may be organised. <i>Complementary Module in Master Environmental and Resource Management.</i>
Module Components	<ul style="list-style-type: none"> • Lecture • Seminar • Examination
Components to be offered in the Current Semester	<p>520223 Lecture Climate Change and Migration - 2 Hours per Term</p> <p>520224 Seminar Climate Change and Migration - 2 Hours per Term</p>

Module 13109 Philosophy of Technology and Nature

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13109	Compulsory elective

Modul Title	Philosophy of Technology and Nature Technik- und Naturphilosophie
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>After passing the module, students should:</p> <ul style="list-style-type: none"> • understand main philosophical theories of “nature” • interrogate the concept of “nature” and to expose its numerous ideological and cultural manifestations. • identify the main ethical dimensions of “nature”, and their crosscultural and political dimensions. • gain insight into reading, writing, and visual practices about “nature” and understand the power of narratives and storytelling to shape our environmental present and future.
Contents	<p>What is “nature”? Is “nature” the same in all times and cultures? Is the “nature”/culture distinction still worth drawing? This module seeks to answer these and other questions, by approaching “nature” with various grounded historical and contemporary philosophical approaches. The module has two parts: „How to talk about “nature”?“ and „Living in the Anthropocene: concepts, models, and narratives in the climate crisis debate.“</p> <p>The module provides an overview on how “nature” reveals itself in various environmental debates. For example, the concept of “nature” was differently interpreted in ancient times, compared to modern contemporary cultures. We will probe the different usage, the scope of historical and cross-cultural depth, the semantics, the imageries, and finally, the logical coherence of “nature” concepts. This variety of topics means that the assigned readings will draw from a wide range of sources.</p> <p>With respect to handle current ecological and technocultural problems, a conscious reflection about “nature” seems to be required. Thus,</p>

the module should be also seen, in part, as a way to gain insight into reading and writing about “nature”. In this module, we will demonstrate the power of narratives and storytelling to understand and shape our environmental present and future.
Participation in the accompanying excursion is requested.

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	See course material in moodle.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • One short essay, max. 2 pages (20%) • Two reviews, max. 5 pages (each 25%) • 2 oral group presentations, about 15 min OR weekly submitted written answers to one short question on the topical readings to be determined by the instructor (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	Lectures and seminars in the corresponding field.
Components to be offered in the Current Semester	No assignment

Module 13234 Communication of Science and Technology

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13234	Compulsory elective

Modul Title	Communication of Science and Technology Wissenschafts- und Technikkommunikation
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13655 Un/Disciplining Knowledge: Technology, Science, and Society in Transformation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13655	Compulsory elective

Modul Title	Un/Disciplining Knowledge: Technology, Science, and Society in Transformation Epistemischer Ungehorsam: Technik, Wissenschaft und Gesellschaft im Wandel
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	By the end of the module students are able to develop a research question within the academic field of Science and Technology Studies and create and present a research design, as well as identify and make use of appropriate sources of empirical material for your analysis, furthermore to identify, select and compare appropriate concepts and methods relating to an interdisciplinary research field and analyse changes in fields of science and technology with respect to knowledge forms.
Contents	This module presents central theories and approaches developed in Science and Technology Studies. The module focuses on questions about disciplining and undisciplining knowledge, the corresponding epistemic and ontological perspectives and the political economy of science. It explores concepts being concerned about shifting concepts of disciplinarity, such as interdisciplinarity, transdisciplinarity or postdisciplinarity.
Recommended Prerequisites	Knowledge from the courses <ul style="list-style-type: none"> • Technik in Wissenschaft und Gesellschaft • Philosophy of Science in Practice
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester

	Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature and learning materials are given in the course description.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• short scientific essay, max. 4000 words (45%)• scientific review, max. 2500 words (40%)• presentation, max. 15 minutes (15%) <p>The oral part of the examination can be done digitally or as a virtual meeting if the conditions for an examination in presence are not given.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	German-speaking teachers are available if required. Further information on this can be found in the course description.
Module Components	<ul style="list-style-type: none">• Seminar - 4 SWS
Components to be offered in the Current Semester	No assignment

Module 13656 What Material Culture? Transformative Processes in Technology and Art

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13656	Compulsory elective

Modul Title	What Material Culture? Transformative Processes in Technology and Art Welche materielle Kultur? Transformative Prozesse in Technik und Kunst
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After participating in this module, students understand theories on new materialism and object theories, as well as visualization and experimental techniques. They master media and creative technical skills, and can complete planning and execution of a project is successfully.
Contents	The question "What material culture?" has been raised since the 1990s with the emergence of the current of "new materialism". From various disciplinary perspectives, questions are asked about the relationships of humans to technology, nature and the environment in digital and analog space, and proposals for a new location are developed. This module represents a cross-sectional module that teaches basic cultural studies methods and theories for a disciplinarily heterogeneous group of students. Experimental formats in technology studies and in the arts will be explored and tested in practice. Special attention is paid to the exploration of transformative processes in urban public spaces, gardens and parks, current industrial sites (ports, open- cast mining) or industrial wastelands. A concept of student research in the sense of moving teaching and learning is implemented here.
Recommended Prerequisites	Interest in media technology and creativity techniques
Mandatory Prerequisites	none

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	To be announced during the first class meeting.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• project outline (20%)• presentation, 15 minute (20%)• written documentation of the project work, 2500-3000 words (60%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Lecture/Seminar - 4 SWS
Components to be offered in the Current Semester	No assignment

Module 13659 Sustainability and Digitalisation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13659	Compulsory elective

Modul Title	Sustainability and Digitalisation Digitalisierung und Nachhaltigkeit
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13705 Sociology of Sustainable Development

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13705	Compulsory elective

Modul Title	Sociology of Sustainable Development Soziologie der nachhaltigen Entwicklung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13706 Justice and Diversity in Environmental Change

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13706	Compulsory elective

Modul Title	Justice and Diversity in Environmental Change Gerechtigkeit und Diversität im Kontext von Umweltveränderungen
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Jaeger-Erben, Melanie
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<ul style="list-style-type: none"> • Acquiring a profound understanding of different concepts on social justice and diversity in the context of environmental change, climate change and sustainable development. • Discussing and critically reflecting upon current issues related to environmental justice, such as resource conflicts, land-use change or environmental movements. • Methodological skills in reading and discussing academic texts, preparing Pecha Kucha presentations, and recording scientific podcasts.
Contents	<p>Environmental problems have the capacity to affect all of us. However, certain communities are disproportionately exposed to environmental hazards, such as air pollution. Also, some regions of the world (will) suffer much more from the implications of climate change. Environmental problems thus do not affect us all equally, or in the same way. Nor do we have equal power to decide solutions to these problems, or to take the necessary action to solve them. This unequal positioning, which often impose the greatest burdens upon marginalised, disadvantaged and less powerful populations, forms the central premise of environmental justice research and activism. The goal of this module is to gain a comprehensive understanding of social justice, environmental justice and diversity in environmentalism. The course introduces concepts such as environmental racism, climate justice, ecofeminism, and indigenous perspectives on environmental change. The theoretical perspectives introduced are applied to various environmental movements and resource conflicts all over the world.</p>

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Exercise - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none">• Bell, K. (Ed.) (2021). Diversity and Inclusion in Environmentalism, Routledge.• Holifield, R., Chakraborty, J., Walker, G. (Eds.) (2018). The Routledge Handbook of Environmental Justice, Routledge.• Lele, S. et al. (Eds.) (2019). Rethinking environmentalism: Linking justice, sustainability, and diversity (Vol. 23). MIT Press.• Williams, J. (2021). Climate change is racist. Race, privilege and struggle for climate justice. Icon Books. <p>Further literature will be announced during class.</p>
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Reading assignments, 1.500-2.000 words (20%)• Reflections on sessions, 1.500-2.000 words (20%)• Pecha Kucha presentation, 6:40 Min (30%)• written test (multiple choice) (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	50
Remarks	none
Module Components	<ul style="list-style-type: none">• Exercise Theoretical approaches to Justice and Diversity in Environmental Change• Seminar Justice and Diversity research and methods in the context of Environmental Change
Components to be offered in the Current Semester	No assignment

Module 13717 Decarbonisation of Industrial Processes

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13717	Compulsory elective

Modul Title	Decarbonisation of Industrial Processes Dekarbonisierung von Industrieprozessen
Department	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13739 Anthropos in the Anthropocene

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13739	Compulsory elective

Modul Title	Anthropos in the Anthropocene Anthropos im Anthropozän
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13795 Market Integration of Renewable Energies and Sector Coupling

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13795	Compulsory elective

Modul Title	Market Integration of Renewable Energies and Sector Coupling
	Marktintegration erneuerbarer Energien und Sektorenkopplung
Department	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
Responsible Staff Member	Prof. Dr. rer. nat. Ragwitz, Mario
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>The course gives a comprehensive overview of all relevant aspects of market integration of renewable energies including quantitative modelling based on the model PyPSA. Based on a detailed characterisation of the challenges of market integration the different flexibility options available within modern energy systems will be introduced and their impact on the market outcome will be assessed quantitatively. Furthermore, regulatory and policy choices will be addressed.</p> <p>After attending the module "Market Integration of Renewable Energies and Sector Coupling" the student will have a deeper understanding of the challenges and options of the integration of renewable energies into energy markets. Furthermore, the student will be familiar with the definition of sector coupling and the various technologies and organisational options for the integration of energy sectors. Students will understand the impact of the regulatory framework and technology choices on the market integration of renewable energies and will be able to apply methods and tools for analysis of energy markets.</p>
Contents	<ul style="list-style-type: none"> • Scenarios for the development of future energy systems • Definition and challenges of market integration of renewable energies • Instruments for market-based investment decisions and dispatch of renewable energies • Technology options for the integration of energy sectors • Flexibility options on the supply and demand side and based on based on storage technologies

- Value of flexibility at the energy market
- The role of grid infrastructures for the market integration of renewable energies
- Python Programming Fundamentals: Introduction to reading and writing Python code, focusing on important programming concepts necessary for energy modeling.
- Introduction to simulation and optimisation techniques in energy system modelling
- Methodologies for analyzing and managing datasets
- Policies for renewable energy sources in the power sector

Recommended Prerequisites

Participation at

- module 35303 - "Power System Economics I" and
- module 35401 - "Power System Economics II"

is strongly recommended

Mandatory Prerequisites

none

Forms of Teaching and Proportion

Lecture - 2 hours per week per semester
Exercise - 2 hours per week per semester
Seminar - 2 hours per week per semester
Self organised studies - 90 hours

Teaching Materials and Literature

- Script (slides)
- Reference books
- Agora Energiewende. 2018. Energiewende 2030: The Big Picture – Megatrends, Targets, Strategies and a 10-Point Agenda for the Second Phase of Germany's Energy Transition. Impulse. Berlin
- IEA (2022), World Energy Outlook 2022, IEA, Paris <https://www.iea.org/reports/world-energy-outlook-2022>
- IEA (2011), Integration of Renewables, IEA, Paris <https://www.iea.org/reports/integration-of-renewables>
- Winkler (2016)): Market integration of renewables in the electricity sector – impact on electricity markets and renewable support policy as well as interactions with system flexibility, Dissertation, University of Freiburg.
- JRC – Joint Research Centre (2020): Towards net-zero emissions in the EU energy system by 2050 – Insights from scenarios in line with the 2030 and 2050 ambitions of the European Green Deal. EUR 29981 EN. Publications Office of the European Union, Luxembourg, doi:10.2760/081488.
- Wietschel, M.; Held, A.; Pfluger, B.; Ragwitz, M. (2020): Energy integration across electricity, heating & cooling and the transport sector – Sector coupling. Fraunhofer ISI Working Paper Sustainability and Innovation, No. S 08/2020
- Energy sector magazines

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- Written examination, 60 minutes OR oral examination, 30 minutes (the lecturer decides and informs at the beginning of the course) 60 %
- 2 Seminar works including presentation (duration 15 minutes, presentation ca. 10 slides) 40 %

Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	20
Remarks	none
Module Components	<ul style="list-style-type: none">• VL Market Integration of Renewable Energies and Sector Coupling• Proj Market Integration of Renewable Energies and Sector Coupling
Components to be offered in the Current Semester	No assignment

Module 13796 Just Energy Transition

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13796	Compulsory elective

Modul Title	Just Energy Transition Energiewende gerecht gestalten
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13899 Urban Transformation / Urban Studies

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13899	Compulsory elective

Modul Title	Urban Transformation / Urban Studies Urban Transformation / Urban Studies
Department	Faculty 6 - Architecture, Civil Engineering and Urban Planning
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13904 Heritage and Transformation in Regional and Urban Studies

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13904	Compulsory elective

Modul Title	Heritage and Transformation in Regional and Urban Studies Kulturerbe und Transformation in der Regional- und Stadtforschung
Department	Faculty 6 - Architecture, Civil Engineering and Urban Planning
Responsible Staff Member	Prof. Dr. rer. pol. Gailing, Ludger
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>The aims of this module are:</p> <ul style="list-style-type: none"> • To understand regional and urban transformation processes and controversies around heritage in terms of e.g. spatial planning, governance and politics, built environment, socio-cultural, architectural traditions in the context of transformation processes. • To develop knowledge of the interfaces between heritage studies and regional and urban studies. • To critically interrogate “heritage” as a concept and its position in regional and urban development, grasping the interplay between material, cultural, economic and political dimensions in the making of regions and cities around the world
Contents	<p>Heritage is central to contemporary towns, cities and regions today. From industrial sites, through ancient ruins, to festivals heritage can be understood in terms of constituent elements of a city or region or it can be used more expansively to the city/ region in general as a spatial-cultural quality of e.g. an urban centre or regional landscape. Urban/ landscape heritage is central to policy, planning and politics, becoming embroiled in approaches to and conflicts over urbanisation, deindustrialisation, tourism, social and cultural identities and urban/ regional democracy. This module examines the spatial politics and geographies of heritage from regional and urban perspectives in the context of transformation processes. We consider how heritage can become central to overlapping discourses on these transformation</p>

processes as well as on identities, built environment, urban/ regional history and plans for the future of towns, cities and regions. We consider how heritage can contribute to spatial inequalities and conflicts over public space, identity, community and economic development. We engage critically with concepts of urban and regional heritage from their emergence in mid-20th century Europe. Empirically, we focus on diverse global contexts, in both the Global North (e.g. Western Europe, post-socialist countries) and South (Africa, Asia).

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	The bibliography will be presented in class.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • 20% Presentation (15 minutes per student) • 80% Research paper (3000-3500 words including references)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<i>Seminar Heritage and Transformation in Regional and Urban Studies</i>
Components to be offered in the Current Semester	640603 Seminar Heritage and Transformation in Regional and Urban Studies - 4 Hours per Term

Module 13927 Concepts of Social Criticism and Social Transformation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13927	Compulsory elective

Modul Title	Concepts of Social Criticism and Social Transformation Konzepte von Gesellschaftskritik und sozialer Transformation
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Dr. phil. habil. Havlin, Tetiana
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<ul style="list-style-type: none"> • Students are familiar with historical discourses as well as theoretical concepts on social change, social criticism and social transformation in Political Theory and Social Philosophy including perspectives from Critical Theory, Radical Democratic Theory, Political Epistemology and Political Philosophy. • Students can apply these concepts in their own research and are able to use these concepts to analyse real-life examples. • Students are able to understand and critically examine 'classical' as well as contemporary texts. • Students can articulate and present their own perspective on course contents in an academically adequate and sound manner. • Students are able to write academically and are capable to orally present their ideas convincingly in an academic context.
Contents	<p>The module gives an overview of the development, critique and application of concepts of social criticism and social transformation. We will discuss the formation of key concepts and ideas such as "progress", "emancipation", "reform" and "revolution" in the Age of Enlightenment as well as their appropriation and subsequent critique in theoretical movements such as Critical Theory, Postmodernism and Postcolonialism.</p> <p>The module will then focus on contemporary ideas of social criticism and social change in Critical Theory, Radical Democratic Theory, Political Epistemology, Feminist Philosophy, Abolitionism and (possibly) other strands of the current theory landscape. We will explore how the approaches discussed may serve as building blocks for a theory of the transformation of contemporary societies in light of current economic</p>

and ecological crises and/or for the description of current blockades and impediments for such a transformation. Additionally, we will ask how the concepts discussed relate to conceptions of transformation in sociology and transformation science.

Recommended Prerequisites	Students have knowledge of at least one of the following modules <ul style="list-style-type: none">• 13922 Introduction to Transformation Studies• 13932 Transformation Theories
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature and teaching materials will be provided on moodle at start of the semester.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• One oral presentation (10 to 15 minutes) (10%)• Three writing assignments (750 to 1500 words per assignment) (30%)• A final essay (5000 to 10000 words) (60%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Seminar Critical Theories of Social Transformation
Components to be offered in the Current Semester	No assignment

Module 13945 Europe in Transformation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13945	Compulsory elective

Modul Title	Europe in Transformation Europa im Wandel
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13946 Mobility and Digitalisation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13946	Compulsory elective

Modul Title	Mobility and Digitalisation Mobilität und Digitalisierung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Dr. phil. habil. Havlin, Tetiana
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>This module provides sociological and cultural theory perspectives on the nexus between digitalization and mobility specifically in the context of current societal transformations.</p> <p>In the course of semester, students learn</p> <ul style="list-style-type: none"> • to understand current transformations of economy, society and politics, • to reflect on how both institutions and everyday settings are co-constituted by specific patterns of mobility, both in the international and domestic realms. • to understand and explain the central basic and advanced theoretical positions in the context of sociology of mobility, migration and digital cultures (cross-border mobilities, social inclusion and exclusion, postcolonialism, postsocialism, global and transnational relations) • to analyse and compare texts and apply their theories to social phenomena • to reflect their own positionality within the nexus mobilities and digitalization. • to present these positions and analyses in a concise manner
Contents	<p>This module provides sociological and cultural theory perspectives on the nexus between digitalization and mobility specifically in the context of current societal transformations.</p>

It teaches a variety of central theories and texts concerned with hierarchies and freedoms at the nexus of mobilities and digitalization. Digital technologies and networks change our perception of the world and our place therein. For example, digital technologies change borders, passport systems, work arrangements as well as how friendship and family networks organize their cross-border mobilities. They create new hierarchies, but also new freedoms. This module provides insights in how to analyse mobilities and digital culture from a critical sociological perspective sensitive to power, colonialities, hybridity, entanglement and difference. Digital mobility and immobility becomes understood as part of a complex global settings which spans beyond national boundaries.

Students will be introduced to a number of specialized research areas of research with reference to digitalization, digital cultures, migration, mobility and ethnicity/racialization research as well as further theories of social inequality. From a non-essentialist perspective, these address digitally generated and perpetuated social placement processes in relation to "race", class, gender, dis/ability and discuss their implications for privilege and disadvantage as well as the unequal distribution of life chances in the digital age on the basis of empirical examples.

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature will be provided in the moodle at the beginning of the semester
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ol style="list-style-type: none"> 1. Oral presentation 15 min (40%) 2. Essay: 10-15 pages (30 %) 3. Participation in exercises and discussions (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14069 Biomass and Bioenergy

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14069	Compulsory elective

Modul Title	Biomass and Bioenergy Biomasse und Bioenergie
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Hirschl, Bernd
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	Students are able to understand the multifunctionality of biomass and know the various pathways of biomass conversion into energy. They are prepared to have critical knowledge regarding biomass cultivation for energy generation by discussing social and environmental concerns, like land use or the competition with food chains. After attending the module, students have expertise in interpreting and presenting scientific texts.
Contents	Sustainable energy generation is seen as one of the largest present challenges of our society. The module "Biomass and Bioenergy" will discuss climate neutral energy systems, where biomass is a sustainable carbon neutral source of energy. This module is highly interdisciplinary. Topics will include: <ul style="list-style-type: none"> • Overview on biomass production (agriculture and forestry) • Biomass residual waste • Energy conversion technologies • Social and ecological aspects of biomass use • Current bioenergy policies
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	The following literature can be used for preparation:

- Book: Kaltschmitt, M., ed. (2018) Energy from Organic Materials (Biomass). A Volume in the Encyclopedia of Sustainability Science and Technology, 1439 p. Springer DOI:<https://doi.org/10.1007/978-1-4939-7813-7>
- Book: Srivastava, N., Verma, B. & Mishra, P.K., eds. 2023. Agroindustrial Waste for Green Fuel Application. Springer DOI:<https://doi.org/10.1007/978-981-19-6230-1>
- Journal “Biomass and Bioenergy” (Elsevier)
- Journal “Sustainable Energy Technologies and Assessments” (Elsevier)

Module Examination

Prerequisite + Final Module Examination (MAP)

Assessment Mode for Module Examination

Prerequisite:

- Presentation (15 minutes + discussion)

Final Module Examination:

- Written exam, 120 min

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

none

Remarks

Not offered in **summer semester 2026**.

Module Components

- Seminar: Biomass and Bioenergy
- Examination: Biomass and Bioenergy

Components to be offered in the Current Semester

538909 Examination
Biomass and Bioenergy (Wiederholungsprüfung)

Module 14132 Multidimensional Approaches for Technology Assessment

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14132	Compulsory elective

Modul Title	Multidimensional Approaches for Technology Assessment Multidimensionale Ansätze für Technikfolgenabschätzung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. pol. habil. Lee, Roh Pin
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>Students know about a range of technology assessment approaches, methodologies and tools to facilitate the evaluation of decarbonization & sustainability transformation options along socio-technological-economical-ecological-political (<i>STEEP</i>) dimensions.</p> <p>On completion of the module, students are able to:</p> <ul style="list-style-type: none"> • Demonstrate a deep understanding of the multidimensional aspects and systemic interactions in the transformation of energy- and carbon-intensive industries; • Gain familiarity with a range of qualitative and quantitative methodologies in conducting technology assessment; • Design and conduct studies to analyze the opportunities and challenges which will be associated with the transformation of energy- and carbon-intensive industries along multiple dimensions; • Identify, assess and evaluate appropriate sources of information and critically reflect on the methodologies commonly implemented for technology assessment and their usefulness/weaknesses.
Contents	<p>Course coverage:</p> <ul style="list-style-type: none"> • Relevance and development of technology assessment; • Common methodological approaches and their usefulness/weakness; • Data and approaches for assessment (e.g., primary vs. secondary; qualitative vs. quantitative); • Methodologies for socio-political evaluations, techno-economic evaluations and ecological evaluations;

	<ul style="list-style-type: none"> • Application on a case study to assess multidimensional opportunities and challenges associated with the transformation of a specific sector and derive implications along the <i>STEEP</i> dimensions based on assessment results.
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 1 hours per week per semester Exercise - 1 hours per week per semester Study project - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Lee, R.P., Meyer, B., Huang, Q.L, Voss, R. 2020. Sustainable waste management for zero waste cities in China: potential, challenges and opportunities. <i>Clean Energy</i>, 4(3): 169 – 201. • Lee, R.P. 2019. Alternative carbon feedstock for the chemical industry? – Assessing the challenges posed by the human dimension in the carbon transition, <i>Journal of Cleaner Production</i>, 219: 786-796. • Lee, R. P., Tschoepe, M., Voss, R. 2021. Perception of chemical recycling and its role in the transition towards a circular carbon economy: A case study in Germany. <i>Waste Management</i>, 125: 280-292. • Voss, R., Lee, R.P., Seidl, L., Keller, F., Fröhling, M. 2021. Global warming potential and economic performance of gasification-based chemical recycling and incineration pathways for residual municipal solid waste treatment in Germany. <i>Waste Management</i>, 134: 206 – 219. • Keller, F., Lee, R.P., Meyer, B. 2020. Life cycle assessment of global warming potential, resource depletion and acidification potential of fossil, renewable and secondary feedstock for olefin production in Germany. <i>Journal of Cleaner Production</i>, 250: 119484. • Lee, R.P., Scheibe, A. 2020. The politics of a carbon transition: An analysis of political indicators for a transformation in the German chemical industry, <i>Journal of Cleaner Production</i>, 244: 118629. <p>Further materials are provided via Moodle (including lecture slides and additional materials including videos, readings etc.)</p>
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Individual component (E-assessment), 60-90 min - 50% • Group Project - Part 1: Create a scientific poster (Analysis of e.g., a scientific article, industry report, case study, ...) - 25% • Group Project - Part 2: Presentation, 15min - 25%
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none"> • Lectures & Exercises • Projects

**Components to be offered in the
Current Semester**

510602 Lecture/Seminar
Multidimensional Approaches for Technology Assessment - 4 Hours per
Term

Module 14148 Media in Transformation - Media Theory and Analysis

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14148	Compulsory elective

Modul Title	Media in Transformation - Media Theory and Analysis Medien im Wandel - Medientheorie und -analyse
Department	Faculty 1 - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology
Responsible Staff Member	Prof. Dr. phil. Petersen, Christer
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	After successfully completing the module, students have in-depth knowledge of methods for analysing text-based, visual and audiovisual formats. They are able to apply these methods in the context of media theory issues and thus gain a deeper understanding of analog and digital media communication. In addition they are able to critically analyze and theoretically model the changing social functions and effects of the media.
Contents	In-depth introduction to the methods of film and text analysis, methodology of media and cultural theory, as well as the philosophy and sociology of new and old, digital and analog media in their various forms and formats.
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> Joachim Friedmann: Storytelling for Media: Introduction to the Theory and Practice of Narrative Design. München, Tübingen: UVK 2021. Niklas Luhmann: Reality of the Mass Media. Hoboken, N.J.: Blackwell Publishers 2000. Material is available for download on the Internet. More information at the beginning of course.

Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Successful completion of an essay of 10-20 pages or practical/project work of corresponding scope (60%)• Presentation of a research topic or a project work, approx. 20 minutes (40%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Seminar: Media in Transformation - Media Theory and Analysis Current Description
Components to be offered in the Current Semester	No assignment

Module 14466 Fit4Future Summer School

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14466	Compulsory elective

Modul Title	Fit4Future Summer School Fit4Future Sommerschule
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 37106 Social Change and Continuity

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	37106	Compulsory elective

Modul Title	Social Change and Continuity Sozialer Wandel und Kontinuität
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 37404 Culture and Globalisation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozioökonomische und institutionelle Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	37404	Compulsory elective

Modul Title	Culture and Globalisation Kultur und Globalisierung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13109 Philosophy of Technology and Nature

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13109	Compulsory elective

Modul Title	Philosophy of Technology and Nature Technik- und Naturphilosophie
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>After passing the module, students should:</p> <ul style="list-style-type: none"> • understand main philosophical theories of “nature” • interrogate the concept of “nature” and to expose its numerous ideological and cultural manifestations. • identify the main ethical dimensions of “nature”, and their crosscultural and political dimensions. • gain insight into reading, writing, and visual practices about “nature” and understand the power of narratives and storytelling to shape our environmental present and future.
Contents	<p>What is “nature”? Is “nature” the same in all times and cultures? Is the “nature”/culture distinction still worth drawing? This module seeks to answer these and other questions, by approaching “nature” with various grounded historical and contemporary philosophical approaches. The module has two parts: „How to talk about “nature”?“ and „Living in the Anthropocene: concepts, models, and narratives in the climate crisis debate.“</p> <p>The module provides an overview on how “nature” reveals itself in various environmental debates. For example, the concept of “nature” was differently interpreted in ancient times, compared to modern contemporary cultures. We will probe the different usage, the scope of historical and cross-cultural depth, the semantics, the imageries, and finally, the logical coherence of “nature” concepts. This variety of topics means that the assigned readings will draw from a wide range of sources.</p> <p>With respect to handle current ecological and technocultural problems, a conscious reflection about “nature” seems to be required. Thus,</p>

the module should be also seen, in part, as a way to gain insight into reading and writing about “nature”. In this module, we will demonstrate the power of narratives and storytelling to understand and shape our environmental present and future.

Participation in the accompanying excursion is requested.

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	See course material in moodle.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • One short essay, max. 2 pages (20%) • Two reviews, max. 5 pages (each 25%) • 2 oral group presentations, about 15 min OR weekly submitted written answers to one short question on the topical readings to be determined by the instructor (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	Lectures and seminars in the corresponding field.
Components to be offered in the Current Semester	No assignment

Module 13234 Communication of Science and Technology

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13234	Compulsory elective

Modul Title	Communication of Science and Technology Wissenschafts- und Technikkommunikation
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13656 What Material Culture? Transformative Processes in Technology and Art

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13656	Compulsory elective

Modul Title	What Material Culture? Transformative Processes in Technology and Art Welche materielle Kultur? Transformative Prozesse in Technik und Kunst
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After participating in this module, students understand theories on new materialism and object theories, as well as visualization and experimental techniques. They master media and creative technical skills, and can complete planning and execution of a project is successfully.
Contents	The question "What material culture?" has been raised since the 1990s with the emergence of the current of "new materialism". From various disciplinary perspectives, questions are asked about the relationships of humans to technology, nature and the environment in digital and analog space, and proposals for a new location are developed. This module represents a cross-sectional module that teaches basic cultural studies methods and theories for a disciplinarily heterogeneous group of students. Experimental formats in technology studies and in the arts will be explored and tested in practice. Special attention is paid to the exploration of transformative processes in urban public spaces, gardens and parks, current industrial sites (ports, open- cast mining) or industrial wastelands. A concept of student research in the sense of moving teaching and learning is implemented here.
Recommended Prerequisites	Interest in media technology and creativity techniques
Mandatory Prerequisites	none

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	To be announced during the first class meeting.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• project outline (20%)• presentation, 15 minute (20%)• written documentation of the project work, 2500-3000 words (60%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Lecture/Seminar - 4 SWS
Components to be offered in the Current Semester	No assignment

Module 13659 Sustainability and Digitalisation

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13659	Compulsory elective

Modul Title	Sustainability and Digitalisation Digitalisierung und Nachhaltigkeit
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13717 Decarbonisation of Industrial Processes

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13717	Compulsory elective

Modul Title	Decarbonisation of Industrial Processes Dekarbonisierung von Industrieprozessen
Department	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13795 Market Integration of Renewable Energies and Sector Coupling

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13795	Compulsory elective

Modul Title	Market Integration of Renewable Energies and Sector Coupling Marktintegration erneuerbarer Energien und Sektorenkopplung
Department	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
Responsible Staff Member	Prof. Dr. rer. nat. Ragwitz, Mario
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>The course gives a comprehensive overview of all relevant aspects of market integration of renewable energies including quantitative modelling based on the model PyPSA. Based on a detailed characterisation of the challenges of market integration the different flexibility options available within modern energy systems will be introduced and their impact on the market outcome will be assessed quantitatively. Furthermore, regulatory and policy choices will be addressed.</p> <p>After attending the module "Market Integration of Renewable Energies and Sector Coupling" the student will have a deeper understanding of the challenges and options of the integration of renewable energies into energy markets. Furthermore, the student will be familiar with the definition of sector coupling and the various technologies and organisational options for the integration of energy sectors. Students will understand the impact of the regulatory framework and technology choices on the market integration of renewable energies and will be able to apply methods and tools for analysis of energy markets.</p>
Contents	<ul style="list-style-type: none"> • Scenarios for the development of future energy systems • Definition and challenges of market integration of renewable energies • Instruments for market-based investment decisions and dispatch of renewable energies • Technology options for the integration of energy sectors • Flexibility options on the supply and demand side and based on based on storage technologies

- Value of flexibility at the energy market
- The role of grid infrastructures for the market integration of renewable energies
- Python Programming Fundamentals: Introduction to reading and writing Python code, focusing on important programming concepts necessary for energy modeling.
- Introduction to simulation and optimisation techniques in energy system modelling
- Methodologies for analyzing and managing datasets
- Policies for renewable energy sources in the power sector

Recommended Prerequisites

Participation at

- module 35303 - "Power System Economics I" and
- module 35401 - "Power System Economics II"

is strongly recommended

Mandatory Prerequisites

none

Forms of Teaching and Proportion

Lecture - 2 hours per week per semester
Exercise - 2 hours per week per semester
Seminar - 2 hours per week per semester
Self organised studies - 90 hours

Teaching Materials and Literature

- Script (slides)
- Reference books
- Agora Energiewende. 2018. Energiewende 2030: The Big Picture – Megatrends, Targets, Strategies and a 10-Point Agenda for the Second Phase of Germany's Energy Transition. Impulse. Berlin
- IEA (2022), World Energy Outlook 2022, IEA, Paris <https://www.iea.org/reports/world-energy-outlook-2022>
- IEA (2011), Integration of Renewables, IEA, Paris <https://www.iea.org/reports/integration-of-renewables>
- Winkler (2016)): Market integration of renewables in the electricity sector – impact on electricity markets and renewable support policy as well as interactions with system flexibility, Dissertation, University of Freiburg.
- JRC – Joint Research Centre (2020): Towards net-zero emissions in the EU energy system by 2050 – Insights from scenarios in line with the 2030 and 2050 ambitions of the European Green Deal. EUR 29981 EN. Publications Office of the European Union, Luxembourg, doi:10.2760/081488.
- Wietschel, M.; Held, A.; Pfluger, B.; Ragwitz, M. (2020): Energy integration across electricity, heating & cooling and the transport sector – Sector coupling. Fraunhofer ISI Working Paper Sustainability and Innovation, No. S 08/2020
- Energy sector magazines

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- Written examination, 60 minutes OR oral examination, 30 minutes (the lecturer decides and informs at the beginning of the course) 60 %
- 2 Seminar works including presentation (duration 15 minutes, presentation ca. 10 slides) 40 %

Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	20
Remarks	none
Module Components	<ul style="list-style-type: none">• VL Market Integration of Renewable Energies and Sector Coupling• Proj Market Integration of Renewable Energies and Sector Coupling
Components to be offered in the Current Semester	No assignment

Module 13796 Just Energy Transition

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13796	Compulsory elective

Modul Title	Just Energy Transition Energiewende gerecht gestalten
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14069 Biomass and Bioenergy

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14069	Compulsory elective

Modul Title	Biomass and Bioenergy Biomasse und Bioenergie
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Hirschl, Bernd
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	Students are able to understand the multifunctionality of biomass and know the various pathways of biomass conversion into energy. They are prepared to have critical knowledge regarding biomass cultivation for energy generation by discussing social and environmental concerns, like land use or the competition with food chains. After attending the module, students have expertise in interpreting and presenting scientific texts.
Contents	Sustainable energy generation is seen as one of the largest present challenges of our society. The module "Biomass and Bioenergy" will discuss climate neutral energy systems, where biomass is a sustainable carbon neutral source of energy. This module is highly interdisciplinary. Topics will include: <ul style="list-style-type: none"> • Overview on biomass production (agriculture and forestry) • Biomass residual waste • Energy conversion technologies • Social and ecological aspects of biomass use • Current bioenergy policies
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	The following literature can be used for preparation:

- Book: Kaltschmitt, M., ed. (2018) Energy from Organic Materials (Biomass). A Volume in the Encyclopedia of Sustainability Science and Technology, 1439 p. Springer DOI:<https://doi.org/10.1007/978-1-4939-7813-7>
- Book: Srivastava, N., Verma, B. & Mishra, P.K., eds. 2023. Agroindustrial Waste for Green Fuel Application. Springer DOI:<https://doi.org/10.1007/978-981-19-6230-1>
- Journal “Biomass and Bioenergy” (Elsevier)
- Journal “Sustainable Energy Technologies and Assessments” (Elsevier)

Module Examination

Prerequisite + Final Module Examination (MAP)

Assessment Mode for Module Examination

Prerequisite:

- Presentation (15 minutes + discussion)

Final Module Examination:

- Written exam, 120 min

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

none

Remarks

Not offered in **summer semester 2026**.

Module Components

- Seminar: Biomass and Bioenergy
- Examination: Biomass and Bioenergy

Components to be offered in the Current Semester

538909 Examination
Biomass and Bioenergy (Wiederholungsprüfung)

Module 14132 Multidimensional Approaches for Technology Assessment

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14132	Compulsory elective

Modul Title	Multidimensional Approaches for Technology Assessment Multidimensionale Ansätze für Technikfolgenabschätzung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. pol. habil. Lee, Roh Pin
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>Students know about a range of technology assessment approaches, methodologies and tools to facilitate the evaluation of decarbonization & sustainability transformation options along socio-technological-economical-ecological-political (<i>STEEP</i>) dimensions.</p> <p>On completion of the module, students are able to:</p> <ul style="list-style-type: none"> • Demonstrate a deep understanding of the multidimensional aspects and systemic interactions in the transformation of energy- and carbon-intensive industries; • Gain familiarity with a range of qualitative and quantitative methodologies in conducting technology assessment; • Design and conduct studies to analyze the opportunities and challenges which will be associated with the transformation of energy- and carbon-intensive industries along multiple dimensions; • Identify, assess and evaluate appropriate sources of information and critically reflect on the methodologies commonly implemented for technology assessment and their usefulness/weaknesses.
Contents	<p>Course coverage:</p> <ul style="list-style-type: none"> • Relevance and development of technology assessment; • Common methodological approaches and their usefulness/weakness; • Data and approaches for assessment (e.g., primary vs. secondary; qualitative vs. quantitative); • Methodologies for socio-political evaluations, techno-economic evaluations and ecological evaluations;

	<ul style="list-style-type: none"> • Application on a case study to assess multidimensional opportunities and challenges associated with the transformation of a specific sector and derive implications along the <i>STEEP</i> dimensions based on assessment results.
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 1 hours per week per semester Exercise - 1 hours per week per semester Study project - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Lee, R.P., Meyer, B., Huang, Q.L, Voss, R. 2020. Sustainable waste management for zero waste cities in China: potential, challenges and opportunities. <i>Clean Energy</i>, 4(3): 169 – 201. • Lee, R.P. 2019. Alternative carbon feedstock for the chemical industry? – Assessing the challenges posed by the human dimension in the carbon transition, <i>Journal of Cleaner Production</i>, 219: 786-796. • Lee, R. P., Tschoepe, M., Voss, R. 2021. Perception of chemical recycling and its role in the transition towards a circular carbon economy: A case study in Germany. <i>Waste Management</i>, 125: 280-292. • Voss, R., Lee, R.P., Seidl, L., Keller, F., Fröhling, M. 2021. Global warming potential and economic performance of gasification-based chemical recycling and incineration pathways for residual municipal solid waste treatment in Germany. <i>Waste Management</i>, 134: 206 – 219. • Keller, F., Lee, R.P., Meyer, B. 2020. Life cycle assessment of global warming potential, resource depletion and acidification potential of fossil, renewable and secondary feedstock for olefin production in Germany. <i>Journal of Cleaner Production</i>, 250: 119484. • Lee, R.P., Scheibe, A. 2020. The politics of a carbon transition: An analysis of political indicators for a transformation in the German chemical industry, <i>Journal of Cleaner Production</i>, 244: 118629. <p>Further materials are provided via Moodle (including lecture slides and additional materials including videos, readings etc.)</p>
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Individual component (E-assessment), 60-90 min - 50% • Group Project - Part 1: Create a scientific poster (Analysis of e.g., a scientific article, industry report, case study, ...) - 25% • Group Project - Part 2: Presentation, 15min - 25%
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none"> • Lectures & Exercises • Projects

**Components to be offered in the
Current Semester**

510602 Lecture/Seminar
Multidimensional Approaches for Technology Assessment - 4 Hours per
Term

Module 14466 Fit4Future Summer School

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14466	Compulsory elective

Modul Title	Fit4Future Summer School Fit4Future Sommerschule
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14633 Autumn School Technoscience, Environment and Society

assign to: Specific Modules of Sociotechnical Transformation

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14633	Compulsory elective

Modul Title	Autumn School Technoscience, Environment and Society Herbstschule Technowissenschaften, Umwelt und Gesellschaft
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	At the end of the module students are able to: <ul style="list-style-type: none"> • develop a research question within the interdisciplinary field of Science and Technology Studies; • identify and compare at least two perspectives on practices of research fields; • analyse developments in fields of science and technology with respect to forms of disciplining knowledge; • adopt knowledge about theories and concepts in the field (e.g. responsibility, care, ethnomethodology, participation, action theory) • act as part of a community of practice created during a workshop in presence
Contents	The autumn school provides an introduction to the subject area of technoscience, environment and society. Students learn about different perspectives on how the interdependence of technology, the environment and society can be analysed. The global challenges of the present are identified as they are referred to in various discourses, such as the Anthropocene, irreversible plastic pollution, the loss of biodiversity, environmental conflicts and security, science diplomacy or the opportunities and risks of emerging eco-technological artefacts. Accordingly, this course is focussed on the reciprocity of theory and practice, for example by examining technical artefacts in museums or outdoors, in working with case studies about nature-culture relationships, or doing a project in a creative collaborative virtual environment on an open simulator platform.

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 2 hours per week per semester Study project - 30 hours Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Burnard, P., L. Colucci-Gray & S. Pallawi Sinha (2021). Transdisciplinarity: letting arts and science teach together. In: Curriculum Perspectives 41: 113-118. • Eustáquio, L. & C. Carneiro de Sousa (2018). Creative Collaborative Virtual Environments. In: Khosrow-Pour, M. (ed.), Encyclopedia of Information Science and Technology. Hersey (PA): IGI Global, 4146-4156. • Hirsch-Hadorn, G. et al. (2008). Handbook of Transdisciplinary Research. Berlin, New York: Springer • Martinez, F. (2019). Doing nothing: Anthropology sits at the same table with contemporary art in Lisbon and Tbilisi. In: Ethnography 20 (4), 541-539. • Moallem, M. et al. (eds.) / 2019). The Wiley Handbook of Problem-Based Learning. Hoboken: Wiley. • Morris, J.E. & L.F. Paris Lisa Francesca (2022). Rethinking arts-based research methods in education: enhanced participant engagement processes to increase research credibility and knowledge translation. In: International Journal of Research & Method in Education 45 (1), 99-112.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • written contribution max. 2000 words (50%) • outline of study project max. 600 words (20%) • two presentation each max. 15 minutes (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	The course is divided into several blocks, the autumn school is in presence, the preparation and development of the study projects takes place online or students work on their own. The special feature of this course is that it is taught by teachers from different European universities.
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 11284 Advanced Studies of International Environmental Law

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozio-technische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	11284	Compulsory elective

Modul Title **Advanced Studies of International Environmental Law**

Internationales Umweltrecht für Fortgeschrittene

Department

Faculty 5 - Business, Law and Social Sciences

Responsible Staff Member

Prof. Dr. jur. Albrecht, Eike

Language of Teaching / Examination

English

Duration

1 semester

Frequency of Offer

Every summer semester

Credits

6

Learning Outcome

After completing the module, students should be able to:

- Understand international environmental law and its role in the management of global environmental problems,
- Identify and critically analyse issues pertaining to international environmental disputes,
- Apply international environmental law in specific concrete cases,
- Comprehend and evaluate the significance of international environmental law in protecting the environment and fostering international relations.

After completing the seminar, students will:

- Understand the way in which international agreements are achieved,
- Understand the role various international actors play in decision making,
- Have an understanding of the relevant actors who contribute to the outcome of international agreements,
- Be able to make clear and convincing statements (orally and in written form),
- Understand international decision-making procedures after playing an active role in a (simulated) negotiation process,
- Have improved their skills in effectively arguing their case in relation to the topics discussed in class.

Contents

Lecture: Advanced Studies of International Environmental Law

- Introduction to international law and international environmental law
- Creation and development of international environmental law

- Implementation and enforcement strategies of international environmental agreements
- International environmental agreements with respect to the following topics:
 - Biodiversity (Biodiversity Convention/CITES/WHC).
 - Marine environment (Convention on the Law of the Sea)
 - Climate change (Climate Change Convention/Kyoto Protocol/Paris Agreement)
 - Ozone depletion (Convention for Protecting Ozone Layer/Montreal Protocol)
 - Toxic/hazardous substances (Basel Convention on Hazardous Waste)
 - Citizens rights to information, public participation and access to Justice

Seminar: International Negotiations and Environmental Decision-Making

- Challenges of international negotiations with a focus on climate change
- Actors of global environmental governance and international environmental decision-making
- State participation in global environmental governance
- The role of non-state actors in environmental decision-making and negotiations
- Simulation (role play) of an international conference (2 groups with maximum 35 students)

At the beginning of the semester, the students will be prepared to participate in a simulation of a multilateral negotiation process. (Climate Conference Simulation Groups). Each student in the simulation group will take the role of a relevant international player such as a country, an NGO, the private sector, or a subsidiary body. Participants will be required to prepare (in written and oral form) an assigned country/organisation engaged in the international environmental negotiation process to actively participate in the final role-play.

Recommended Prerequisites

Knowledge of the content of module:

- 41201 *International Environmental Law*

Mandatory Prerequisites

none

Forms of Teaching and Proportion

Lecture - 2 hours per week per semester
Seminar - 2 hours per week per semester
Self organised studies - 120 hours

Teaching Materials and Literature

- Birnie/Boyle/Redgwell, *International Law and the Environment*, 4th edition, Oxford University Press, 2021
- Knopp/Epstein/Hoffmann, *International and European Environmental Law with Reference to German Environmental Law – A Guide for International Study Programs*, 2nd edition, Berlin 2019

- Albrecht, Egute, Wanki, Ezeamama (Eds.), International environmental law (IEL) – Agreements and introduction. 6th expanded and updated edition, 2022.
- IPCC, 2022: Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.001.
- IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3-24 <https://doi.org/10.1017/9781009157940.001>.

Additional literature will be announced in class and made available on the Moodle page of the course.

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- **Written Exam, 120 minutes** (maximum 40 points)

And

Climate Conference Simulation Group:

- Paper for preparation of the climate conference, 2 pages (maximum 15 points)
- Simulation of a climate conference, 10 SWS (maximum 25 points)

or

Weekly seminars Group:

- 10 pages essay submission on topics related to environmental negotiations and decision-making (maximum 40 points)

To pass (grade 4,0) the module, students need to earn a minimum of 40 points.

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

none

Remarks

none

Module Components

- Lecture: Advanced Studies in International Environmental Law
- Seminar: International Negotiations and Environmental Decision-Making (including COTT COP blocked seminars)

Components to be offered in the
Current Semester

- Examination: Advanced Studies in International Environmental Law

520211 Lecture

Advanced Studies of International Environmental Law - 2 Hours per Term

520219 Seminar

International Negotiations and Environmental Decision-Making - 2 Hours per Term

520216 Examination

Advanced Studies of International Environmental Law - 2 Hours per Term

Module 12983 Climate Change and Migration

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozio-technische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	12983	Compulsory elective

Modul Title	Climate Change and Migration Klimawandel und Migration
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Associate Prof. (Univ. Damaskus) Dr. agr. Ibrahim, Bachar
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	After completion of this module, students will have a solid understanding of Climate Change and its impacts, especially on vulnerable countries. Students will further have the knowledge about various concepts and logical arguments linking climate change and migration.
Contents	<p>Part "Climate Change"</p> <ul style="list-style-type: none"> • Observations of change in the climate system • Critically assess the role of human activities in modern climate change • Assess future climate change scenarios and their potential impact on the Earth • climate change agenda and how this agenda impact on policy • Identify the Impacts and related Adaptation measures <p>Part "Migration"</p> <ul style="list-style-type: none"> • The potential link between climate change, migration, • The Task of defining 'climate refugee' • climate change contribution to the refugee problems • Gaps in the international legal framework • Individual and Collective Action on Mitigation <p>Lectures will be given live online and afterwards uploaded as a PDF on the moodle For the exercise, students have to solve a given problem. Students have to select a topic on moodle and register in the given table (maximum of 4 students per group).</p>
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Environment, forced migration and social vulnerability, T. Afifi, J. Jäger - 2010 - Springer • Climate change, human security and violent conflict: challenges for societal stability, J. Scheffran, M. Brzoska, H.G. Brauch, P.M. Link... - 2012 • People on the move in a changing climate: The regional impact of environmental change on migration, E. Piguët, F. Laczko - 2013 • Global migration governance, A. Betts - 2011 • Disentangling migration and climate change, T. Faist, J. Schade - 2013 - Springer • Climate change and migration: security and borders in a warming world, G. White – 2011- Oxford University Press
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Oral Exam, 30 min. (50%) • Two presentations on the a scientific topic (each 25%) <p>A pass mark is only achieved by obtaining at least 50% of the grade for each part of the module. The examination as well as the seminar part have to be passed (at least 50% in each) to pass the module.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	An annual excursion pertaining to the module may be organised. <i>Complementary Module in Master Environmental and Resource Management.</i>
Module Components	<ul style="list-style-type: none"> • Lecture • Seminar • Examination
Components to be offered in the Current Semester	<p>520223 Lecture Climate Change and Migration - 2 Hours per Term</p> <p>520224 Seminar Climate Change and Migration - 2 Hours per Term</p>

Module 13356 Global Change and Legal Response

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozio-technische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13356	Compulsory elective

Modul Title	Global Change and Legal Response Rechtsfragen Globaler Änderungsprozesse
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. jur. Albrecht, Eike
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>After completing the module, students are able to:</p> <ul style="list-style-type: none"> • Understand principles and procedures of international law and its role in the management of global changes, • Identify and critically analyse issues pertaining to international disputes, • Apply international law in specific concrete cases in the field of selected areas of global change • Comprehend and evaluate the significance of international law in managing global change processes. • Understand the way in which international agreements are achieved in specific areas, • Understand the role various international actors play in decision making, • Apply their understanding of international law and its implementation at the national level, • Demonstrate a basic outline of the key challenges, the relevant actors and the legal response
Contents	<ul style="list-style-type: none"> • Introduction to the principles, procedures and main actors in international law • Overview of the most relevant global changes (Climate Change; Loss of Biodiversity; Loss of Agricultural Land; Digitalisation; Migration; Waste; Chemical Substances; Rare substances (e.g. phosphor, etc.) • Outlook to developments of the future and its legal response
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Birnie/Boyle/Redgwell, International Law and the Environment, 4th edition, Oxford University Press, 2021 • Knopp/Epstein/Hoffmann, International and European Environmental Law with Reference to German Environmental Law – A Guide for International Study Programs, 2nd edition, Berlin 2019 • Albrecht, Egute, Wanki, Ezeamama (Eds.), International environmental law (IEL) – Agreements and introduction. 6th expanded and updated edition, 2022. • IPCC, 2022: Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.001. • IPCC, 2023. Climate Change 2023: Synthesis Report - Summary for Policymakers [Arias, P., Bustamante, M., Elgizouli, I., Flato, G., Howden, M., Méndez, C., Pereira, J., Pichs-Madruga, R., Rose, S.K., Saheb, Y., Sánchez, R., Ürge-Vorsatz, D., Xiao, C., Yassaa, N. (eds.)]. IPCC, Geneva, Switzerland • IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3-24 https://doi.org/10.1017/9781009157940.001. • German Advisory council on Global Change (2019): Towards our Common Digital Future. Berlin. WGBU. https://www.wbgu.de/en/publications/publication/towards-our-common-digital-future
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Written Exam, 120 minutes (maximum 40 points) • Presentation, 15 min. (maximum 20 points) <p>In the beginning of the semester the students choose one topic of determined areas of global change for group work and presentation To pass (grade 4,0) the module, students need to earn a minimum of 30 points.</p>
Evaluation of Module Examination	Performance Verification – graded

Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Lecture: Global Change and Legal Response• Seminar: Will be announced during the lecture• Examination: Global Change and Legal Response
Components to be offered in the Current Semester	No assignment

Module 13655 Un/DisCIPLining Knowledge: Technology, Science, and Society in Transformation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13655	Compulsory elective

Modul Title	Un/DisCIPLining Knowledge: Technology, Science, and Society in Transformation Epistemischer Ungehorsam: Technik, Wissenschaft und Gesellschaft im Wandel
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	By the end of the module students are able to develop a research question within the academic field of Science and Technology Studies and create and present a research design, as well as identify and make use of appropriate sources of empirical material for your analysis, furthermore to identify, select and compare appropriate concepts and methods relating to an interdisciplinary research field and analyse changes in fields of science and technology with respect to knowledge forms.
Contents	This module presents central theories and approaches developed in Science and Technology Studies. The module focuses on questions about disciplining and undisciplining knowledge, the corresponding epistemic and ontological perspectives and the political economy of science. It explores concepts being concerned about shifting concepts of disciplinarity, such as interdisciplinarity, transdisciplinarity or postdisciplinarity.
Recommended Prerequisites	Knowledge from the courses <ul style="list-style-type: none"> • Technik in Wissenschaft und Gesellschaft • Philosophy of Science in Practice
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester

	Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature and learning materials are given in the course description.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• short scientific essay, max. 4000 words (45%)• scientific review, max. 2500 words (40%)• presentation, max. 15 minutes (15%) <p>The oral part of the examination can be done digitally or as a virtual meeting if the conditions for an examination in presence are not given.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	German-speaking teachers are available if required. Further information on this can be found in the course description.
Module Components	<ul style="list-style-type: none">• Seminar - 4 SWS
Components to be offered in the Current Semester	No assignment

Module 13656 What Material Culture? Transformative Processes in Technology and Art

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13656	Compulsory elective

Modul Title	What Material Culture? Transformative Processes in Technology and Art Welche materielle Kultur? Transformative Prozesse in Technik und Kunst
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After participating in this module, students understand theories on new materialism and object theories, as well as visualization and experimental techniques. They master media and creative technical skills, and can complete planning and execution of a project is successfully.
Contents	The question "What material culture?" has been raised since the 1990s with the emergence of the current of "new materialism". From various disciplinary perspectives, questions are asked about the relationships of humans to technology, nature and the environment in digital and analog space, and proposals for a new location are developed. This module represents a cross-sectional module that teaches basic cultural studies methods and theories for a disciplinarily heterogeneous group of students. Experimental formats in technology studies and in the arts will be explored and tested in practice. Special attention is paid to the exploration of transformative processes in urban public spaces, gardens and parks, current industrial sites (ports, open- cast mining) or industrial wastelands. A concept of student research in the sense of moving teaching and learning is implemented here.
Recommended Prerequisites	Interest in media technology and creativity techniques
Mandatory Prerequisites	none

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	To be announced during the first class meeting.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• project outline (20%)• presentation, 15 minute (20%)• written documentation of the project work, 2500-3000 words (60%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Lecture/Seminar - 4 SWS
Components to be offered in the Current Semester	No assignment

Module 13705 Sociology of Sustainable Development

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13705	Compulsory elective

Modul Title	Sociology of Sustainable Development Soziologie der nachhaltigen Entwicklung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13706 Justice and Diversity in Environmental Change

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13706	Compulsory elective

Modul Title	Justice and Diversity in Environmental Change
	Gerechtigkeit und Diversität im Kontext von Umweltveränderungen
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Jaeger-Erben, Melanie
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<ul style="list-style-type: none"> • Acquiring a profound understanding of different concepts on social justice and diversity in the context of environmental change, climate change and sustainable development. • Discussing and critically reflecting upon current issues related to environmental justice, such as resource conflicts, land-use change or environmental movements. • Methodological skills in reading and discussing academic texts, preparing Pecha Kucha presentations, and recording scientific podcasts.
Contents	<p>Environmental problems have the capacity to affect all of us. However, certain communities are disproportionately exposed to environmental hazards, such as air pollution. Also, some regions of the world (will) suffer much more from the implications of climate change. Environmental problems thus do not affect us all equally, or in the same way. Nor do we have equal power to decide solutions to these problems, or to take the necessary action to solve them. This unequal positioning, which often impose the greatest burdens upon marginalised, disadvantaged and less powerful populations, forms the central premise of environmental justice research and activism. The goal of this module is to gain a comprehensive understanding of social justice, environmental justice and diversity in environmentalism. The course introduces concepts such as environmental racism, climate justice, ecofeminism, and indigenous perspectives on environmental change. The theoretical perspectives introduced are applied to various environmental movements and resource conflicts all over the world.</p>

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Exercise - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none">• Bell, K. (Ed.) (2021). Diversity and Inclusion in Environmentalism, Routledge.• Holifield, R., Chakraborty, J., Walker, G. (Eds.) (2018). The Routledge Handbook of Environmental Justice, Routledge.• Lele, S. et al. (Eds.) (2019). Rethinking environmentalism: Linking justice, sustainability, and diversity (Vol. 23). MIT Press.• Williams, J. (2021). Climate change is racist. Race, privilege and struggle for climate justice. Icon Books. <p>Further literature will be announced during class.</p>
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Reading assignments, 1.500-2.000 words (20%)• Reflections on sessions, 1.500-2.000 words (20%)• Pecha Kucha presentation, 6:40 Min (30%)• written test (multiple choice) (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	50
Remarks	none
Module Components	<ul style="list-style-type: none">• Exercise Theoretical approaches to Justice and Diversity in Environmental Change• Seminar Justice and Diversity research and methods in the context of Environmental Change
Components to be offered in the Current Semester	No assignment

Module 13739 Anthropos in the Anthropocene

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13739	Compulsory elective

Modul Title	Anthropos in the Anthropocene Anthropos im Anthropozän
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13899 Urban Transformation / Urban Studies

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13899	Compulsory elective

Modul Title	Urban Transformation / Urban Studies Urban Transformation / Urban Studies
Department	Faculty 6 - Architecture, Civil Engineering and Urban Planning
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13904 Heritage and Transformation in Regional and Urban Studies

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13904	Compulsory elective

Modul Title	Heritage and Transformation in Regional and Urban Studies
	Kulturerbe und Transformation in der Regional- und Stadtforschung
Department	Faculty 6 - Architecture, Civil Engineering and Urban Planning
Responsible Staff Member	Prof. Dr. rer. pol. Gailing, Ludger
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>The aims of this module are:</p> <ul style="list-style-type: none"> • To understand regional and urban transformation processes and controversies around heritage in terms of e.g. spatial planning, governance and politics, built environment, socio-cultural, architectural traditions in the context of transformation processes. • To develop knowledge of the interfaces between heritage studies and regional and urban studies. • To critically interrogate “heritage” as a concept and its position in regional and urban development, grasping the interplay between material, cultural, economic and political dimensions in the making of regions and cities around the world
Contents	<p>Heritage is central to contemporary towns, cities and regions today. From industrial sites, through ancient ruins, to festivals heritage can be understood in terms of constituent elements of a city or region or it can be used more expansively to the city/ region in general as a spatial-cultural quality of e.g. an urban centre or regional landscape. Urban/ landscape heritage is central to policy, planning and politics, becoming embroiled in approaches to and conflicts over urbanisation, deindustrialisation, tourism, social and cultural identities and urban/ regional democracy. This module examines the spatial politics and geographies of heritage from regional and urban perspectives in the context of transformation processes. We consider how heritage can become central to overlapping discourses on these transformation</p>

processes as well as on identities, built environment, urban/ regional history and plans for the future of towns, cities and regions. We consider how heritage can contribute to spatial inequalities and conflicts over public space, identity, community and economic development. We engage critically with concepts of urban and regional heritage from their emergence in mid-20th century Europe. Empirically, we focus on diverse global contexts, in both the Global North (e.g. Western Europe, post-socialist countries) and South (Africa, Asia).

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	The bibliography will be presented in class.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • 20% Presentation (15 minutes per student) • 80% Research paper (3000-3500 words including references)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<i>Seminar Heritage and Transformation in Regional and Urban Studies</i>
Components to be offered in the Current Semester	640603 Seminar Heritage and Transformation in Regional and Urban Studies - 4 Hours per Term

Module 13907 Anthropocene and Law

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Sozio-technische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13907	Compulsory elective

Modul Title	Anthropocene and Law Anthropozän und Recht
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. publ. Dr. h. c. Knopp, Lothar
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>As a result of participating in this module, you have</p> <ul style="list-style-type: none"> • knowledge of the Anthropocene concept as a proclaimed new geological age within the context of law <p>You are able</p> <ul style="list-style-type: none"> • to classify the Anthropocene concept in the sustainability discourse or to critically contrast it, • to critically question whether the state and its organization can cope with the Anthropocene, • derive potential consequences of the Anthropocene concept for the legal system, • to develop a one-semester study project based on what you have learned, • to create a well-founded presentation and to carry out a written elaboration on a context-related question.
Contents	The (none-legal) anthropocene concept and (legal) questions and answers: reducing human impact on the natural environment (mitigation); human adaptation to environmental changes; Possibilities and limits of technological influence on nature/environment, e.g. through geoengineering; Consequences of the Anthropocene concept for the legal organization of women and men in the state.
Recommended Prerequisites	none
Mandatory Prerequisites	none

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature and learning materials are given in the course description and will be announced within the first class meeting.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• project proposal, max. 3 pages (25 %)• final presentation, 15-25 min (15 %)• project report, min. 12 pages (60 %)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• NN - Lecture Anthropocene and Law• NN - Seminar Anthropocene and Law
Components to be offered in the Current Semester	No assignment

Module 13925 Alternative Economies

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13925	Compulsory elective

Modul Title	Alternative Economies Alternative Ökonomien
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Jaeger-Erben, Melanie
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	Upon successful completion, students will have a solid overview on heterodox economic theories (including feminist, post-Keynesian, ecological and political economy perspectives), and understand how they differ from neoclassical economics. They are skilled in discussing and critically reflecting upon the opportunities, limitations and the applicability of different economic concepts presented in class. Students will acquire methodological skills in researching, reading and discussing academic literature.
Contents	The multiple crises we are currently facing – in relation to climate, biodiversity, democracy, or social inequalities – require different economic perspectives and practices. In lectures and seminars, students will learn about the limits of the dominant neoclassical paradigm and gain an overview on heterodox economic schools. They will be introduced to concepts such as degrowth, care economy, economic democracy or social entrepreneurship. At the same time, this course will critically analyse fundamental aspects of current economies, such as money, growth, profits, work or the relation to nature, and discuss practical examples of alternative economies.
Recommended Prerequisites	Knowledge of the contents of module • 13922 <i>Introduction to Transformation Studies</i>
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester

Self organised studies - 120 hours

Teaching Materials and Literature

- Chang, H.-J. (2014). Economics: The User's Guide. Bloomsbury Publishing.
- Bauhardt, C. (2014). Solutions to the crisis? The Green New Deal, Degrowth, and the Solidarity Economy: Alternatives to the capitalist growth economy from an ecofeminist economics perspective. Ecological Economics 102, 60-68. <https://doi.org/10.1016/j.ecolecon.2014.03.015>
- The Foundational Economy Collective (2022). Foundational Economy. The infrastructure of everyday life. Manchester University Press.
- Raworth, K. (2017). Doughnut economics: seven ways to think like a 21st-century economist. London: Random House Business Books.
- Wellbeing Economy Alliance (2020). Wellbeing Economics for the COVID-19 recovery. Ten principles to build back better. Briefing Paper, https://serval.unil.ch/resource/serval:BIB_C2D492EC73DF.P001/REF.
- Kallis, G. et al. (2018). Research on Degrowth. Annual Review of Environment and Resources. 43:4.1–4.26. <https://doi.org/10.1146/annurev-environ-102017-025941>

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- Participation and reflection notebook, 1,500-2,000 words (30%)
- 4 short tests in class, 10 min. each (40%)
- Poster presentation in groups (15 min.) (30%)

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

40

Remarks

Module with limited number of participants - Registration two weeks prior to the commencement of lectures!

Module Components

none

Components to be offered in the Current Semester

510551 Lecture
Heterodox economic theories - 2 Hours per Term
510552 Seminar
Exploring cases of alternative economies - 2 Hours per Term

Module 13927 Concepts of Social Criticism and Social Transformation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13927	Compulsory elective

Modul Title	Concepts of Social Criticism and Social Transformation Konzepte von Gesellschaftskritik und sozialer Transformation
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Dr. phil. habil. Havlin, Tetiana
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<ul style="list-style-type: none"> • Students are familiar with historical discourses as well as theoretical concepts on social change, social criticism and social transformation in Political Theory and Social Philosophy including perspectives from Critical Theory, Radical Democratic Theory, Political Epistemology and Political Philosophy. • Students can apply these concepts in their own research and are able to use these concepts to analyse real-life examples. • Students are able to understand and critically examine 'classical' as well as contemporary texts. • Students can articulate and present their own perspective on course contents in an academically adequate and sound manner. • Students are able to write academically and are capable to orally present their ideas convincingly in an academic context.
Contents	<p>The module gives an overview of the development, critique and application of concepts of social criticism and social transformation. We will discuss the formation of key concepts and ideas such as "progress", "emancipation", "reform" and "revolution" in the Age of Enlightenment as well as their appropriation and subsequent critique in theoretical movements such as Critical Theory, Postmodernism and Postcolonialism.</p> <p>The module will then focus on contemporary ideas of social criticism and social change in Critical Theory, Radical Democratic Theory, Political Epistemology, Feminist Philosophy, Abolitionism and (possibly) other strands of the current theory landscape. We will explore how the approaches discussed may serve as building blocks for a theory of the transformation of contemporary societies in light of current economic</p>

and ecological crises and/or for the description of current blockades and impediments for such a transformation. Additionally, we will ask how the concepts discussed relate to conceptions of transformation in sociology and transformation science.

Recommended Prerequisites	Students have knowledge of at least one of the following modules <ul style="list-style-type: none">• 13922 Introduction to Transformation Studies• 13932 Transformation Theories
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature and teaching materials will be provided on moodle at start of the semester.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• One oral presentation (10 to 15 minutes) (10%)• Three writing assignments (750 to 1500 words per assignment) (30%)• A final essay (5000 to 10000 words) (60%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Seminar Critical Theories of Social Transformation
Components to be offered in the Current Semester	No assignment

Module 13945 Europe in Transformation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13945	Compulsory elective

Modul Title	Europe in Transformation Europa im Wandel
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13946 Mobility and Digitalisation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13946	Compulsory elective

Modul Title	Mobility and Digitalisation Mobilität und Digitalisierung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Dr. phil. habil. Havlin, Tetiana
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	<p>This module provides sociological and cultural theory perspectives on the nexus between digitalization and mobility specifically in the context of current societal transformations.</p> <p>In the course of semester, students learn</p> <ul style="list-style-type: none"> • to understand current transformations of economy, society and politics, • to reflect on how both institutions and everyday settings are co-constituted by specific patterns of mobility, both in the international and domestic realms. • to understand and explain the central basic and advanced theoretical positions in the context of sociology of mobility, migration and digital cultures (cross-border mobilities, social inclusion and exclusion, postcolonialism, postsocialism, global and transnational relations) • to analyse and compare texts and apply their theories to social phenomena • to reflect their own positionality within the nexus mobilities and digitalization. • to present these positions and analyses in a concise manner
Contents	<p>This module provides sociological and cultural theory perspectives on the nexus between digitalization and mobility specifically in the context of current societal transformations.</p>

It teaches a variety of central theories and texts concerned with hierarchies and freedoms at the nexus of mobilities and digitalization. Digital technologies and networks change our perception of the world and our place therein. For example, digital technologies change borders, passport systems, work arrangements as well as how friendship and family networks organize their cross-border mobilities. They create new hierarchies, but also new freedoms. This module provides insights in how to analyse mobilities and digital culture from a critical sociological perspective sensitive to power, colonialities, hybridity, entanglement and difference. Digital mobility and immobility becomes understood as part of a complex global settings which spans beyond national boundaries.

Students will be introduced to a number of specialized research areas of research with reference to digitalization, digital cultures, migration, mobility and ethnicity/racialization research as well as further theories of social inequality. From a non-essentialist perspective, these address digitally generated and perpetuated social placement processes in relation to "race", class, gender, dis/ability and discuss their implications for privilege and disadvantage as well as the unequal distribution of life chances in the digital age on the basis of empirical examples.

Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Literature will be provided in the moodle at the beginning of the semester
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ol style="list-style-type: none"> 1. Oral presentation 15 min (40%) 2. Essay: 10-15 pages (30 %) 3. Participation in exercises and discussions (30%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13953 Economic Perspectives on Climate Neutrality

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13953	Compulsory elective

Modul Title	Economic Perspectives on Climate Neutrality Ökonomische Perspektiven der Klimaneutralität
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Hirschl, Bernd
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>Participants learn about different economic perspectives on climate neutrality.</p> <p>They will be able to describe different economic levels and distinguish their specifics: the individual, company, systemic, regional, macroeconomic and global levels.</p> <p>They will understand different CO2 accounting methods and be able to compare them.</p> <p>They know the relevant framework conditions and influencing factors that affect the economics of climate neutrality, including the political framework as well as technological and social influencing factors.</p>
Contents	<p>Among other things:</p> <ul style="list-style-type: none"> • Basics of climate neutrality - terms, concepts, political framework • macroeconomic aspects (e.g. costs, benefits, damages etc.) • economic aspects (e.g. economic efficiency in the context of political framework) • Distributional and equity aspects, social dimension (e.g. distribution of costs and benefits among different social groups, conception of relevant levies, investor-user dilemmas) • Regional economic effects (e.g. value-added and employment effects on site and prerequisites for this) • Systemic aspects and infrastructures (e.g. economic evaluation and sustainability of relevant infrastructures) • Energy economy in transition (including new actors and business models)
Recommended Prerequisites	none

Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Slides and working materials/literature will be announced in the lecture
Module Examination	Final Module Examination (MAP)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• 120 min written examination
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	20
Remarks	Please register your participation by email with the department before the start of the semester
Module Components	<ul style="list-style-type: none">• lecture with integrated seminar elements and exercises• examination
Components to be offered in the Current Semester	No assignment

Module 13957 Behavioural Economics

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13957	Compulsory elective

Modul Title	Behavioural Economics
	Verhaltensökonomie
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. oec. habil. Schnellenbach, Jan
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After completing this module, students will be able to apply behavioural economic models to analyse individual decisions. They can integrate psychological research approaches into economic models. They can independently develop and master advanced research approaches in the field of behavioural economics and have a solid understanding of the basics of empirical, including experimental, research methods in the field of behavioural economics. Furthermore, they will be able to critically analyse and evaluate economic policy proposals with a behavioral economics perspective.
Contents	<ul style="list-style-type: none"> • Homo Economicus: The economic concept of human behaviour • The economic theory of moral action • Behavioural anomalies: an overview • Bounded rationality • Dealing with risk and uncertainty • Prospect theory • Heuristics: Curse or blessing? • Fairness and social norms • Economic happiness research • Behavioural political economy • Behavioural public economics
Recommended Prerequisites	Good knowledge of microeconomics.
Mandatory Prerequisites	No successful participation in the corresponding discontinued module 11814 Behavioral Economics.

Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	Foundational literature: <ul style="list-style-type: none">• Angner, E. (2012). A Course in Behavioral Economics, Houndmills: Palgrave Macmillan.• Additional literature will be announced during the lecture. In the exercise: <ul style="list-style-type: none">• Wilkinson, N. and Klaes, M. (2012), An Introduction to Behavioral Economics. 2nd edition, Houndmills: Palgrave Macmillan.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Term paper with a maximum of 15.000 characters incl. spaces (roughly 6 pages), 50 points• Final exam, 40 minutes, 50 points.
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	This module is a successor module to the module „Behavioral Economics (11814)". Students who have already passed the module cannot take the module "Behavioral Economics (13957)" again.
Module Components	Behavioral Economics (Lecture) Behavioral Economics (Exercise)
Components to be offered in the Current Semester	No assignment

Module 13958 Economics of Innovation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13958	Compulsory elective

Modul Title	Economics of Innovation Innovationsökonomik
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. oec. habil. Schnellenbach, Jan
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Each winter semester even year
Credits	6
Learning Outcome	Students will understand how innovation can be explained from a microeconomic perspective. They will know the economic, institutional, and psychological prerequisites for entrepreneurial innovation. Upon successful completion of the module, students will be able to critically assess under which circumstances innovative entrepreneurial actions are positively evaluated and potentially eligible for economic policy support.
Contents	Innovation in the history of economic theory; Types of innovation; Competition and innovation; Organizational aspects of innovation; Political and institutional prerequisites for innovation; Diffusion of innovations; Innovation and economic growth; Innovations and societal welfare.
Recommended Prerequisites	Good knowledge of microeconomics.
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	G.M. Swann, The Economics of Innovation: An Introduction, Elgar, 2013 as well as additional articles and book chapters announced during the lecture
Module Examination	Continuous Assessment (MCA)

Assessment Mode for Module Examination	<ul style="list-style-type: none">• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50%)• Exam, 40 minutes, which can also be conducted digitally (50%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	No offer in the winter semester 2025/26.
Module Components	Innovation Economics Lecture - 2 hours per week Innovation Economics Exercise - 2 hours per week
Components to be offered in the Current Semester	No assignment

Module 13959 Law and Economics

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13959	Compulsory elective

Modul Title	Law and Economics Recht und Wirtschaft
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. oec. habil. Schnellenbach, Jan
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Each winter semester odd year
Credits	6
Learning Outcome	Students will gain an overview of the field of economic analysis of law, which involves analyzing legal rules from the perspective of economic theory. It focuses on the interaction of legal norms with the actions of private households and companies, as well as the impact of constitutional law on government actions. Students should learn to analyze legal norms in terms of their efficiency and economic effects, including microeconomic efficiency, as well as growth and distribution effects. They should also be able to assess why specific legal norms have developed historically as we know them today.
Contents	<ol style="list-style-type: none"> 1. Fundamentals of the theory of private property rights <ol style="list-style-type: none"> a) Historical development of private property b) Theories of the emergence of private property rights c) Economic analysis of common-pool resources d) Property rights in intangible assets 2. Economic analysis of contract law <ol style="list-style-type: none"> a) Complete and incomplete contracts b) Moral hazard and adverse selection c) Efficient responses to contract breaches 3. Economic analysis of tort law <ol style="list-style-type: none"> a) The Coase theorem b) Economic analysis of liability rules 4. Economic analysis of criminal law <ol style="list-style-type: none"> a) Differentiating between tort law and criminal law b) Deterrence effects of criminal law c) Optimal deterrence effects 5. Constitutional economics

- a) Fundamentals of the economic theory of public law
- b) Empirical analysis of the economic effects of constitutional rules

Recommended Prerequisites	Basic knowledge of microeconomics
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	H. Schäfer and C. Ott, Lehrbuch der ökonomischen Analyse des Zivilrechts, 5th edition, Heidelberg: Springer, 2012 Additional articles and book chapters announced during the lecture
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50% of the total grade)• Exam, 40 minutes (50% of the total grade)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	None
Module Components	Law & Economics Lecture - 2 hours per week Law & Economics Exercise - 2 hours per week
Components to be offered in the Current Semester	No assignment

Module 13960 Transformation: Law, Governance, Ethical Foundations

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13960	Compulsory elective

Modul Title	Transformation: Law, Governance, Ethical Foundations
	Transformation: Recht, Governance, ethische Grundlagen
Department	ZfRV - Centre for Law and Administration
Responsible Staff Member	Prof. Dr. jur. Albrecht, Eike
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	<p>After completing the module, students are able to:</p> <ul style="list-style-type: none"> • Understand different kinds of transformation such as digital and sustainable transformation, • Understand the debate on transformation and social change in sociology, cultural studies, economics, social anthropology, • Critically strengths and weaknesses of different policy instruments such as economic instruments, regulatory law, self-regulation and informational instruments, • Discuss normative criteria for determining the overall objectives against which the effectiveness of instruments can be assessed (such as human rights or the Paris climate target), • Comprehend and evaluate the significance of the interdependencies of different human sciences and their contribution to sustainability science. • Understand the role of different legislative actors (including at EU level) • Have improved their skills in effectively arguing their case in relation to the topics discussed in class.
Contents	<p>Lecture: Transformation: Law, Governance, Ethical Foundations</p> <ul style="list-style-type: none"> • Introduction to research on transformation and social change in various disciplines of human sciences • Legal and ethical debate on objectives in terms of sustainability and digitalization, with a special focus on human rights and different concepts of freedom

- Strengths and weaknesses of various policy instruments (that necessarily have a legal shape – such as regulatory law, economic instruments, informational instruments, etc.)
- Special focus on the role of economic instruments
- Contribution of environmental litigation (especially climate litigation) to legal transformation processes
- Interaction of sustainable and digital transformation
- Challenges of EU legislation with a focus on sustainable and digital transformation
- Actors of EU sustainability governance and EU decision-making
- The role of non-state actors in sustainability and digitalization decision-making and negotiations
- Simulation (role play) of a legislation process (2 groups with maximum 35 students) or essay writing based on a topic discussed during the seminar

In the beginning of the semester the students choose to attend either a weekly seminar (2 hours per week) or take part in a simulation of a EU legislation process. Each student in this simulation group will take the role of a relevant EU player such as a DG of the COM, or an NGO, or another body. Participants will be required to prepare (in written and oral form) an assigned topic of EU sustainability or digitalization law in order to actively participate in the final role play.

Student in the weekly seminar (1 group with maximum 35 students) will attend seminars on a weekly basis and will be given topics for essay writing based on the topics discussed during the seminar. These essays have to be researched, articulated, and submitted independently by each student in the weekly seminar group.

Recommended Prerequisites

Knowledge of the content of module:
• 41201 *International Environmental Law*

Mandatory Prerequisites

none

Forms of Teaching and Proportion

Lecture - 2 hours per week per semester
Seminar - 2 hours per week per semester
Self organised studies - 120 hours

Teaching Materials and Literature

- Ekardt, Sustainability: Transformation, Governance, Ethics, Law, Springer, 2020
- Scholz, Environmental Literacy in Science and Society: From Knowledge to Decisions, Cambridge University Press, 2011

Additional literature will be announced in class and made available on the Moodle page of the course.

Module Examination

Continuous Assessment (MCA)

Assessment Mode for Module Examination

- Written Exam, 60 minutes (maximum 40 points)

And

- Simulation Group:
 - Paper for preparation of the EU legislation process, 2 pages (maximum 15 points)

- Simulation of the legislation process, 10 SWS (maximum 25 points)

Or

- Weekly seminars Group:
 - 10 pages essay submission on topics related to environmental negotiations and decision-making (maximum 40 points)

To pass (grade 4,0) the module, students need to earn a minimum of 40 points.

Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	In the event that the module cannot be taught or examined according to this description (e.g., for infection control reasons), the alternatives communicated on relevant platforms (e.g., on the module homepage or Moodle) shall apply.
Module Components	Summerterm: NN - Lecture Transformation: Law, Governance, Ethical Foundations NN - Seminar Transformation: Law, Governance, Ethical Foundations
Components to be offered in the Current Semester	No assignment

Module 14148 Media in Transformation - Media Theory and Analysis

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14148	Compulsory elective

Modul Title	Media in Transformation - Media Theory and Analysis Medien im Wandel - Medientheorie und -analyse
Department	Faculty 1 - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology
Responsible Staff Member	Prof. Dr. phil. Petersen, Christer
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	After successfully completing the module, students have in-depth knowledge of methods for analysing text-based, visual and audiovisual formats. They are able to apply these methods in the context of media theory issues and thus gain a deeper understanding of analog and digital media communication. In addition they are able to critically analyze and theoretically model the changing social functions and effects of the media.
Contents	In-depth introduction to the methods of film and text analysis, methodology of media and cultural theory, as well as the philosophy and sociology of new and old, digital and analog media in their various forms and formats.
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Joachim Friedmann: Storytelling for Media: Introduction to the Theory and Practice of Narrative Design. München, Tübingen: UVK 2021. • Niklas Luhmann: Reality of the Mass Media. Hoboken, N.J.: Blackwell Publishers 2000. • Material is available for download on the Internet. More information at the beginning of course.

Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Successful completion of an essay of 10-20 pages or practical/project work of corresponding scope (60%)• Presentation of a research topic or a project work, approx. 20 minutes (40%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Seminar: Media in Transformation - Media Theory and Analysis Current Description
Components to be offered in the Current Semester	No assignment

Module 14288 Psychology of Entrepreneurship and Change

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14288	Compulsory elective

Modul Title	Psychology of Entrepreneurship and Change Psychologie des Unternehmertums und Wandels
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. Urbig, Diemo
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every winter semester
Credits	6
Learning Outcome	After completing this module, students will understand how basic psychological theories of decision making under uncertainty, complex interdependence, and intertemporal dynamics help explain the behavior of individuals who drive change, such as entrepreneurs, innovators and social activists. They will have developed a basic understanding of key psychological and behavioral economic theories related to decision-making under risk and ambiguity. Identify and explain critical thinking and decision-making patterns in the work context. Students will be able to apply theories to real-world situations.
Contents	<p>In this module, we venture into the specifics of a wide range of decision-making theories. We travel through a diverse collection of seminal theories, including many that have formed the basis of Nobel Prize-winning research. We emphasize the interdisciplinary application of insights to ensure that students from a variety of disciplines can absorb and apply the knowledge gained in this module to their own professional decision-making scenarios.</p> <p>The literature is presented in the lecture and students can afterwards read the literature in depth.</p> <p>The topics include:</p> <ul style="list-style-type: none"> • Satisficing and dual process theories • Risk aversion and ambiguity aversion • Prospect theory and loss aversion • Mental accounting and choice bracketing • Risk reduction strategies: Hedging, learning, and real options • Time preferences

- Status-quo, escalation of commitment, and the not-invented-here effect
- Personal initiative, sensation seeking, and entrepreneurship
- Rational herding and individually irrational learning
- Nash equilibrium and individually irrational cooperation

The concepts and theories are presented in lectures.
Students practice their theory application skills by presenting and discussing critical issues and applications of these theories in seminar.

Recommended Prerequisites	none
Mandatory Prerequisites	No successful participation in modules "13811 Behavioral Resource Management" and "13514 Individuals in Transformation Processes".
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Antons, D., & Piller, F. T. (2015). Opening the black box of "Not Invented Here": Attitudes, decision biases, and behavioral consequences. <i>Academy of Management Perspectives</i>, 29(2), 193-217. • Bernardo, A. E., & Welch, I. (2001). On the evolution of overconfidence and entrepreneurs. <i>Journal of Economics & Management Strategy</i>, 10(3), 301-330. • Bönte, W., Urbig, D. (2019) <i>Connecting People and Knowledge: Knowledge Spillovers, Cognitive Biases, and Entrepreneurship</i> (Chapter 34). In: E. E. Lehmann, M. Keilbach (eds.), <i>From Industrial Organization to Entrepreneurship</i>. Springer, pp. 385-397. • Crant, J. M. (2000). Proactive behavior in organizations. <i>Journal of Management</i>, 26(3), 435-462. • Ellsberg, D. (1961). Risk, ambiguity, and the savage axioms. <i>The Quarterly Journal of Economics</i>, 75(4), 643-669. • Evans, J. S. B., & Stanovich, K. E. (2013). Dual-process theories of higher cognition: Advancing the debate. <i>Perspectives on Psychological Science</i>, 8(3), 223-241. • Fehr, E., & Schmidt, K. M. (1999). A theory of fairness, competition, and cooperation. <i>The Quarterly Journal of Economics</i>, 114(3), 817-868. • Fox, C. R., & Tversky, A. (1995). Ambiguity aversion and comparative ignorance. <i>The Quarterly Journal of Economics</i>, 110(3), 585-603. • Frederick, S., Loewenstein, G., & O'donoghue, T. (2002). Time discounting and time preference: A critical review. <i>Journal of Economic Literature</i>, 40(2), 351-401. • Kahneman, D., Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. <i>Econometrica</i>, 47, 278. • Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. <i>Psychological Bulletin</i>, 127(2), 267-286. • Ostrom, E. (2000). Collective action and the evolution of social norms. <i>Journal of Economic Perspectives</i>, 14(3), 137-158.

- Read, D., Loewenstein, G., Rabin, M., Keren, G., & Laibson, D. (2000). Choice bracketing. In S. Barbera, P. Hammond, & C. Seidl (Eds.), *Elicitation of Preferences* (pp. 171–202). Springer.
- Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of Risk and Uncertainty*, 1(1), 7-59.
- Simon, H. A. (1955). A behavioural model of rational choice. *The Quarterly Journal of Economics*, 69(1), 99-118.
- Staw, B. M. (1981). The escalation of commitment to a course of action. *Academy of Management Review*, 6(4), 577-587.
- Thaler, R. (1985). Mental accounting and consumer choice. *Marketing Science*, 4(3), 199-214.
- Trigeorgis, L., & Reuer, J. J. (2017). Real options theory in strategic management. *Strategic Management Journal*, 38(1), 42-63:
- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 5(2), 207-232.
- Tversky, A., & Kahneman, D. (1991). Loss aversion in riskless choice: A reference-dependent model. *The Quarterly Journal of Economics*, 106(4), 1039-1061.

Module Examination

Final Module Examination (MAP)

Assessment Mode for Module Examination

- Written exam, 90 min, a third of the exam is specific to Bachelor-level and Master-level programs, with Master-level programs focusing on the reading of the original articles and Bachelor-level programs focusing on the lecture and tutorials only
- Bonus points of up to 10% for a graded theory-application paper (essay, 1200 to 1500 words)

Evaluation of Module Examination

Performance Verification – graded

Limited Number of Participants

none

Remarks

none

Module Components

Lecture/exercise/examination

Components to be offered in the Current Semester

530903 Examination
Psychology of Entrepreneurship and Change (Wiederholungsprüfung)

Module 14466 Fit4Future Summer School

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14466	Compulsory elective

Modul Title	Fit4Future Summer School Fit4Future Sommerschule
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14494 The Political Economy of Transformation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14494	Compulsory elective

Modul Title	The Political Economy of Transformation Die politische Ökonomie der Transformation
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14495 Optimization in Business Transformation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14495	Compulsory elective

Modul Title	Optimization in Business Transformation Optimierung der Unternehmensumwandlung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. pol. Xie, Lin
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	By the end of this course, students will be able to: <ol style="list-style-type: none"> 1. Understand Optimization Concepts 2. Formulate and Solve Optimization Problems 3. Apply Optimization to Business Scenarios 4. Utilize Optimization Tools and Software 5. Develop Critical Thinking and Analytical Skills 6. Connect Optimization with Business Transformation Goals
Contents	<ul style="list-style-type: none"> • Foundations of Optimization in Business • Linear Optimization Techniques • Integer Programming • Network Optimization • Standort- und Tourenplanung • Business Applications and Transformation
Recommended Prerequisites	<ul style="list-style-type: none"> • basic mathematical knowledge is desired, such as the content of Module 11112 <i>Mathematik IT-1</i>
Mandatory Prerequisites	None
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Winston W. L. Operations Research: Applications and Algorithms, fourth edition, Thomson, 2004

	Further materials are provided via Moodle (including lecture slides and additional materials including videos, readings etc.)
Module Examination	Final Module Examination (MAP)
Assessment Mode for Module Examination	<ul style="list-style-type: none">• Written Test, 90 minutes <p>Bonus points (10 % of total points) can be earned through the group assignment and will be added to your final score only if you pass the written test.</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	150
Remarks	<i>Module with limited number of participants - Registration two weeks prior to the commencement of lectures!</i>
Module Components	Lecture and Exercise
Components to be offered in the Current Semester	531001 Lecture Optimization in Business Transformation - 2 Hours per Term 531002 Exercise Optimization in Business Transformation - 2 Hours per Term 531003 Examination Optimization in Business Transformation

Module 14498 International Marketing

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14498	Compulsory elective

Modul Title	International Marketing
	Internationales Marketing
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 37106 Social Change and Continuity

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	37106	Compulsory elective

Modul Title	Social Change and Continuity Sozialer Wandel und Kontinuität
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 37404 Culture and Globalisation

assign to: Compulsory Elective Modules from Another Field of Study

Studienrichtung / Vertiefung: Soziotechnische Transformation

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	37404	Compulsory elective

Modul Title	Culture and Globalisation Kultur und Globalisierung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13234 Communication of Science and Technology

assign to: Method Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13234	Compulsory elective

Modul Title	Communication of Science and Technology Wissenschafts- und Technikkommunikation
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Modul 13710 B-TU for Future - Transdisziplinäres Modul für Klimaschutz und nachhaltige Entwicklung

zugeordnet zu: Method Modules

Studiengang Transformation Studies

Akademischer Grad	Modulnummer	Modulform
Master of Arts	13710	Wahlpflicht

Modultitel	B-TU for Future - Transdisziplinäres Modul für Klimaschutz und nachhaltige Entwicklung B-TU for Future - Transdisciplinary Module for Climate Protection and Sustainable Development
Einrichtung	Fakultät 5 - Wirtschaft, Recht und Gesellschaft
Verantwortlich	keine Zuordnung vorhanden
Lehr- und Prüfungssprache	Deutsch
Dauer	1 Semester
Angebotsturnus	jedes Sommersemester
Leistungspunkte	6
Lernziele	keine
Inhalte	keine
Empfohlene Voraussetzungen	keine
Zwingende Voraussetzungen	keine
Lehrformen und Arbeitsumfang	keine Zuordnung vorhanden
Unterrichtsmaterialien und Literaturhinweise	keine
Modulprüfung	Keine Angabe - Angabe ab Wintersemester 2016/17 erforderlich!
Prüfungsleistung/en für Modulprüfung	keine
Bewertung der Modulprüfung	Prüfungsleistung - benotet
Teilnehmerbeschränkung	keine
Bemerkungen	keine
Veranstaltungen zum Modul	keine

Veranstaltungen im aktuellen Semester keine Zuordnung vorhanden

Module 13711 Colloquium Transdisciplinary Sustainability Research

assign to: Method Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13711	Compulsory elective

Modul Title	Colloquium Transdisciplinary Sustainability Research Kolloquium Transdisziplinäre Nachhaltigkeitsforschung
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Study Performance – ungraded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 13714 Research Methods in Business Administration and Economics

assign to: Method Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13714	Compulsory elective

Modul Title	Research Methods in Business Administration and Economics Forschungsmethoden der Betriebswirtschaftslehre
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. Urbig, Diemo
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	Students are able to independently plan, conduct and document theoretical and empirical research projects. They know the basics of theoretical as well as quantitative, inductive and deductive empirical research, which includes the motivating the research questions, the measurement of relevant variables and their manipulation in the context of experiments, and simple statistical tests and least squares estimation. Students gain a broader perspective towards these methods to employ them in more flexible terms. They possess a sound intuition for the typical classes of endogeneity problems
Contents	<p>Developing a deep understanding of the basic methods in conducting research projects in business and economics is critical for students of this field. Mastering the basic methods gives a major advantage to professionals and academics, because they are able to see valuable and reliable patterns in data and critically judge claims justified with these data. Basic statistical concepts are briefly reviewed. However, this course does not replace the corresponding prior knowledge from the bachelor's degree or from courses that are specified as conditions upon admission to the degree program. Instead, an application-oriented approach is pursued, which builds on this prior knowledge and prepares the students for future applications, either their corresponding theses, or research reports.</p> <ol style="list-style-type: none"> 1. Overview of theoretical as well as qualitative and quantitative, inductive and deductive empirical research 2. Descriptive statistics, inductive statistics, and fundamental statistical tests (e.g. z, t, F, Chi-Squared)

	<ol style="list-style-type: none"> 3. Basics of linear regression and non-linear effects, including critical evaluation of assumptions 4. Multicollinearity and outlier analyses 5. Endogeneity problems, including omitted variables, measurement errors, reverse causality, and endogenous selection, and solution, such as instrumental variables and different kinds of experiments 6. Quantitative surveys: Measurement, measurement errors and confirmatory and exploratory factor analysis
Recommended Prerequisites	<p>Knowledge of the content of modules</p> <ul style="list-style-type: none"> • 11962 Angewandte Mathematik und Ökonometrie • 11917 Mathematik W-3 (Statistik)
Mandatory Prerequisites	No successful completion of module 38427 "Forschungsmethoden der Betriebswirtschaftslehre"
Forms of Teaching and Proportion	<p>Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours</p>
Teaching Materials and Literature	Materials are provided via Moodle and include the lecture slides, and additional material including videos.
Module Examination	Prerequisite + Final Module Examination (MAP)
Assessment Mode for Module Examination	<p>Prerequisite for Final Module Examination:</p> <ul style="list-style-type: none"> • Participation in and assessment of an interview. • Passing two tests during the lecture period. <p>Final Module Examination:</p> <ul style="list-style-type: none"> • Written examination, 120 min. <p>In presence or as online-take-home-examination (depending on regulations then in force at the BTU).</p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	<p>Module 13714 (Quantitative Research Methods in Business Administration and Economics) is equivalent in content to module 38427 (Research Methods in Business Administration), but with a different teaching and examination language.</p> <p>No offer in summersemester 2026!</p>
Module Components	<ul style="list-style-type: none"> • Lecture • Exercises
Components to be offered in the Current Semester	No assignment

Module 13983 Interdisciplinary Thinking and Practice

assign to: Method Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13983	Compulsory elective

Modul Title	Interdisciplinary Thinking and Practice Interdisziplinär Denken und Handeln
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	12
Learning Outcome	In this practice-based research project students learn how to communicate and scientifically orient in an interdisciplinary context. In the end they have organized a study project, including a public presentation (a student workshop or an exhibition or a session at a conference). Students learn to deal with complex practice-oriented tasks and to solve them in a step-by-step and goal-oriented manner. The project work can be understood as a methodical step of preparation for a final thesis in which individual interests are also developed and executed in a scientific paper.
Contents	In their practice-based research project students learn how to communicate and scientifically orient in an interdisciplinary context. In the end they have organized a study project, including a public presentation and a student workshop or summer school. Students learn to organize and operate together in a research project. By the end of the module students are able to develop research questions within the academic field of Science and Technology Studies. They create and present a design for interdisciplinary research, including the selection of appropriate theories, concepts, media tools and practical interventions (such as excursions). Students will explore various techniques and experimental formats for presenting the results of their projects. Examples may include, but are not limited to, exhibitions, blogs, wiki pages, video-essays, or other multimodal formats. The module requests a careful co-supervision format to make sure that an interdisciplinary practice-based research happens. At the end of the module a final presentation takes place and students organize an exhibition, a workshop, or a part of a conference together.

Recommended Prerequisites	<ul style="list-style-type: none"> • Knowledge of the content of module • 13655 Un/Disciplining Knowledge <p style="text-align: center;">or</p> <ul style="list-style-type: none"> • 13656 What material culture? <ul style="list-style-type: none"> • Interest in media technology and creativity techniques
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Excursion - 30 hours Self organised studies - 270 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Mahnaz Moallem, Woei Hung, Nada Dabbagh (2019). The Wiley Handbook of Problem-Based Learning. John Wiley & Sons, Inc
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Project outline (2-3 pages) (10%) • Written documentation project (3000 words) (30%) • Scientific Paper OR Exhibition work OR Blog contribution OR Wikipage (5000 words) (40%); The type of examination will be announced in the first week of lectures. • End presentation 20 min. (20%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	Students organize a final presentation event of their study projects (public presentation, student workshop or summer school).
Module Components	none
Components to be offered in the Current Semester	510118 Seminar Study Project - Relational Heritage and Carbon Culture - 4 Hours per Term

Module 14147 Media of Transformation - Film Course

assign to: Method Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14147	Compulsory elective

Modul Title	Media of Transformation - Film Course
	Medien der Transformation - Filmseminar
Department	Faculty 1 - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Module 14148 Media in Transformation - Media Theory and Analysis

assign to: Method Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14148	Compulsory elective

Modul Title	Media in Transformation - Media Theory and Analysis Medien im Wandel - Medientheorie und -analyse
Department	Faculty 1 - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology
Responsible Staff Member	Prof. Dr. phil. Petersen, Christer
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	On special announcement
Credits	6
Learning Outcome	After successfully completing the module, students have in-depth knowledge of methods for analysing text-based, visual and audiovisual formats. They are able to apply these methods in the context of media theory issues and thus gain a deeper understanding of analog and digital media communication. In addition they are able to critically analyze and theoretically model the changing social functions and effects of the media.
Contents	In-depth introduction to the methods of film and text analysis, methodology of media and cultural theory, as well as the philosophy and sociology of new and old, digital and analog media in their various forms and formats.
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> Joachim Friedmann: Storytelling for Media: Introduction to the Theory and Practice of Narrative Design. München, Tübingen: UVK 2021. Niklas Luhmann: Reality of the Mass Media. Hoboken, N.J.: Blackwell Publishers 2000. Material is available for download on the Internet. More information at the beginning of course.
Module Examination	Continuous Assessment (MCA)

Assessment Mode for Module Examination	<ul style="list-style-type: none">• Successful completion of an essay of 10-20 pages or practical/project work of corresponding scope (60%)• Presentation of a research topic or a project work, approx. 20 minutes (40%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none">• Seminar: Media in Transformation - Media Theory and Analysis Current Description
Components to be offered in the Current Semester	No assignment

Module 14440 Causal Data Science

assign to: Method Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14440	Compulsory elective

Modul Title	Causal Data Science
	Kausale Datenanalyse
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. Urbig, Diemo
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	Students have a basic understanding of data science in the context of the identification of causal relationships. They are familiar with a verbal and graphical language to communicate about causality, and with key concepts, such as counterfactuals, outcome equivalence, and confounding effects. They know about typical classes of problems that do not allow causal interpretations of observed associations as well as typical solutions for these problems by means of data analytic and data collection methods. Moreover, students understand the tight interdependency of data analytics and the design of data collection to generate high-quality evidence and high-quality predictions.
Contents	<ol style="list-style-type: none"> 1. Relationships and causal graphs 2. Identification of a causal effect and the potential outcome model 3. Estimation and testing of causal effect 4. Matching 5. Regression analysis, basics and nonlinear regression 6. Instrumental variables 7. Frondoor criterion 8. Selection bias and correction 9. Interrupted time series, regression discontinuity, fuzzy regression discontinuity 10. Panel data and fixed effects, first difference, dif-in-dif estimation 11. Experiments and quasi experiments <p>The module focuses on applications in business and economics, but the underlying theories and methods generalize beyond these fields. The course complements more traditional data science modules with</p>

a stronger focus on implementing data-scientific algorithms. Tutorials also apply these methods to the analysis of real-world problems with simulated and real datasets. Currently, the freely available software [R] is used in the practical parts of the tutorials.

Recommended Prerequisites	<ul style="list-style-type: none"> Basics of statistics, especially estimation and testing and simple regression analysis
Mandatory Prerequisites	None
Forms of Teaching and Proportion	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<p>The lecture is based on selected chapters mostly from Morgan & Winship (2015). A few other articles or chapters will be provided during the module. Pearl, J. (2009) has become a classic reference in computer science. A more accessible introduction is found in Morgan & Winship (2015), the book on which most of the module is based. An accessible econometric perspective on some aspects of the module is offered by Angrist & Pischke (2014). More details on experiments can be found in Gerber & Green (2012).</p> <ul style="list-style-type: none"> Pearl, J. (2009). Causality. Cambridge University Press Morgan, S. L., & Winship, C. (2015). Counterfactuals and causal inference. Methods and Principles for Social Research. Cambridge University Press. Angrist, J. D., & Pischke, J. S. (2014). Mastering'metrics: The path from cause to effect. Princeton university press. Gerber, A. S., & Green, D. P. (2012). Field experiments: Design, analysis, and interpretation. WW Norton. <p>A few additional shorter articles or chapters might be provided during the course of the module.</p>
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> mid term examination, 45 min (35%) end term examination, 75 min (65%)
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	Tutorials are open to questions in English and German.
Module Components	<ul style="list-style-type: none"> Lecture Causal Data Science – 2 Hours per Week per Semester Exercise Causal Data Science – 2 Hours per Week per Semester
Components to be offered in the Current Semester	<p>530906 Lecture Vorlesung Causal Data Science - 2 Hours per Term</p> <p>530907 Exercise Übung Causal Data Science - 2 Hours per Term</p>

Module 14493 AI-Assisted Statistics: Exploring Data with ChatGPT & Co

assign to: Method Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14493	Compulsory elective

Modul Title	AI-Assisted Statistics: Exploring Data with ChatGPT & Co KI-unterstützte Statistik: Datenanalyse mit ChatGPT & Co
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. Urbig, Diemo
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	After completing the course, students will be able to apply statistical concepts and methods to analyze real-world data effectively. They have the skills needed to conduct a simple empirical research project from start to finish, including defining a research question, collecting and analyzing secondary data, and presenting their findings. By integrating AI tools such as ChatGPT throughout the research process, students know how to enhance their efficiency and creativity in the process of hypothesis development, data analysis, and data interpretation. The course will also foster critical thinking, enabling students to reflect on the opportunities and limitations of using AI in research, as well as the ethical implications. Furthermore, students will develop their ability to communicate research findings effectively in both academic and non-academic contexts while improving their collaboration and problem-solving skills in team-based environments.
Contents	The course <i>Statistics with ChatGPT & Co.</i> introduces students to the principles and practices of using AI-driven tools specifically general purpose large language models (LLM), such as ChatGPT in the context of data analysis. IN groups, students will explore the research process, starting with identifying a research question and locating suitable secondary data sources online or in databases. The course provides hands-on training in statistical analysis, including descriptive statistics, regression techniques, and data visualization, with the aid of AI tools like ChatGPT to support each phase. Students will engage in reflective discussions about their experiences with AI in research, examining both its potential and its limitations. The centerpiece of the course is the development and execution of an independent research project, where

students will collect, analyze, and interpret secondary data to address their chosen research question. Group work of up to three people is possible. Alongside these activities, the course emphasizes the ethical and practical challenges of using AI in research, culminating in the presentation of findings in written and oral formats.

Recommended Prerequisites	Basics in statistics, in particular simple regression analyses
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 2 hours per week per semester Self organised studies - 150 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Han, J., Qiu, W., & Lichtfouse, E. (2024). ChatGPT in Scientific Research and Writing: A Beginner's Guide. In ChatGPT in Scientific Research and Writing: A Beginner's Guide (pp. 1-109). Cham: Springer Nature Switzerland
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Two-weekly progress and reflection reports of at most 1 page, group-based (20%) • Final presentation, 15 min, group-based (10%) • Term paper, 15 pages, individual submission and grading (70%) <p><i>The presentation and the progress and reflection reports are done in working groups if projects have been worked on in working groups, for the term paper individual papers are handed in and graded individually - however, overlaps in the texts of members of the same group are allowed when group members are declared on the title page of the term paper. Groups are up to 3 members.</i></p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	30
Remarks	<p><i>Module with limited number of participants - Registration two weeks prior to the commencement of lectures!</i></p> <p><i>No offer in summer semester 2026.</i></p>
Module Components	Seminar
Components to be offered in the Current Semester	No assignment

Module 14872 Design Science in Entrepreneurship and Management

assign to: Method Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14872	Compulsory elective

Modul Title	Design Science in Entrepreneurship and Management Designwissenschaft in Unternehmertum und Management
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	Prof. Dr. phil. Scheidgen, Katharina
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every semester
Credits	6
Learning Outcome	<p>Successfully completing this course means, students will be able to apply design science in both scientific and practical projects. They will understand how design science differs from traditional explanatory research and know how to develop practical, research-based solutions to pressing challenges.</p> <p>Students will be able to identify design problems worth solving and use qualitative methods such as interviews to understand real-world problems. Based on this, they will be able to derive design requirements and create useful solutions, such as tools, processes, or frameworks. They will be competent in how to co-design these solutions with relevant stakeholders as well as how to evaluate these solutions.</p>
Contents	<p>The course <i>Design Science in Entrepreneurship and Management</i> introduces students to an innovative, impact-oriented approach that bridges academic theorizing with real-world problem solving. Design science is a problem-solving and scientific research approach that focuses on designing and evaluating solutions to pressing, complex problems. Unlike traditional academic research, which typically aims to understand and explain phenomena (“how and why” things happen), design science aims to shape and improve reality, answering “how can” and “how should things be” questions.</p> <p>The students will work in small teams and engage with a real-world problem. This problem will be introduced through a design brief, which outlines the problem they are asked to solve. Each team will plan and conduct their own design science mini-project. They will derive design requirements, that are, insights into what a solution must achieve in order to be useful. Based on these design requirements, they will co-create artifacts and evaluate them. Drawing on both their</p>

artifact evaluation and academic literature, students will formulate design principles, that are, prescriptive knowledge that explains how to change an existing situation into a preferred one. Throughout their project, students will engage with relevant stakeholders to collect data, for example to understand the problem better or evaluate their solutions. The results of the project will be presented in two formats: a written report and an oral presentation.

By completing their own mini design science projects, students will gain hands-on experience in planning and conducting such projects. They will also learn how to communicate with relevant stakeholders, both in written reports and in oral presentations.

Recommended Prerequisites	<ul style="list-style-type: none"> • Experience in reading and engaging with academic literature as well as • an interest in problem-solving are advantageous. • Basic knowledge of qualitative approaches such as case studies are helpful.
Mandatory Prerequisites	none
Forms of Teaching and Proportion	Seminar - 4 hours per week per semester Self organised studies - 120 hours
Teaching Materials and Literature	<ul style="list-style-type: none"> • Denyer, D., Tranfield, D., & Van Aken, J. E. (2008). Developing design propositions through research synthesis. <i>Organization studies</i>, 29(3), 393-413. • Gregor, S., Chandra Kruse, L., & Seidel, S. (2020). Research perspectives: the anatomy of a design principle. <i>Journal of the Association for Information Systems</i>, 21(6), 2. • Opdenakker, R., & Cuijpers, C. (2025). <i>Design Science Methodology for the Management Sciences</i>. Springer Texts in Business and Economics. • Seckler, C., Mauer, R., & vom Brocke, J. (2021). Design science in entrepreneurship: Conceptual foundations and guiding principles. <i>Journal of Business Venturing Design</i>, 1(1-2), 100004. • Thuan, N. H., Drechsler, A., & Antunes, P. (2019). Construction of design science research questions. <i>Communications of the Association for Information Systems</i>, 44(1), 20. • Romme, A. G. L., & Holmström, J. (2023). From theories to tools: calling for research on technological innovation informed by design science. <i>Technovation</i>, 121, 102692. • Romme, A. G. L., & Reymen, I. M. (2018). Entrepreneurship at the interface of design and science: Toward an inclusive framework. <i>Journal of Business Venturing Insights</i>, 10, e00094. • Venable, J., Pries-Heje, J., & Baskerville, R. (2016). FEDS: a framework for evaluation in design science research. <i>European Journal of Information Systems</i>, 25(1), 77-89.
Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> • Presentation including discussion, max. 10 minutes, group-based (40 %) • Term paper, 15 pages, group-based (40 %) • Reflections on sessions, individual (20%)

Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	30
Remarks	<i>Module with limited number of participants - Registration two weeks prior to the commencement of lectures!</i>
Module Components	<ul style="list-style-type: none">• Seminar 530505
Components to be offered in the Current Semester	530505 Seminar Design Science in Entrepreneurship and Management - 4 Hours per Term

Module 37101 Intercultural Competence

assign to: Method Modules

Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	37101	Compulsory elective

Modul Title	Intercultural Competence Interkulturelle Kompetenz
Department	Faculty 5 - Business, Law and Social Sciences
Responsible Staff Member	No assignment
Language of Teaching / Examination	English
Duration	1 semester
Frequency of Offer	Every summer semester
Credits	6
Learning Outcome	none
Contents	none
Recommended Prerequisites	none
Mandatory Prerequisites	none
Forms of Teaching and Proportion	No assignment
Teaching Materials and Literature	none
Module Examination	Unspecified - Specification from winter semester 2016/17 required!
Assessment Mode for Module Examination	none
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	none
Remarks	none
Module Components	none
Components to be offered in the Current Semester	No assignment

Erläuterungen

Das Modulhandbuch bildet als Teil der Prüfungsordnung die Rechtsgrundlage für ein ordnungsgemäßes Studium. Darüber hinaus soll es jedoch auch Orientierung bei der Gestaltung des Studiums geben.

Dieses Modulhandbuch wurde am 19. März 2026 automatisch für den Master (universitär)-Studiengang Transformation Studies (universitäres Profil), PO-Version 2024, aus dem Prüfungsverwaltungssystem auf Basis der Prüfungsordnung generiert. Es enthält alle zugeordneten Module einschließlich der ausführlichen Modulbeschreibungen mit Stand vom 19. März 2026. Neben der Zusammensetzung aller Veranstaltungen zu einem Modul wird zusätzlich das Veranstaltungsangebot für das jeweils aktuelle Semester gemäß dem Verzeichnis der BTU ausgegeben.

The module catalogue is part of the examination regulation and as such establishes the legal basis for studies according to the rules. Furthermore, it should also give orientation for the organisation of the studies.

This module catalogue was generated automatically by the examination administration system on the base of the examination regulation on the 19 March 2026, for the Master (universitär) of Transformation Studies (research-oriented profile). The examination version is the 2024, Catalogue contains all allocated modules including the detailed module descriptions from 19 March 2026. Apart from the composition of all components of a module, the list of lectures, seminars and events for the current semester according to the catalogue of lectures of the BTU is displayed.