

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

**Inhaltsverzeichnis**

**Total Account**

14078 Master Thesis .....	5
---------------------------	---

**Mandatory Modules**

13922 Introduction to Transformation Studies .....	7
13923 Transformation Theories .....	9
13924 Transformation: Design and Methodologies .....	11
41514 Study Project .....	13

**Specific Modules of Sociocultural Transformation**

12983 Climate Change and Migration .....	15
13655 Un/DisCIPLining Knowledge: Technology, Science, and Society in Transformation .....	17
13656 What Material Culture? Transformative Processes in Technology and Art .....	19
13705 Sociology of Sustainable Development .....	21
13706 Justice and Diversity in Environmental Change .....	23
13739 Anthropos in the Anthropocene .....	25
13899 Urban Transformation / Urban Studies .....	27
13904 Heritage and Transformation in Regional and Urban Studies .....	29
13927 Concepts of Social Criticism and Social Transformation .....	31
13945 Europe in Transformation .....	33
13946 Mobility and Digitalisation .....	35
14148 Media in Transformation - Media Theory and Analysis .....	37
14466 Fit4Future Summer School .....	39
37106 Social Change and Continuity .....	41
37404 Culture and Globalisation .....	43

**Compulsory Elective Modules from Another Field of Study**

11284 Advanced Studies of International Environmental Law .....	45
12983 Climate Change and Migration .....	49
13109 Philosophy of Technology and Nature .....	51
13234 Communication of Science and Technology .....	53
13356 Global Change and Legal Response .....	55
13656 What Material Culture? Transformative Processes in Technology and Art .....	58
13659 Sustainability and Digitalisation .....	60
13717 Decarbonisation of Industrial Processes .....	62
13795 Market Integration of Renewable Energies and Sector Coupling .....	65

13796 Just Energy Transition .....	68
13907 Anthropocene and Law .....	70
13925 Alternative Economies .....	72
13953 Economic Perspectives on Climate Neutrality .....	74
13957 Behavioural Economics .....	76
13958 Economics of Innovation .....	78
13959 Law and Economics .....	80
13960 Transformation: Law, Governance, Ethical Foundations .....	82
14069 Biomass and Bioenergy .....	85
14132 Multidimensional Approaches for Technology Assessment .....	87
14288 Psychology of Entrepreneurship and Change .....	90
14466 Fit4Future Summer School .....	93
14494 The Political Economy of Transformation .....	95
14495 Optimization in Business Transformation .....	97
14498 International Marketing .....	99

#### **Specific Modules of Socioeconomic and Institutional Transformation**

11284 Advanced Studies of International Environmental Law .....	101
12983 Climate Change and Migration .....	105
13356 Global Change and Legal Response .....	107
13907 Anthropocene and Law .....	110
13925 Alternative Economies .....	112
13953 Economic Perspectives on Climate Neutrality .....	114
13957 Behavioural Economics .....	116
13958 Economics of Innovation .....	118
13959 Law and Economics .....	120
13960 Transformation: Law, Governance, Ethical Foundations .....	122
14288 Psychology of Entrepreneurship and Change .....	125
14466 Fit4Future Summer School .....	128
14494 The Political Economy of Transformation .....	130
14495 Optimization in Business Transformation .....	132
14498 International Marketing .....	134
14870 Resourcing in Entrepreneurship .....	136

#### **Compulsory Elective Modules from Another Field of Study**

12983 Climate Change and Migration .....	138
13109 Philosophy of Technology and Nature .....	140
13234 Communication of Science and Technology .....	142
13655 Un/Disiplining Knowledge: Technology, Science, and Society in Transformation .....	144
13656 What Material Culture? Transformative Processes in Technology and Art .....	146
13659 Sustainability and Digitalisation .....	148
13705 Sociology of Sustainable Development .....	150

13706	Justice and Diversity in Environmental Change .....	152
13717	Decarbonisation of Industrial Processes .....	154
13739	Anthropos in the Anthropocene .....	157
13795	Market Integration of Renewable Energies and Sector Coupling .....	159
13796	Just Energy Transition .....	162
13899	Urban Transformation / Urban Studies .....	164
13904	Heritage and Transformation in Regional and Urban Studies .....	166
13927	Concepts of Social Criticism and Social Transformation .....	168
13945	Europe in Transformation .....	170
13946	Mobility and Digitalisation .....	172
14069	Biomass and Bioenergy .....	174
14132	Multidimensional Approaches for Technology Assessment .....	176
14148	Media in Transformation - Media Theory and Analysis .....	179
14466	Fit4Future Summer School .....	181
37106	Social Change and Continuity .....	183
37404	Culture and Globalisation .....	185
<b>Specific Modules of Sociotechnical Transformation</b>		
13109	Philosophy of Technology and Nature .....	187
13234	Communication of Science and Technology .....	189
13656	What Material Culture? Transformative Processes in Technology and Art .....	191
13659	Sustainability and Digitalisation .....	193
13717	Decarbonisation of Industrial Processes .....	195
13795	Market Integration of Renewable Energies and Sector Coupling .....	198
13796	Just Energy Transition .....	201
14069	Biomass and Bioenergy .....	203
14132	Multidimensional Approaches for Technology Assessment .....	205
14466	Fit4Future Summer School .....	208
14633	Autumn School Technoscience, Environment and Society .....	210
<b>Compulsory Elective Modules from Another Field of Study</b>		
11284	Advanced Studies of International Environmental Law .....	212
12983	Climate Change and Migration .....	216
13356	Global Change and Legal Response .....	218
13655	Un/Dis Disciplining Knowledge: Technology, Science, and Society in Transformation .....	221
13656	What Material Culture? Transformative Processes in Technology and Art .....	223
13705	Sociology of Sustainable Development .....	225
13706	Justice and Diversity in Environmental Change .....	227
13739	Anthropos in the Anthropocene .....	229
13899	Urban Transformation / Urban Studies .....	231
13904	Heritage and Transformation in Regional and Urban Studies .....	233
13907	Anthropocene and Law .....	235

13925	Alternative Economies .....	237
13927	Concepts of Social Criticism and Social Transformation .....	239
13945	Europe in Transformation .....	241
13946	Mobility and Digitalisation .....	243
13953	Economic Perspectives on Climate Neutrality .....	245
13957	Behavioural Economics .....	247
13958	Economics of Innovation .....	249
13959	Law and Economics .....	251
13960	Transformation: Law, Governance, Ethical Foundations .....	253
14148	Media in Transformation - Media Theory and Analysis .....	256
14288	Psychology of Entrepreneurship and Change .....	258
14466	Fit4Future Summer School .....	261
14494	The Political Economy of Transformation .....	263
14495	Optimization in Business Transformation .....	265
14498	International Marketing .....	267
37106	Social Change and Continuity .....	269
37404	Culture and Globalisation .....	271
<b>Method Modules</b>		
13234	Communication of Science and Technology .....	273
13710	B-TU for Future - Transdisziplinäres Modul für Klimaschutz und nachhaltige Entwicklung .....	275
13711	Colloquium Transdisciplinary Sustainability Research .....	277
13714	Research Methods in Business Administration and Economics .....	279
13983	Interdisciplinary Thinking and Practice .....	281
14147	Media of Transformation - Film Course .....	283
14148	Media in Transformation - Media Theory and Analysis .....	285
14440	Causal Data Science .....	287
14493	AI-Assisted Statistics: Exploring Data with ChatGPT & Co .....	289
14872	Design Science in Entrepreneurship and Management .....	291
37101	Intercultural Competence .....	294
<b>Erläuterungen</b> .....		<b>296</b>

## Module 14078 Master Thesis

assign to: Total Account

### Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14078	Mandatory

<b>Modul Title</b>	<b>Master Thesis</b>
	Masterarbeit
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	30
<b>Learning Outcome</b>	<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>
<b>Contents</b>	<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>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	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.
<b>Forms of Teaching and Proportion</b>	Seminar - 30 hours per week per semester Self organised studies - 450 hours
<b>Teaching Materials and Literature</b>	Abhängig vom jeweilig definierten Thema
<b>Module Examination</b>	Continuous Assessment (MCA)

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

<b>Modul Title</b>	<b>Introduction to Transformation Studies</b> Einführung in Transformation Studies
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Shrivastava, P. et al. (2020) Transforming Sustainability Science to Generate Positive Social and Environmental Change Globally</li> <li>• Elmqvist, T. et al. (2029) Sustainability and resilience for transformation in the urban century</li> <li>• Bennett, N. J. (2019) Just Transformations to Sustainability</li> <li>• Scoones, I. et al. (2018) Transformations to Sustainability</li> <li>• Olsson, P. et al. (2014) Sustainability transformations: a resilience perspective</li> <li>• Patterson, J. et al. (2016) Exploring the governance and politics of transformations towards sustainability</li> <li>• Leal Filho, W. et al. (2018) The role of transformation in learning and education for sustainability</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• 3 Reflections of session content, 1000 words each (10% each).</li> <li>• 2 paper reviews, 2000 words each (20% each)</li> <li>• 1 group presentation as Pecha Kucha, 6:40 minutes each (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture/ Seminar Introduction to Transformation Studies</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>510540</b> Lecture/Seminar Introduction to Transformation Studies - 4 Hours per Term



## 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.

<b>Recommended Prerequisites</b>	Knowledge of the contents of module <ul style="list-style-type: none"> <li>• 13922 Introduction to Transformation Studies</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Feola, G. Societal transformation in response to global environmental change: A review of emerging concepts. <i>Ambio</i> 44, 376–390 (2015). <a href="https://doi.org/10.1007/s13280-014-0582-z">https://doi.org/10.1007/s13280-014-0582-z</a></li> <li>• 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,</li> <li>• 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.</li> <li>• Persson, L., Carney Almroth, C. D. Collins, S. Cornell, C. de Wit, M. Diamond, P. Fantke, M. Hassellöv, M. MacLeod, M. Ryberg, P. Søggaard 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 &amp; Technology</i> 56(3): 1510–1521.</li> <li>• Polanyi, K. (1944). <i>The Great Transformation</i>. Frankfurt a. M.: Suhrkamp.</li> <li>• Wright, E. O. (2017) <i>Real Utopias</i>. Sage</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• comparative theory essay, 5000 words, (40%)</li> <li>• 3 protocols of a theory reading circle, 1500 words each, (20% each).</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• 510550 Transformation Theories (Vorlesung/ Seminar)</li> </ul>
<b>Components to be offered in the Current Semester</b>	No assignment

## Module 13924 Transformation: Design and Methodologies

assign to: Mandatory Modules

### Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13924	Mandatory

<b>Modul Title</b>	<b>Transformation: Design and Methodologies</b>
<b>Department</b>	Transformationsdesign und Methoden der Transformationsforschung Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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>
<b>Contents</b>	<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>
<b>Recommended Prerequisites</b>	<p>Knowledge of the contents of module</p> <ul style="list-style-type: none"> <li>• 13922 <i>Introduction to Transformation Studies</i></li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Exercise - 2 hours per week per semester

	Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	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). Handbook Transdisciplinary Learning. Berlin: transcript.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Written study design, 1500-2000 words (20%)</li> <li>• 2 reflections/ theoretical memos on analysis sessions, 1500-2000 words (10% per reflection/ memo, 20% in total)</li> <li>• Pecha Kucha presentation on results, 7 min, or podcast, 20 min (30%)</li> <li>• Written test (multiple choice), 20 min (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	planned for the Master Transformation Studies
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Seminar Transformation Methodologies</li> <li>• Exercise Transformation Design</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>510560</b> Seminar/Exercise Transformation Design and Methodologies - 4 Hours per Term

## Module 41514 Study Project

assign to: Mandatory Modules

### Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	41514	Mandatory

<b>Modul Title</b>	<b>Study Project</b>
	Studienprojekt
<b>Department</b>	Faculty 2 - Environment and Natural Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. Beckmann, Michael
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	12
<b>Learning Outcome</b>	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.
<b>Contents</b>	A study includes a project report with all factual information about the work in the project.
<b>Recommended Prerequisites</b>	Depending on the project topic knowledge in mathematics/statistics and/or social as well as natural sciences is advantageous.
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Consultation - 1 hours per week per semester Self organised studies - 345 hours
<b>Teaching Materials and Literature</b>	To be named by supervisor.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	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"> <li>• Written report, 20-30 pages (75%)</li> <li>• Presentation of results (25%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded

<b>Limited Number of Participants</b>	none
<b>Remarks</b>	None
<b>Module Components</b>	• 240215 Study project Study Project
<b>Components to be offered in the Current Semester</b>	No assignment

## 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

<b>Modul Title</b>	<b>Climate Change and Migration</b> Klimawandel und Migration
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Associate Prof. (Univ. Damaskus) Dr. agr. Ibrahim, Bachar
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	<p><b>Part "Climate Change"</b></p> <ul style="list-style-type: none"> <li>• Observations of change in the climate system</li> <li>• Critically assess the role of human activities in modern climate change</li> <li>• Assess future climate change scenarios and their potential impact on the Earth</li> <li>• climate change agenda and how this agenda impact on policy</li> <li>• Identify the Impacts and related Adaptation measures</li> </ul> <p><b>Part "Migration"</b></p> <ul style="list-style-type: none"> <li>• The potential link between climate change, migration,</li> <li>• The Task of defining 'climate refugee'</li> <li>• climate change contribution to the refugee problems</li> <li>• Gaps in the international legal framework</li> <li>• Individual and Collective Action on Mitigation</li> </ul> <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>
<b>Recommended Prerequisites</b>	none

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Environment, forced migration and social vulnerability, T. Afifi, J. Jäger - 2010 - Springer</li> <li>• Climate change, human security and violent conflict: challenges for societal stability, J. Scheffran, M. Brzoska, H.G. Brauch, P.M. Link... - 2012</li> <li>• People on the move in a changing climate: The regional impact of environmental change on migration, E. Piguet, F. Laczko - 2013</li> <li>• Global migration governance, A. Betts - 2011</li> <li>• Disentangling migration and climate change, T. Faist, J. Schade - 2013 - Springer</li> <li>• Climate change and migration: security and borders in a warming world, G. White – 2011- Oxford University Press</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Oral Exam, 30 min. (50%)</li> <li>• Two presentations on the a scientific topic (each 25%)</li> </ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	<p>An annual excursion pertaining to the module may be organised.</p> <p><b><i>Complementary Module in Master Environmental and Resource Management.</i></b></p>
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Seminar</li> <li>• Examination</li> </ul>
<b>Components to be offered in the Current Semester</b>	No assignment



## 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

<b>Modul Title</b>	<b>Un/DisCIPLining Knowledge: Technology, Science, and Society in Transformation</b>  Epistemischer Ungehorsam: Technik, Wissenschaft und Gesellschaft im Wandel
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Knowledge from the courses <ul style="list-style-type: none"> <li>• Technik in Wissenschaft und Gesellschaft</li> <li>• Philosophy of Science in Practice</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester

	Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and learning materials are given in the course description.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• short scientific essay, max. 4000 words (45%)</li><li>• scientific review, max. 2500 words (40%)</li><li>• presentation, max. 15 minutes (15%)</li></ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	German-speaking teachers are available if required. Further information on this can be found in the course description.
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar - 4 SWS</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>510151</b> Seminar Un/disciplining Knowledge - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>What Material Culture? Transformative Processes in Technology and Art</b>  Welche materielle Kultur? Transformative Prozesse in Technik und Kunst
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Interest in media technology and creativity techniques
<b>Mandatory Prerequisites</b>	none

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	To be announced during the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• project outline (20%)</li><li>• presentation, 15 minute (20%)</li><li>• written documentation of the project work, 2500-3000 words (60%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Lecture/Seminar - 4 SWS</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>510121</b> Lecture/Seminar What Material Culture? - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Sociology of Sustainable Development</b> Soziologie der nachhaltigen Entwicklung
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	Students overview sociological approaches, theories and research topics in the context of sustainable development. After completing the module, they will have a sound knowledge on various approaches of social-ecological transformation and will be able to critically discuss current concepts such as the Anthropocene, Green Growth or Circular Economy. They have expertise in the reception and presentation of scientific texts.
<b>Contents</b>	Sustainable development promises to meet human needs of present and future generations while maintaining the integrity and stability of natural systems. However, this concept has been criticised on various grounds. Some argue that more fundamental changes are required to solve the multiple, accelerating crises of our times. Under the umbrella term 'socio-ecological transformation', scholars discuss various political, socio-economic, socio-technical and cultural changes aimed at responding appropriately to the socio-ecological crisis. This module critically engages with current sustainability debates from a sociological perspective, thereby discussing concepts such as Green Growth, Degrowth, Circular Economy or the Anthropocene. It explores how we can move to a society and economy in which human needs are met within planetary boundaries.
<b>Recommended Prerequisites</b>	41421: Introduction to Environmental and Resource Management II
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Exercise - 2 hours per week per semester

	Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Eisenmenger et al. (2020). The Sustainable Development Goals prioritize economic growth over sustainable resource use: a critical reflection on the SDGs from a socio-ecological perspective. Sustainability Science, 15:1101-1110.</li> <li>• Haberl, H. et al. (2011). A Socio-metabolic Transition towards Sustainability? Challenges for Another Great Transformation. Sustainable Development 19, 1-14</li> <li>• Gough, I., 2017. Recomposing consumption: defining necessities for sustainable and equitable well-being. Phil. Trans. R. Soc. A. 375, 20160379.</li> <li>• Hickel, J., Kallis, G., 2020. Is Green Growth Possible? New Political Economy 25, 469–486.</li> <li>• Malm, A., Hornborg, A., 2014. The geology of mankind? A critique of the Anthropocene narrative. The Anthropocene Review 1, 62–69.</li> </ul> <p>Further literature will be announced in the module.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Reading assignments, 1.500-2000 words (20%)</li> <li>• Reflections on sessions, 1.500-2000 words (20%)</li> <li>• Pecha Kucha presentation, (7 Min.) oder Podcast (20Min.) (30%)</li> <li>• Written Test (multiple choice, 30 Min.) (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Exercise: Research and methods of a Sociology of Sustainability - 2 Hours per Week per Semester</li> <li>• Seminar: Theories of Social-Ecological Transformation - 2 Hours per Week per Semester</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Justice and Diversity in Environmental Change</b>
	Gerechtigkeit und Diversität im Kontext von Umweltveränderungen
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<ul style="list-style-type: none"> <li>• Acquiring a profound understanding of different concepts on social justice and diversity in the context of environmental change, climate change and sustainable development.</li> <li>• Discussing and critically reflecting upon current issues related to environmental justice, such as resource conflicts, land-use change or environmental movements.</li> <li>• Methodological skills in reading and discussing academic texts, preparing Pecha Kucha presentations, and recording scientific podcasts.</li> </ul>
<b>Contents</b>	<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>

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Exercise - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Bell, K. (Ed.) (2021). Diversity and Inclusion in Environmentalism, Routledge.</li> <li>• Holifield, R., Chakraborty, J., Walker, G. (Eds.) (2018). The Routledge Handbook of Environmental Justice, Routledge.</li> <li>• Lele, S. et al. (Eds.) (2019). Rethinking environmentalism: Linking justice, sustainability, and diversity (Vol. 23). MIT Press.</li> <li>• Williams, J. (2021). Climate change is racist. Race, privilege and struggle for climate justice. Icon Books.</li> </ul> <p>Further literature will be announced during class.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Reading assignments, 1.500-2.000 words (20%)</li> <li>• Reflections on sessions, 1.500-2.000 words (20%)</li> <li>• Pecha Kucha presentation, 6:40 Min (30%)</li> <li>• written test (multiple choice) (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	50
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Exercise Theoretical approaches to Justice and Diversity in Environmental Change</li> <li>• Seminar Justice and Diversity research and methods in the context of Environmental Change</li> </ul>
<b>Components to be offered in the Current Semester</b>	<p><b>510535</b> Seminar Justice and Diversity research and methods in the context of Environmental Change - 2 Hours per Term</p> <p><b>510530</b> Lecture/Exercise Theoretical approaches to Justice and Diversity in Environmental Change - 2 Hours per Term</p>



## 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

<b>Modul Title</b>	<b>Anthropos in the Anthropocene</b> Anthropos im Anthropozän
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>As a result of taking part in this module students have</p> <ul style="list-style-type: none"> <li>• knowledge about theories and concepts in the field of ethics and anthropology (e.g. responsibility, care, participation).</li> </ul> <p>They are able to</p> <ul style="list-style-type: none"> <li>• critically study nature-culture debates in different discourses, mainly in STS and anthropology,</li> <li>• develop a one semester study project on the basis of the acquired theories and methods, and</li> <li>• create and present a well documented and analytically grounded written report based on a sound research design and question.</li> </ul>
<b>Contents</b>	<p>The Anthropocene is a term of the 21st century, it focuses attention on the role of humans as being virtually a natural force. When being introduced the wording was realigned according to the terminology of geology, however it became quickly adopted in a sociopolitical context and also by cultural studies. As a consequence the discourse has globally expanded and nowadays revolves around the question of the anthropos, the role of man in its environment on a global and local scale. This course offers theoretical reflections about the limits and opportunities of human action in an age, in which humans do not only encounter themselves in technical and artistic works, but also in nature. The module deals with anthropological questions and challenges a method of philosophical field work: how can technology-environment assemblages be described adequately, and how is the historical and media dimension to be included. Empirical-based models and cultural studies analysis are investigated, issues such</p>

as geoengineering, design with nature, extraction, in general environmental degradation is scrutinized. How become socio-economic and eco-cultural contexts relevant for local realities of life, how do responsibility, participation, or empowerment do play out as action guiding values in this game of transformation.  
The course is organised around lectures and student's study projects; topics of the study project are chosen together and intermediate results discussed in class.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and learning materials are given in the course description and will be announced during the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• project proposal, max. 3 pages (25 %)</li> <li>• final presentation, 5-25 min (15 %)</li> <li>• project report, min. 12 pages (60 %)</li> </ul> <p>The duration of the final presentation will be announced in the first class meeting.</p>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Project/Seminar - 4 SWS</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Urban Transformation / Urban Studies</b> Urban Transformation / Urban Studies
<b>Department</b>	Faculty 6 - Architecture, Civil Engineering and Urban Planning
<b>Responsible Staff Member</b>	Dr. phil. Binder, Julia
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	The module addresses questions regarding transforming planning visions that link with urban transformation. The students are asked to reflect on the disciplinary understanding to plan the cities according to the problems of the cities and to analyse urban transformation as a multidimensional spatial process.
<b>Contents</b>	The module focuses on planning as a system of visions and ideas. Against the backdrop of current debates regarding urban development, the students will discuss German and English papers of the 20th and 21st Century in order to reflect on the planners' key terminologies (common good, sustainability, inequality). The students will have to design their own empirical research projects that deal with questions of urban transformation.
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	to be announced in the first lecture
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Presentation, 45 min (30%)</li> <li>• Research paper, max. 20 DIN A4-pages without attachments (70%)</li> </ul>

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	Seminar
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Heritage and Transformation in Regional and Urban Studies</b>
	Kulturerbe und Transformation in der Regional- und Stadtforschung
<b>Department</b>	Faculty 6 - Architecture, Civil Engineering and Urban Planning
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. Gailing, Ludger
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>The aims of this module are:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• To develop knowledge of the interfaces between heritage studies and regional and urban studies.</li> <li>• 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</li> </ul>
<b>Contents</b>	<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-20<sup>th</sup> 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).

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	The bibliography will be presented in class.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• 20% Presentation (15 minutes per student)</li> <li>• 80% Research paper (3000-3500 words including references)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<i>Seminar Heritage and Transformation in Regional and Urban Studies</i>
<b>Components to be offered in the Current Semester</b>	No assignment

## 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

<b>Modul Title</b>	<b>Concepts of Social Criticism and Social Transformation</b> Konzepte von Gesellschaftskritik und sozialer Transformation
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. habil. Havlin, Tetiana
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Students can apply these concepts in their own research and are able to use these concepts to analyse real-life examples.</li> <li>• Students are able to understand and critically examine 'classical' as well as contemporary texts.</li> <li>• Students can articulate and present their own perspective on course contents in an academically adequate and sound manner.</li> <li>• Students are able to write academically and are capable to orally present their ideas convincingly in an academic context.</li> </ul>
<b>Contents</b>	<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.

<b>Recommended Prerequisites</b>	Students have knowledge of at least one of the following modules <ul style="list-style-type: none"> <li>• 13922 Introduction to Transformation Studies</li> <li>• 13932 Transformation Theories</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and teaching materials will be provided on moodle at start of the semester.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• One oral presentation (10 to 15 minutes) (10%)</li> <li>• Three writing assignments (750 to 1500 words per assignment) (30%)</li> <li>• A final essay (5000 to 10000 words) (60%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Seminar Critical Theories of Social Transformation</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>510200 Seminar</b> Critical Theories of Social Transformation - 4 Hours per Term



## 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

<b>Modul Title</b>	<b>Europe in Transformation</b> Europa im Wandel
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. Amelina, Anna
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>Students know how to approach Europe and European transformation by using sociological theories of belonging, culture, and power, and to apply these to historical and current theoretical discourses in European contexts. What is more, students have fundamental knowledge in central approaches to European Studies, Post- and Decolonial Studies as well as Postsocialist Studies, Migration Studies and Transnationalization Studies and to apply these to the societal realities of Europe at the beginning of the 21st century.</p> <p>They are able to:</p> <ul style="list-style-type: none"> <li>· understand the central positions and methods used in social and - cultural studies research</li> <li>· Understand and explain relations between culture, belonging, migration and transformation</li> <li>· Independently analyze, compare and discuss scientific texts and apply these to social phenomena</li> </ul>
<b>Contents</b>	<p>In the module, classical and newer approaches in European Studies, Post- and Decolonial Studies, Postsocialist Studies, Migration and Transnationalization Studies will be read and discussed. Against this background, contemporary and historical questions/ debates in the field of "Europe in Transformation" will be analyzed and discussed from the perspective of the social sciences. Towards a better understanding of transformation processes, a special focus lies on relational approaches to transnational realities and migratory movements, the European history of both Colonialism and Socialism,</p>

	present processes of racialization and othering (coloniality), forms of remembering etc..
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature will be provided in the moodle.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Oral presentation, 15 min (40%)</li><li>• Essay, 10-15 pages (30 %)</li><li>• Participation in exercises and discussions (30%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	No offer in summer semester 2025
<b>Module Components</b>	none
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Mobility and Digitalisation</b> Mobilität und Digitalisierung
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. habil. Havlin, Tetiana
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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"> <li>• to understand current transformations of economy, society and politics,</li> <li>• to reflect on how both institutions and everyday settings are co-constituted by specific patterns of mobility, both in the international and domestic</li> <li>• realms.</li> <li>• 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)</li> <li>• to analyse and compare texts and apply their theories to social phenomena</li> <li>• to reflect their own positionality within the nexus mobilities and digitalization.</li> <li>• to present these positions and analyses in a concise manner</li> </ul>
<b>Contents</b>	<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.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature will be provided in the moodle at the beginning of the semester
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ol style="list-style-type: none"> <li>1. Oral presentation 15 min (40%)</li> <li>2. Essay: 10-15 pages (30 %)</li> <li>3. Participation in exercises and discussions (30%)</li> </ol>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	none
<b>Components to be offered in the Current Semester</b>	<b>510274 Seminar</b> Digital Cultures and (Im)Mobilities: Theorizing Global Connectivity - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Media in Transformation - Media Theory and Analysis</b> Medien im Wandel - Medientheorie und -analyse
<b>Department</b>	Faculty 1 - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology
<b>Responsible Staff Member</b>	Prof. Dr. phil. Petersen, Christer
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>Joachim Friedmann: Storytelling for Media: Introduction to the Theory and Practice of Narrative Design. München, Tübingen: UVK 2021.</li> <li>Niklas Luhmann: Reality of the Mass Media. Hoboken, N.J.: Blackwell Publishers 2000.</li> <li>Material is available for download on the Internet. More information at the beginning of course.</li> </ul>

<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Successful completion of an essay of 10-20 pages or practical/project work of correspondending scope (60%)</li><li>• Presentation of a research topic or a project work, approx. 20 minutes (40%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar: Media in Transformation - Media Theory and Analysis Current Description</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>110306</b> Seminar/Exercise Methods and Analysis from the perspective of media psychology - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Fit4Future Summer School</b> Fit4Future Sommerschule
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	After successful completion, students have in-depth knowledge of various transformation dynamics and forms. They are experienced in discussing and reflecting on various analytical and evaluation concepts of transformation dynamics. They can classify various theoretical and methodological approaches in the present day and discuss them in light of relevant evaluation criteria that apply to transformations in the face of pressing crises such as climate catastrophe, biodiversity loss or land overuse. They are also able to understand the complexity of the design challenges of a transformation on a global scale and to analyze the various roles, e.g. of the state or niche actors. They can apply conceptual perspectives such as the multi-level perspective, the ecosystem approach or evolutionary innovation theory.
<b>Contents</b>	<p>The Fit4Future Summer School series provide a dynamic learning environment where students engage with challenges of tomorrow. Every year the thematic focus shifts towards current transition dynamics and transformaton processes. The Summer School provides a mix of online lecture and offline exercises, with a full-week course during September every year.</p> <p>Topics are:</p> <ul style="list-style-type: none"> <li>• Just Transitions to sustainable and clean energy</li> <li>• Circular Economy and Society</li> <li>• Digitalisation and Sustainability</li> <li>• Globalisation and Global Studies</li> <li>• De- and Prosgrowth</li> </ul>

Throughout the programme, participants will engage with the various aspects of the chosen topic, explore the role of different transformation paradigms and assess the transformative power of different pathways towards sustainable future in an interdisciplinary setting. Renowned international experts will provide participants with a comprehensive understanding of the latest developments through lectures, workshops and field trips, creating a dynamic learning environment that encourages critical thinking and collaborative problem-solving.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Haberl, H., Fischer-Kowalski, M., Krausmann, F., Martinez-Atlier, J., &amp; Winiwarter, V. (2011). A socio-metabolic transition towards sustainability? Challenges for another Great Transformation. <i>Sustainable development</i>, 19(1), 1-14.</li> <li>• Voulvoulis, N., Giakoumis, T., Hunt, C., Kioupi, V., Petrou, N., Souliotis, I., &amp; Vaghela, C.J.G.E.C. (2022). systems thinking as a paradigm shift for sustainability transformation. <i>Global Environmental Change</i>, 75, 102544.</li> <li>• Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., ... &amp; Lang, D. J. (2017). Leverage points for sustainability transformation. <i>Ambio</i>, 46, 30-39</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Essay on selected transformation dynamics, 5000 words, (40%)</li> <li>• 2 protocols of two events during the summer school, 1500 words each (20% each)</li> <li>• Learning diary, 3000 words (20%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	- Summer School Fit4Future
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Social Change and Continuity</b> Sozialer Wandel und Kontinuität
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. Puder, Janina
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<ul style="list-style-type: none"> <li>• Introduction into main topics of the sociological debate on social change</li> <li>• Overview of core theories on social change and continuity</li> <li>• Improve students competence to apply key-concepts for the analysis on social change to specific dimensions, theoretical and empirical problems or ongoing economic and social challenges</li> </ul>
<b>Contents</b>	<p>In the wake of increasing globalization of the economy and transformations in the relationship between states and markets, many scholars have become increasingly aware of the need for systematic analysis of the social dimensions of economic institutions and practices. This seminar provides an introduction into main topics of the sociological debate on social change and economic phenomena and gives an overview of core theories in this field.</p> <p>Topics: The (changed) economic and social role of flexible labour markets, processes of rationalization, production regimes and management concepts, finance markets and (informal) networks; comparative analysis of industrial organisations in different countries; capitalism in (non)-western societies; transformation in Eastern Germany and Europe; migration flows and social cohesion.</p>
<b>Recommended Prerequisites</b>	<p>Knowledge:</p> <ul style="list-style-type: none"> <li>• Fundamentals of sociology</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester

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

**Teaching Materials and Literature**

- Boltanski, Luc/Chiapello, Eve, 2005: "The New Spirit of Capitalism", International Journal of Politics, Culture, and Society, vol. 18, n° 3-4, pp. 161-188.
- Granovetter, Mark: Economic Institutions as Social Constructions: A Framework for Analysis. In: Acta Sociologica, 1992, Vol. 35, p. 3-11
- Polanyi, Karl, The great Transformation. Dt. 1978 (1944)
- Giddens, Anthony, 1990: The consequences of modernity. Stanford, Calif: Stanford University Press.
- Jackson, Stevi/Scott, Sue, 2001: Gender. A sociological reader. New York: Routledge

**Module Examination**

Continuous Assessment (MCA)

**Assessment Mode for Module Examination**

1. Oral presentation, 10 minutes (worth 30%)
2. Essay, 4 pages (worth 30%)
3. Written examination, 60 minutes (worth 40%)

**Evaluation of Module Examination**

Performance Verification – graded

**Limited Number of Participants**

none

**Remarks**

none

**Module Components**

- Social Change and Continuity (seminar) - It is a lecture/seminar with a seminaristic character.

**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

<b>Modul Title</b>	<b>Culture and Globalisation</b> Kultur und Globalisierung
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. habil. Havlin, Tetiana
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	After completion of this module, students are able to identify and differentiate central areas, approaches, concepts and methods within the interdisciplinary field of World Heritage Studies. They have critical reading skills, know a number of key concepts to Heritage Studies and how to link conceptual ideas to current phenomena in the field of World Heritage. In addition, the students are able to apply knowledge about standards in scientific techniques and presentation skills.
<b>Contents</b>	The first part of the module gives an overview over the key areas and disciplines of the World Heritage Studies Program. The second part provides basic knowledge about key interdisciplinary approaches, concepts and skills within the field of World Heritage Studies.
<b>Recommended Prerequisites</b>	None
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Students will be provided with weekly meetings and lectures, reading materials, and bibliographical references. All materials and literature will be provided in a moodle course.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• presentation of a concept, 10 min., + handout (30 % of the grade)</li> <li>• final essay, 5000 words + references (70 % of the grade)</li> </ul>

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	Participation and active involvement are expected. 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., homepage or Moodle) shall apply.
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar Culture and Globalisation I - 2 Hours per Week per Semester</li><li>• Seminar Culture and Globalisation II - 2 Hours per Week per Semester</li></ul>
<b>Components to be offered in the Current Semester</b>	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**

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)

- Examination: Advanced Studies in International Environmental Law

**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: Soziokulturelle Transformation

### Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	12983	Compulsory elective

<b>Modul Title</b>	<b>Climate Change and Migration</b> Klimawandel und Migration
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Associate Prof. (Univ. Damaskus) Dr. agr. Ibrahim, Bachar
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	<p><b>Part "Climate Change"</b></p> <ul style="list-style-type: none"> <li>• Observations of change in the climate system</li> <li>• Critically assess the role of human activities in modern climate change</li> <li>• Assess future climate change scenarios and their potential impact on the Earth</li> <li>• climate change agenda and how this agenda impact on policy</li> <li>• Identify the Impacts and related Adaptation measures</li> </ul> <p><b>Part "Migration"</b></p> <ul style="list-style-type: none"> <li>• The potential link between climate change, migration,</li> <li>• The Task of defining 'climate refugee'</li> <li>• climate change contribution to the refugee problems</li> <li>• Gaps in the international legal framework</li> <li>• Individual and Collective Action on Mitigation</li> </ul> <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>
<b>Recommended Prerequisites</b>	none

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Environment, forced migration and social vulnerability, T. Afifi, J. Jäger - 2010 - Springer</li> <li>• Climate change, human security and violent conflict: challenges for societal stability, J. Scheffran, M. Brzoska, H.G. Brauch, P.M. Link... - 2012</li> <li>• People on the move in a changing climate: The regional impact of environmental change on migration, E. Piguet, F. Laczko - 2013</li> <li>• Global migration governance, A. Betts - 2011</li> <li>• Disentangling migration and climate change, T. Faist, J. Schade - 2013 - Springer</li> <li>• Climate change and migration: security and borders in a warming world, G. White – 2011- Oxford University Press</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Oral Exam, 30 min. (50%)</li> <li>• Two presentations on the a scientific topic (each 25%)</li> </ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	<p>An annual excursion pertaining to the module may be organised. <b><i>Complementary Module in Master Environmental and Resource Management.</i></b></p>
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Seminar</li> <li>• Examination</li> </ul>
<b>Components to be offered in the Current Semester</b>	No assignment

## 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

<b>Modul Title</b>	<b>Philosophy of Technology and Nature</b> Technik- und Naturphilosophie
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>After passing the module, students should:</p> <ul style="list-style-type: none"> <li>• understand main philosophical theories of “nature”</li> <li>• interrogate the concept of “nature” and to expose its numerous ideological and cultural manifestations.</li> <li>• identify the main ethical dimensions of “nature”, and their crosscultural and political dimensions.</li> <li>• 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.</li> </ul>
<b>Contents</b>	<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.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	See course material in moodle.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• One short essay, max. 2 pages (20%)</li> <li>• Two reviews, max. 5 pages (each 25%)</li> <li>• 2 oral group presentations, about 15 min <b>OR</b> weekly submitted written answers to one short question on the topical readings to be determined by the instructor (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	Lectures and seminars in the corresponding field.
<b>Components to be offered in the Current Semester</b>	<b>510112</b> Lecture/Seminar How to talk about "Nature"? / Ethik und Handeln / Philosophy of Technology and Nature / Natur und Technik / Wissenschaftstheorie, Logik und Naturphilosophie - 4 Hours per Term

## 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** Prof. Dr. rer. pol. habil. Lee, Roh Pin

**Language of Teaching / Examination** English

**Duration** 1 semester

**Frequency of Offer** Every semester

**Credits** 6

**Learning Outcome** Students will know about different techniques, tools and formats for communication of science & technology. They will develop skills to break down complex issues at the nexus of science, technology and society to communicate science/technical information in a clear, understandable and engaging way to different stakeholders.

On completion of the module, students will be able to:

- Articulate the key issues and challenges in communicating about science & technology;
- Understand the nature of different audiences for better stakeholder engagement;
- Demonstrate awareness of and ability to use a variety of different techniques and media for targeted audience;
- Improve their skills in communication of scientific/technical information in both written and oral forms;
- work as part of a team to develop effective measures for communication of science & technology;
- Provide constructive feedback to other students on their communication skills.

**Contents** Course coverage:

- Key issues in communication of science & technology;
- Identify and knowing your audiences (mental models, risk perception, heuristics and biases, ...);
- Getting your audience's attention (Types of framing);
- Communicating risk and uncertainty;
- Formats for communication of science & technology.

Students will also be given opportunities to receive feedback and improve their own written and oral skills. They will also work in small teams on team projects to further their skills for communicating about sustainability issues. These projects will focus on communicating about a given scientific topic to a particular audience using spoken, visual, written or web-based communication.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Center for Research on Environmental Decisions (CRED). 2009. <i>The Psychology of Climate Change Communication: A guide for Scientists, Journalists, Educators, Political Aides, and the Interested Public</i>. New York.</li> <li>• Nisbet, M.C., Scheufele, D.A. 2009. What's next for science communication? Promising directions and lingering distractions. <i>American Journal of Botany</i>, 96(10): 1767-1778.</li> <li>• Bubela, T., Nisbet, M., Borchelt, R. <i>et al.</i> 2009. Science communication reconsidered. <i>Nature Biotechnology</i>, 27, 514–518.</li> <li>• Nelkin, D. 1989. Communicating technological risk: The social construction of risk perception. <i>Annual Review Public Health</i>, 10, 95-113.</li> <li>• Tversky, A., Kahneman, D. 1974. Judgment under Uncertainty: Heuristics and Biases. <i>Science, New Series</i>, 185(4157), 1124-1131.</li> </ul> <p>Further material (including lecture slides and additional materials including videos, readings etc.) might be announced during the first class meeting.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Individual E-Assessment – 60 min (40%)</li> <li>• Group project - Part 1: Science Communication Material e.g., poster, video, etc. (30%)</li> <li>• Group project - Part 2: Group presentation– 15min oral presentation (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture / Seminar</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>510601</b> Lecture/Seminar Communication of Science & Technology - 4 Hours per Term

## 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

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

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Birnie/Boyle/Redgwell, International Law and the Environment, 4th edition, Oxford University Press, 2021</li> <li>• Knopp/Epstein/Hoffmann, International and European Environmental Law with Reference to German Environmental Law – A Guide for International Study Programs, 2nd edition, Berlin 2019</li> <li>• Albrecht, Egute, Wanki, Ezeamama (Eds.), International environmental law (IEL) – Agreements and introduction. 6th expanded and updated edition, 2022.</li> <li>• 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.</li> <li>• 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</li> <li>• 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 <a href="https://doi.org/10.1017/9781009157940.001">https://doi.org/10.1017/9781009157940.001</a>.</li> <li>• German Advisory council on Global Change (2019): Towards our Common Digital Future. Berlin. WGBU. <a href="https://www.wbgu.de/en/publications/publication/towards-our-common-digital-future">https://www.wbgu.de/en/publications/publication/towards-our-common-digital-future</a></li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Written Exam, 120 minutes (maximum 40 points)</li> <li>• Presentation, 15 min. (maximum 20 points)</li> </ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded



Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none"><li>• Lecture: Global Change and Legal Response</li><li>• Seminar: Will be announced during the lecture</li><li>• Examination: Global Change and Legal Response</li></ul>
Components to be offered in the Current Semester	<p><b>520260</b> Lecture Global Change and Legal Response - 2 Hours per Term</p> <p><b>520261</b> Seminar Climate Adaptation with a Focus on Nature-Based Solutions: An Overview of the EU Policy Framework - 2 Hours per Term</p>

## 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

<b>Modul Title</b>	<b>What Material Culture? Transformative Processes in Technology and Art</b>  Welche materielle Kultur? Transformative Prozesse in Technik und Kunst
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Interest in media technology and creativity techniques
<b>Mandatory Prerequisites</b>	none

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	To be announced during the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• project outline (20%)</li><li>• presentation, 15 minute (20%)</li><li>• written documentation of the project work, 2500-3000 words (60%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Lecture/Seminar - 4 SWS</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>510121</b> Lecture/Seminar What Material Culture? - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Sustainability and Digitalisation</b> Digitalisierung und Nachhaltigkeit
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	The module provides knowledge and understanding of social science sustainability research at the interface of technology, environment and society. After attending the module, students will be able to adequately describe digitization as a comprehensive transformation process in terms of its advantages and disadvantages and analyse various digitization phenomena from a social science perspective. They can use digital media and communication formats (blogs, podcasts) in a targeted manner. Students are able to conduct case analyses after completing the module.
<b>Contents</b>	Digitalisation as well as sustainability are so-called mega-trends the 21st century. Digital technologies are increasingly integrated in society and economy. This process both poses environmental and social challenges, such as climate change or social injustice, as well as the potential to accelerate sustainable transition. An effective transition to renewable decentralized energy supplies for instance will only succeed with digital and connected devices. However, digitalisation is not per definition sustainable. It also has many negative impacts on the environment and society. For example, electronic devices require scarce non-renewable natural resources, and data processing uses vast amounts of energy. The reserves of the elements needed for digitalisation are depleting, while the volume of electronic waste is rapidly growing every year. How can digitalisation support sustainable transition without causing more harm than good? Is a green digitalisation possible? In the module, we cover the risks and potentials in of digital innovations in various sectors such as energy systems, mobility, agriculture o education. The module contains following topics:

	<ul style="list-style-type: none"> <li>• Part 1: Is digitalisation sustainable? - An introduction to digital technologies and their social and environmental impact</li> <li>• Part 2: Is digitalisation serving sustainability? – Diving into sustainable human, technology and nature relationships and innovations for a sustainable world</li> <li>• Part 3: Assessing the effects of specific digital technologies (e.g., Artificial intelligence, Smart Everything or Platform economy) for sustainable development as well as their effects on specific spheres of life (e.g., data protection, effects on democracy and digital divide).</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<p>The following literature can be used for preparation:</p> <ul style="list-style-type: none"> <li>• Lange, S., &amp; Santarius, T. (2020). Smart Green World?: Making Digitalisation Work for Sustainability. Routledge.</li> <li>• Hilty, L., and Aebischer, B. (2015). ICT Innovations for Sustainability. Advances in intelligent systems and computing, 310, p. 351-365.</li> <li>• Vetter, A. (2018). The matrix of convivial technology–assessing technologies for degrowth. Journal of Cleaner Production, 197, 1778-1786.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Written exam (45 min.) - (30%)</li> <li>• Group presentation (max. 10 min/person) - (30%)</li> <li>• 2 exercises from the seminar, incl. a reflection on the topic of the exercises to hand in (3 pages per exercise) - (15% per exercise)</li> <li>• Active participation in class (10%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture: Digitalisation and Sustainability: Evolution, Trends and Future Scenarios</li> <li>• Seminar: Digitalisation and Sustainability: Current Topics</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Decarbonisation of Industrial Processes</b> Dekarbonisierung von Industrieprozessen
<b>Department</b>	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. habil. Riedel, Uwe
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>Participants of the module will be able to understand the specific challenges of CO<sub>2</sub>-reduction in the industrial sectors. Readiness of current and emerging technologies (technology readiness level) and significance for a successful energy transition for various industrial sectors will be discussed. Focus is on the decarbonization of heat as a crosscutting technology and the steel, chemistry, cement sector – each having specific challenges. At the end of the module the students will be able to name the requirements for achieving climate goals in various industrial sectors. Furthermore, students will be able to assess, evaluate, and select different decarbonization strategies for specific industrial processes. Specific cognitive learning goals are:</p> <ul style="list-style-type: none"> <li>• Apply analysis tools like pinch analysis, techno-economics, and energy-hub designs</li> <li>• Analyze selected industrial processes in case studies</li> <li>• Derive and evaluate suitable decarbonization options in a group-project</li> <li>• Get insights into options for process changes and decarbonization in the sectors steel, chemistry, and cement as well as process heat</li> <li>• Understand the role of Carbon Capture and Use (CCU) and Carbon Capture and Storage (CCS) for unavoidable CO<sub>2</sub>-emissions.</li> </ul> <p>Affective learning goals are:</p> <ul style="list-style-type: none"> <li>• Integration in a team and potential conflicts,</li> <li>• deal with feedback in an open presentation session,</li> <li>• deal with potential frustration in a research project.</li> </ul>

**Contents**

The specific topics will be explained in the lecture while the exercise and the project parts will provide more in-depth deeper qualitative and quantitative analyses. The projects will focus on specific industries and their options to reduce their carbon footprint.

The lecture part is structured as follows:

- Introduction
- Techno-Economic Analysis
- Pinch Analysis
- Renewable Energy Hub Design
- Industrial Heat
- Steel Industry
- Chemical Industry
- Cement Industry

These lectures are supported by exercises on techno-economic analysis, Pinch Analysis, energy hub design and CCU/CCS. The decarbonization techniques learned will then be applied as part of a study project.

**Recommended Prerequisites**

Bachelor in Engineering or Natural Sciences

**Mandatory Prerequisites**

none

**Forms of Teaching and Proportion**

Lecture - 2 hours per week per semester  
Exercise - 1 hours per week per semester  
Study project - 2 hours per week per semester  
Self organised studies - 105 hours per week per semester

**Teaching Materials and Literature**

- Selected literature will be recommended at the beginning of the module.
- Handouts for the lecture will be provided.
- Options and guidelines for the project work will be given in the first lecture.

**Module Examination**

Continuous Assessment (MCA)

**Assessment Mode for Module Examination**

Option A:

- A 10-minute electronic presentation of the study project at the beginning of the exam (1/3 weight) and
- Oral exam, 20 minutes, questions related to the lecture and the exercise (2/3 weight)

Option B:

- Multiple-choice test, 20 minutes (30% weight)
- Written examination, 60 minutes: Questions related to the lecture, the exercise, and the outcome of study project (70% weight)

The lecturer decides and informs at the beginning of the course which option is used as assessment mode.

**Evaluation of Module Examination**

Performance Verification – graded

**Limited Number of Participants**

none

<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• VL Decarbonization of Industrial Processes</li><li>• Ü Decarbonization of Industrial Processes</li><li>• PROJ Decarbonization of Industrial Processes</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>322201</b> Lecture Decarbonization of Industrial Processes - 2 Hours per Term <b>322202</b> Exercise Decarbonization of Industrial Processes - 1 Hours per Term



## 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

<b>Modul Title</b>	<b>Market Integration of Renewable Energies and Sector Coupling</b>
	Marktintegration erneuerbarer Energien und Sektorenkopplung
<b>Department</b>	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. Ragwitz, Mario
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Scenarios for the development of future energy systems</li> <li>• Definition and challenges of market integration of renewable energies</li> <li>• Instruments for market-based investment decisions and dispatch of renewable energies</li> <li>• Technology options for the integration of energy sectors</li> <li>• Flexibility options on the supply and demand side and based on based on storage technologies</li> </ul>

	<ul style="list-style-type: none"> <li>• Value of flexibility at the energy market</li> <li>• The role of grid infrastructures for the market integration of renewable energies</li> <li>• Python Programming Fundamentals: Introduction to reading and writing Python code, focusing on important programming concepts necessary for energy modeling.</li> <li>• Introduction to simulation and optimisation techniques in energy system modelling</li> <li>• Methodologies for analyzing and managing datasets</li> <li>• Policies for renewable energy sources in the power sector</li> </ul>
<b>Recommended Prerequisites</b>	<p>Participation at</p> <ul style="list-style-type: none"> <li>• module 35303 - "Power System Economics I" and</li> <li>• module 35401 - "Power System Economics II"</li> </ul> <p>is strongly recommended</p>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	<p>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</p>
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Script (slides)</li> <li>• Reference books</li> <li>• 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</li> <li>• IEA (2022), World Energy Outlook 2022, IEA, Paris <a href="https://www.iea.org/reports/world-energy-outlook-2022">https://www.iea.org/reports/world-energy-outlook-2022</a></li> <li>• IEA (2011), Integration of Renewables, IEA, Paris <a href="https://www.iea.org/reports/integration-of-renewables">https://www.iea.org/reports/integration-of-renewables</a></li> <li>• 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.</li> <li>• 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.</li> <li>• Wietschel, M.; Held, A.; Pfluger, B.; Ragwitz, M. (2020): Energy integration across electricity, heating &amp; cooling and the transport sector – Sector coupling. Fraunhofer ISI Working Paper Sustainability and Innovation, No. S 08/2020</li> <li>• Energy sector magazines</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Written examination, 60 minutes OR oral examination, 30 minutes (the lecturer decides and informs at the beginning of the course) 60 %</li> <li>• 2 Seminar works including presentation (duration 15 minutes, presentation ca. 10 slides) 40 %</li> </ul>

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	20
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• VL Market Integration of Renewable Energies and Sector Coupling</li><li>• Proj Market Integration of Renewable Energies and Sector Coupling</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>322101</b> Lecture Market Integration of Renewable Energies and Sector Coupling - 2 Hours per Term <b>322102</b> Seminar/Exercise Market Integration of Renewable Energies and Sector Coupling - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Just Energy Transition</b> Energiewende gerecht gestalten
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Hirschl, Bernd
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>On completion of this unit, students will be able to demonstrate the main conceptual debates surrounding just energy transitions. Students will be equipped with in-depth critical theoretical and empirical knowledge of the patterns of energy transition governance. After attending the module, students are able to conduct case analyses.</p> <p>The module is designed for Master students to develop their research, argumentation and presentation skills, as well as their capacities for collaborative work and group learning.</p>
<b>Contents</b>	<p>This module will discuss key opportunities and challenges of transitioning towards climate neutral energy systems, primarily through a social science lens. "Leaving no one behind" is a catchphrase used in contemporary climate and energy policies, that we will explore in more detail with texts from political science (policy analysis and political economy), philosophy, economics and sociology. We will discuss the dynamics of capitalism, questions of culture and everyday life, the role of the state, and international governance structures.</p> <p>The course is guided by the following questions:</p> <ul style="list-style-type: none"> <li>• What are the <i>conceptual foundations</i> of just energy transitions?</li> <li>• What are <i>universal and country-specific challenges</i> to just energy transitions?</li> <li>• What are <i>national and international responses</i> from society, politics and businesses to these challenges?</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none

<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<p>There are no core texts for this course. Essential readings for the seminars will be indicated with the course start. The following literature can be used for preparation:</p> <ul style="list-style-type: none"> <li>• Scoones, I., Leach, M., and Newell, P., eds. 2015. The politics of green transformations. Abingdon: Routledge</li> <li>• Unruh, G. C. (2000) 'Understanding carbon lock-in', Energy Policy, Vol 28, no 12, pp 817–830</li> <li>• Peter Newell &amp; Andrew Simms (2021) How Did We Do That? Histories and Political Economies of Rapid and Just Transitions, New Political Economy, 26:6, 907-922</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Case study, about 2,500 words (50 %) <ul style="list-style-type: none"> <li>Empirical case study with theoretical underpinnings of a region/ country of the student's choice (not restricted to Global North): What are specific opportunities and challenges of a just energy transition and which responses have been implemented/are lacking?</li> </ul> </li> <li>• Presentation, 15 min + 5 min Discussion (topics to be announced) (40 %) <ul style="list-style-type: none"> <li>topics to be announced</li> </ul> </li> <li>• Class Participation (10 %)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	20
<b>Remarks</b>	<b><i>Module with limited number of participants - Registration two weeks prior to the commencement of lectures!</i></b>
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Seminar</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

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

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and learning materials are given in the course description and will be announced within the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• project proposal, max. 3 pages (25 %)</li><li>• final presentation, 15-25 min (15 %)</li><li>• project report, min. 12 pages (60 %)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• NN - Lecture Anthropocene and Law</li><li>• NN - Seminar Anthropocene and Law</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>915110</b> Lecture/Seminar Anthropocene and Law - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Alternative Economies</b> Alternative Ökonomien
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	Upon successful completion students will have a comprehensive understanding of the concept of alternative economies and its role in transformation processes. They have acquired critical reflection skills and will be able to navigate through diverse debate and discourse formats. The module will provide them with know-how on specific formats of field research as well as scenario development. Students acquire inter- and transdisciplinary research competencies.
<b>Contents</b>	Alternative economies refer to all economic views that deal with other possibilities to the private-industrial economy. In a series of guest lectures, students will learn about different approaches, such as care economy, solidarity economy, resource-based economy, donut economy, complementary currencies, etc., and critically reflect and discuss their role in transformation processes. In excursions and case studies, students will visit places where alternative economies are being tested. Different approaches will be elaborated in scenario workshops.
<b>Recommended Prerequisites</b>	Knowledge of the contents of module • 13922 <i>Introduction to Transformation Studies</i>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	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](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**

- paper review, 1500-2000 words (20%)
- 3 reflections of Guest Lectures, 1500-2000 words each (30%)
- 2 reflections from field trips, approx. 5000 characters each (20%)
- Written test, 20 minutes (multiple choice) (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: Soziokulturelle Transformation

### Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	13953	Compulsory elective

<b>Modul Title</b>	<b>Economic Perspectives on Climate Neutrality</b> Ökonomische Perspektiven der Klimaneutralität
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Hirschl, Bernd
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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>
<b>Contents</b>	<p>Among other things:</p> <ul style="list-style-type: none"> <li>• Basics of climate neutrality - terms, concepts, political framework</li> <li>• macroeconomic aspects (e.g. costs, benefits, damages etc.)</li> <li>• economic aspects (e.g. economic efficiency in the context of political framework)</li> <li>• Distributional and equity aspects, social dimension (e.g. distribution of costs and benefits among different social groups, conception of relevant levies, investor-user dilemmas)</li> <li>• Regional economic effects (e.g. value-added and employment effects on site and prerequisites for this)</li> <li>• Systemic aspects and infrastructures (e.g. economic evaluation and sustainability of relevant infrastructures)</li> <li>• Energy economy in transition (including new actors and business models)</li> </ul>
<b>Recommended Prerequisites</b>	none

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Slides and working materials/literature will be announced in the lecture
<b>Module Examination</b>	Final Module Examination (MAP)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• 120 min written examination</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	20
<b>Remarks</b>	Please register your participation by email with the department before the start of the semester
<b>Module Components</b>	<ul style="list-style-type: none"><li>• lecture with integrated seminar elements and exercises</li><li>• examination</li></ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Behavioural Economics</b> Verhaltensökonomie
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. oec. habil. Schnellenbach, Jan
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Homo Economicus: The economic concept of human behaviour</li> <li>• The economic theory of moral action</li> <li>• Behavioural anomalies: an overview</li> <li>• Bounded rationality</li> <li>• Dealing with risk and uncertainty</li> <li>• Prospect theory</li> <li>• Heuristics: Curse or blessing?</li> <li>• Fairness and social norms</li> <li>• Economic happiness research</li> <li>• Behavioural political economy</li> <li>• Behavioural public economics</li> </ul>
<b>Recommended Prerequisites</b>	Good knowledge of microeconomics.
<b>Mandatory Prerequisites</b>	No successful participation in the corresponding discontinued module 11814 Behavioral Economics.

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Foundational literature: <ul style="list-style-type: none"><li>• Angner, E. (2012). A Course in Behavioral Economics, Houndmills: Palgrave Macmillan.</li><li>• Additional literature will be announced during the lecture.</li></ul> In the exercise: <ul style="list-style-type: none"><li>• Wilkinson, N. and Klaes, M. (2012), An Introduction to Behavioral Economics. 2nd edition, Houndmills: Palgrave Macmillan.</li></ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Term paper with a maximum of 15.000 characters incl. spaces (roughly 6 pages), 50 points</li><li>• Final exam, 40 minutes, 50 points.</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	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.
<b>Module Components</b>	Behavioral Economics (Lecture) Behavioral Economics (Exercise)
<b>Components to be offered in the Current Semester</b>	<b>530631</b> Lecture Behavioral Economics - 2 Hours per Term <b>530632</b> Exercise Behavioral Economics - 2 Hours per Term

## 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

<b>Modul Title</b>	<b>Economics of Innovation</b>
	Innovationsökonomik
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. oec. habil. Schnellenbach, Jan
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Each winter semester even year
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Good knowledge of microeconomics.
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	G.M. Swann, The Economics of Innovation: An Introduction, Elgar, 2013 as well as additional articles and book chapters announced during the lecture
<b>Module Examination</b>	Continuous Assessment (MCA)

<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50%)</li><li>• Exam, 40 minutes, which can also be conducted digitally (50%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	No offer in the winter semester 2025/26.
<b>Module Components</b>	Innovation Economics Lecture - 2 hours per week Innovation Economics Exercise - 2 hours per week
<b>Components to be offered in the Current Semester</b>	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**
1. Fundamentals of the theory of private property rights
    - 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
    - a) Complete and incomplete contracts
    - b) Moral hazard and adverse selection
    - c) Efficient responses to contract breaches
  3. Economic analysis of tort law
    - a) The Coase theorem
    - b) Economic analysis of liability rules
  4. Economic analysis of criminal law
    - a) Differentiating between tort law and criminal law
    - b) Deterrence effects of criminal law
    - c) Optimal deterrence effects
  5. Constitutional economics



	<p>a) Fundamentals of the economic theory of public law</p> <p>b) Empirical analysis of the economic effects of constitutional rules</p>
<b>Recommended Prerequisites</b>	Basic knowledge of microeconomics
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	<p>Lecture - 2 hours per week per semester</p> <p>Exercise - 2 hours per week per semester</p> <p>Self organised studies - 120 hours</p>
<b>Teaching Materials and Literature</b>	<p>H. Schäfer and C. Ott, Lehrbuch der ökonomischen Analyse des Zivilrechts, 5th edition, Heidelberg: Springer, 2012</p> <p>Additional articles and book chapters announced during the lecture</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50% of the total grade)</li> <li>• Exam, 40 minutes (50% of the total grade)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	None
<b>Module Components</b>	<p>Law &amp; Economics Lecture - 2 hours per week</p> <p>Law &amp; Economics Exercise - 2 hours per week</p>
<b>Components to be offered in the Current Semester</b>	<p><b>530637</b> Lecture</p> <p>Law and Economics - 2 Hours per Term</p> <p><b>530638</b> Exercise</p> <p>Law and Economics - 2 Hours per Term</p>

## 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

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

- 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 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.

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	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.
<b>Module Components</b>	Summerterm: NN - Lecture Transformation: Law, Governance, Ethical Foundations NN - Seminar Transformation: Law, Governance, Ethical Foundations
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Biomass and Bioenergy</b> Biomasse und Bioenergie
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Hirschl, Bernd
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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"> <li>• Overview on biomass production (agriculture and forestry)</li> <li>• Biomass residual waste</li> <li>• Energy conversion technologies</li> <li>• Social and ecological aspects of biomass use</li> <li>• Current bioenergy policies</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	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**

none

**Module Components**

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

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

**538908** Seminar  
Biomass and Bioenergy - 4 Hours per Term  
**538912** Examination  
Biomass and Bioenergy

## 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

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

	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	<p>Lecture - 1 hours per week per semester</p> <p>Exercise - 1 hours per week per semester</p> <p>Study project - 2 hours per week per semester</p> <p>Self organised studies - 120 hours</p>
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> </ul> <p>Further materials are provided via Moodle (including lecture slides and additional materials including videos, readings etc.)</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Individual component (E-assessment), 60-90 min - 50%</li> <li>• Group Project - Part 1: Create a scientific poster (Analysis of e.g., a scientific article, industry report, case study, ...) - 25%</li> <li>• Group Project - Part 2: Presentation, 15min - 25%</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lectures &amp; Exercises</li> <li>• Projects</li> </ul>



**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: Soziokulturelle Transformation

### Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14288	Compulsory elective

<b>Modul Title</b>	<b>Psychology of Entrepreneurship and Change</b> Psychologie des Unternehmertums und Wandels
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. Urbig, Diemo
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	<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"> <li>• Satisficing and dual process theories</li> <li>• Risk aversion and ambiguity aversion</li> <li>• Prospect theory and loss aversion</li> <li>• Mental accounting and choice bracketing</li> <li>• Risk reduction strategies: Hedging, learning, and real options</li> <li>• Time preferences</li> </ul>

- 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.

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

- 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**

**530960** Lecture  
Psychology of Entrepreneurship and Change - 2 Hours per Term  
**530961** Seminar  
Psychology of Entrepreneurship and Change - 2 Hours per Term  
**530962** Examination  
Psychology of Entrepreneurship and Change

## 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

<b>Modul Title</b>	<b>Fit4Future Summer School</b> Fit4Future Sommerschule
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	After successful completion, students have in-depth knowledge of various transformation dynamics and forms. They are experienced in discussing and reflecting on various analytical and evaluation concepts of transformation dynamics. They can classify various theoretical and methodological approaches in the present day and discuss them in light of relevant evaluation criteria that apply to transformations in the face of pressing crises such as climate catastrophe, biodiversity loss or land overuse. They are also able to understand the complexity of the design challenges of a transformation on a global scale and to analyze the various roles, e.g. of the state or niche actors. They can apply conceptual perspectives such as the multi-level perspective, the ecosystem approach or evolutionary innovation theory.
<b>Contents</b>	<p>The Fit4Future Summer School series provide a dynamic learning environment where students engage with challenges of tomorrow. Every year the thematic focus shifts towards current transition dynamics and transformation processes. The Summer School provides a mix of online lecture and offline exercises, with a full-week course during September every year.</p> <p>Topics are:</p> <ul style="list-style-type: none"> <li>• Just Transitions to sustainable and clean energy</li> <li>• Circular Economy and Society</li> <li>• Digitalisation and Sustainability</li> <li>• Globalisation and Global Studies</li> <li>• De- and Prosgrowth</li> </ul>

Throughout the programme, participants will engage with the various aspects of the chosen topic, explore the role of different transformation paradigms and assess the transformative power of different pathways towards sustainable future in an interdisciplinary setting. Renowned international experts will provide participants with a comprehensive understanding of the latest developments through lectures, workshops and field trips, creating a dynamic learning environment that encourages critical thinking and collaborative problem-solving.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Haberl, H., Fischer-Kowalski, M., Krausmann, F., Martinez-Atlier, J., &amp; Winiwarter, V. (2011). A socio-metabolic transition towards sustainability? Challenges for another Great Transformation. <i>Sustainable development</i>, 19(1), 1-14.</li> <li>• Voulvoulis, N., Giakoumis, T., Hunt, C., Kioupi, V., Petrou, N., Souliotis, I., &amp; Vaghela, C.J.G.E.C. (2022). systems thinking as a paradigm shift for sustainability transformation. <i>Global Environmental Change</i>, 75, 102544.</li> <li>• Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., ... &amp; Lang, D. J. (2017). Leverage points for sustainability transformation. <i>Ambio</i>, 46, 30-39</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Essay on selected transformation dynamics, 5000 words, (40%)</li> <li>• 2 protocols of two events during the summer school, 1500 words each (20% each)</li> <li>• Learning diary, 3000 words (20%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	- Summer School Fit4Future
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>The Political Economy of Transformation</b> Die politische Ökonomie der Transformation
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. habil. Berger, Wolfram
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	By the end of the semester, students will have a solid understanding of theoretical concepts tied to a critical political economy perspective. They will be able to apply these theoretical perspectives for analysing concrete empirical contexts. They will have skills for critical reflection and will be able to navigate and process complex conceptual texts. Students have inter- and transdisciplinary research competencies.
<b>Contents</b>	<p>To deal with the major challenges our societies are facing – such as the climate crisis, demographic change, geopolitical tension as well as regional and global economic restructurings – we need a profound understanding of their underlying social conditions. This interdisciplinary course offers an introduction to critical political economy approaches that examine these issues through the lenses of power, social relations, and uneven development.</p> <p>We begin with discussing core concepts through which critical political economists seeks to understand how capitalist economies function and how their contradictions emerge. We then turn to the institutional arrangements that shape and mediate economic life — such as states, legal systems, and international governance — examining their roles not as neutral arbiters but as embedded in social struggles and historical formations.</p> <p>Building on this, we explore the concepts of power and hegemony. Drawing on theorists such as Antonio Gramsci and perspectives from Cultural Political Economy, we analyse how dominant economic and political ideas as well as practices become socialised, and how they are contested. Finally, the course investigates the spatial dimension of capitalism: we study how space is not merely a backdrop but actively</p>

produced through processes of uneven development, globalisation, and territorial differentiation.

Throughout the course, we will engage with both classical texts and contemporary applications, and reflect critically on the relevance of critical political economy approaches for understanding today's transformations. Students are encouraged to bring in their own interests and regional expertise, and to relate theoretical insights to empirical phenomena across scales.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 2 hours per week per semester Self organised studies - 150 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Gramsci, A., 2011. Prison notebooks. Vol. 1. Columbia Univ. Press.</li> <li>• Harvey, D., 2019. Spaces of Global Capitalism: A Theory of Uneven Geographical Development. Verso.</li> <li>• Massey, D.B., 1984. Spatial Divisions of Labour. Macmillan.</li> <li>• Moisio, S. (2018). Geopolitics of the knowledge-based economy. Routledge.</li> <li>• Sum, N.-L., &amp; Jessop, B. (2013). Towards a cultural political economy: Putting culture in its place in political economy. Edward Elgar Pub. Ltd.</li> <li>• Vidal, M., Smith, T., Rotta, T., Prew, P. (Eds.), 2019. The Oxford Handbook of Karl Marx, 1st ed. Oxford University Press.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Präsentation: 15 min (50 %)</li> <li>• Hausarbeit: 6.000 Wörter (50 %)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Seminar (2 SWS)</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>530817 Seminar</b> The Political Economy of Transformation - 2 Hours per Term



## 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

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

	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"><li>• Written Test, 90 minutes</li></ul> <p>Bonus points (10 % of total points) can be earned through the group assignment and will be added to your final score <b>only if you pass the written test.</b></p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	60
Remarks	none
Module Components	Lecture and Exercise
Components to be offered in the Current Semester	<b>531099</b> Examination Optimization in Business Transformation (Wiederholungsprüfung)

## 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

<b>Modul Title</b>	<b>International Marketing</b> Internationales Marketing
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. Dost, Florian
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	Students are familiar with the problems relevant to international marketing, and can explain the special features of strategic decisions and marketing instruments in relation to international challenges. They are able to apply their knowledge to various industries and country markets. Students can evaluate foreign markets using market data and scoring models, and critically assess internationalisation decisions from a business perspective.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• <b>Introduction</b> (basics, importance, special features),</li> <li>• <b>Environmental analysis</b> and information procurement (organisations and cooperation, risk aspects in foreign trade, PESTLE, 5 forces),</li> <li>• <b>Strategic decisions</b> (reasons and motives, selection of foreign markets, forms of international activities, timing of market entry strategies),</li> <li>• <b>Product and brand portfolios</b> (extensions, adaptations, brand transfer),</li> <li>• <b>Innovation and product planning</b> (hype cycle, dynamics of the environment, life cycles)</li> <li>• <b>Financing and hedging</b> (short, medium and long-term export financing),</li> <li>• <b>Marketing management</b> (4P: product policy, pricing policy, distribution policy, communication policy)</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	No successful participation in the German-language module 11959

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Self organised studies - 150 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"><li>• Backhaus, K; Voeth, M.: Internationales Marketing, 6. Aufl., Stuttgart (Kohlhammer) 2010</li><li>• Kotler, P., Burton, S., Deans, K., Brown, L., &amp; Armstrong, G. (2015). Marketing. Pearson Higher Education AU.</li><li>• Berinato, S. (2016). Good charts: The HBR guide to making smarter, more persuasive data visualizations. Harvard Business Review Press.</li></ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Written exam 45 min (40%)</li><li>• Poster preparation, 10 min (25%)</li><li>• Poster presentation, 5 min discussion (15%)</li><li>• Critical essay, approx. 5-6 pages (20 %)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• International Marketing (Lecture)</li></ul>
<b>Components to be offered in the Current Semester</b>	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)

- Examination: Advanced Studies in International Environmental Law

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

No assignment



## 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

<b>Modul Title</b>	<b>Climate Change and Migration</b> Klimawandel und Migration
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Associate Prof. (Univ. Damaskus) Dr. agr. Ibrahim, Bachar
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	<p><b>Part "Climate Change"</b></p> <ul style="list-style-type: none"> <li>• Observations of change in the climate system</li> <li>• Critically assess the role of human activities in modern climate change</li> <li>• Assess future climate change scenarios and their potential impact on the Earth</li> <li>• climate change agenda and how this agenda impact on policy</li> <li>• Identify the Impacts and related Adaptation measures</li> </ul> <p><b>Part "Migration"</b></p> <ul style="list-style-type: none"> <li>• The potential link between climate change, migration,</li> <li>• The Task of defining 'climate refugee'</li> <li>• climate change contribution to the refugee problems</li> <li>• Gaps in the international legal framework</li> <li>• Individual and Collective Action on Mitigation</li> </ul> <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>
<b>Recommended Prerequisites</b>	none

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Environment, forced migration and social vulnerability, T. Afifi, J. Jäger - 2010 - Springer</li> <li>• Climate change, human security and violent conflict: challenges for societal stability, J. Scheffran, M. Brzoska, H.G. Brauch, P.M. Link... - 2012</li> <li>• People on the move in a changing climate: The regional impact of environmental change on migration, E. Piguet, F. Laczko - 2013</li> <li>• Global migration governance, A. Betts - 2011</li> <li>• Disentangling migration and climate change, T. Faist, J. Schade - 2013 - Springer</li> <li>• Climate change and migration: security and borders in a warming world, G. White – 2011- Oxford University Press</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Oral Exam, 30 min. (50%)</li> <li>• Two presentations on the a scientific topic (each 25%)</li> </ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	<p>An annual excursion pertaining to the module may be organised.</p> <p><b><i>Complementary Module in Master Environmental and Resource Management.</i></b></p>
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Seminar</li> <li>• Examination</li> </ul>
<b>Components to be offered in the Current Semester</b>	No assignment

## 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

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

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Birnie/Boyle/Redgwell, International Law and the Environment, 4th edition, Oxford University Press, 2021</li> <li>• Knopp/Epstein/Hoffmann, International and European Environmental Law with Reference to German Environmental Law – A Guide for International Study Programs, 2nd edition, Berlin 2019</li> <li>• Albrecht, Egute, Wanki, Ezeamama (Eds.), International environmental law (IEL) – Agreements and introduction. 6th expanded and updated edition, 2022.</li> <li>• 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.</li> <li>• 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</li> <li>• 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 <a href="https://doi.org/10.1017/9781009157940.001">https://doi.org/10.1017/9781009157940.001</a>.</li> <li>• German Advisory council on Global Change (2019): Towards our Common Digital Future. Berlin. WGBU. <a href="https://www.wbgu.de/en/publications/publication/towards-our-common-digital-future">https://www.wbgu.de/en/publications/publication/towards-our-common-digital-future</a></li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Written Exam, 120 minutes (maximum 40 points)</li> <li>• Presentation, 15 min. (maximum 20 points)</li> </ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded

Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none"><li>• Lecture: Global Change and Legal Response</li><li>• Seminar: Will be announced during the lecture</li><li>• Examination: Global Change and Legal Response</li></ul>
Components to be offered in the Current Semester	<p><b>520260</b> Lecture Global Change and Legal Response - 2 Hours per Term</p> <p><b>520261</b> Seminar Climate Adaptation with a Focus on Nature-Based Solutions: An Overview of the EU Policy Framework - 2 Hours per Term</p>

## 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

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

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and learning materials are given in the course description and will be announced within the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• project proposal, max. 3 pages (25 %)</li><li>• final presentation, 15-25 min (15 %)</li><li>• project report, min. 12 pages (60 %)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• NN - Lecture Anthropocene and Law</li><li>• NN - Seminar Anthropocene and Law</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>915110</b> Lecture/Seminar Anthropocene and Law - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Alternative Economies</b> Alternative Ökonomien
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	Upon successful completion students will have a comprehensive understanding of the concept of alternative economies and its role in transformation processes. They have acquired critical reflection skills and will be able to navigate through diverse debate and discourse formats. The module will provide them with know-how on specific formats of field research as well as scenario development. Students acquire inter- and transdisciplinary research competencies.
<b>Contents</b>	Alternative economies refer to all economic views that deal with other possibilities to the private-industrial economy. In a series of guest lectures, students will learn about different approaches, such as care economy, solidarity economy, resource-based economy, donut economy, complementary currencies, etc., and critically reflect and discuss their role in transformation processes. In excursions and case studies, students will visit places where alternative economies are being tested. Different approaches will be elaborated in scenario workshops.
<b>Recommended Prerequisites</b>	Knowledge of the contents of module • 13922 <i>Introduction to Transformation Studies</i>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	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](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**

- paper review, 1500-2000 words (20%)
- 3 reflections of Guest Lectures, 1500-2000 words each (30%)
- 2 reflections from field trips, approx. 5000 characters each (20%)
- Written test, 20 minutes (multiple choice) (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: 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

<b>Modul Title</b>	<b>Economic Perspectives on Climate Neutrality</b> Ökonomische Perspektiven der Klimaneutralität
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Hirschl, Bernd
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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>
<b>Contents</b>	<p>Among other things:</p> <ul style="list-style-type: none"> <li>• Basics of climate neutrality - terms, concepts, political framework</li> <li>• macroeconomic aspects (e.g. costs, benefits, damages etc.)</li> <li>• economic aspects (e.g. economic efficiency in the context of political framework)</li> <li>• Distributional and equity aspects, social dimension (e.g. distribution of costs and benefits among different social groups, conception of relevant levies, investor-user dilemmas)</li> <li>• Regional economic effects (e.g. value-added and employment effects on site and prerequisites for this)</li> <li>• Systemic aspects and infrastructures (e.g. economic evaluation and sustainability of relevant infrastructures)</li> <li>• Energy economy in transition (including new actors and business models)</li> </ul>
<b>Recommended Prerequisites</b>	none

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Slides and working materials/literature will be announced in the lecture
<b>Module Examination</b>	Final Module Examination (MAP)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• 120 min written examination</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	20
<b>Remarks</b>	Please register your participation by email with the department before the start of the semester
<b>Module Components</b>	<ul style="list-style-type: none"><li>• lecture with integrated seminar elements and exercises</li><li>• examination</li></ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Behavioural Economics</b> Verhaltensökonomie
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. oec. habil. Schnellenbach, Jan
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Homo Economicus: The economic concept of human behaviour</li> <li>• The economic theory of moral action</li> <li>• Behavioural anomalies: an overview</li> <li>• Bounded rationality</li> <li>• Dealing with risk and uncertainty</li> <li>• Prospect theory</li> <li>• Heuristics: Curse or blessing?</li> <li>• Fairness and social norms</li> <li>• Economic happiness research</li> <li>• Behavioural political economy</li> <li>• Behavioural public economics</li> </ul>
<b>Recommended Prerequisites</b>	Good knowledge of microeconomics.
<b>Mandatory Prerequisites</b>	No successful participation in the corresponding discontinued module 11814 Behavioral Economics.

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Foundational literature: <ul style="list-style-type: none"><li>• Angner, E. (2012). A Course in Behavioral Economics, Houndmills: Palgrave Macmillan.</li><li>• Additional literature will be announced during the lecture.</li></ul> In the exercise: <ul style="list-style-type: none"><li>• Wilkinson, N. and Klaes, M. (2012), An Introduction to Behavioral Economics. 2nd edition, Houndmills: Palgrave Macmillan.</li></ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Term paper with a maximum of 15.000 characters incl. spaces (roughly 6 pages), 50 points</li><li>• Final exam, 40 minutes, 50 points.</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	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.
<b>Module Components</b>	Behavioral Economics (Lecture) Behavioral Economics (Exercise)
<b>Components to be offered in the Current Semester</b>	<b>530631</b> Lecture Behavioral Economics - 2 Hours per Term <b>530632</b> Exercise Behavioral Economics - 2 Hours per Term

## 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

<b>Modul Title</b>	<b>Economics of Innovation</b>
	Innovationsökonomik
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. oec. habil. Schnellenbach, Jan
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Each winter semester even year
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Good knowledge of microeconomics.
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	G.M. Swann, The Economics of Innovation: An Introduction, Elgar, 2013 as well as additional articles and book chapters announced during the lecture
<b>Module Examination</b>	Continuous Assessment (MCA)

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

<b>Modul Title</b>	<b>Law and Economics</b> Recht und Wirtschaft
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. oec. habil. Schnellenbach, Jan
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Each winter semester odd year
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	<ol style="list-style-type: none"> <li>1. Fundamentals of the theory of private property rights <ol style="list-style-type: none"> <li>a) Historical development of private property</li> <li>b) Theories of the emergence of private property rights</li> <li>c) Economic analysis of common-pool resources</li> <li>d) Property rights in intangible assets</li> </ol> </li> <li>2. Economic analysis of contract law <ol style="list-style-type: none"> <li>a) Complete and incomplete contracts</li> <li>b) Moral hazard and adverse selection</li> <li>c) Efficient responses to contract breaches</li> </ol> </li> <li>3. Economic analysis of tort law <ol style="list-style-type: none"> <li>a) The Coase theorem</li> <li>b) Economic analysis of liability rules</li> </ol> </li> <li>4. Economic analysis of criminal law <ol style="list-style-type: none"> <li>a) Differentiating between tort law and criminal law</li> <li>b) Deterrence effects of criminal law</li> <li>c) Optimal deterrence effects</li> </ol> </li> <li>5. Constitutional economics</li> </ol>



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

<b>Recommended Prerequisites</b>	Basic knowledge of microeconomics
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	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
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50% of the total grade)</li> <li>• Exam, 40 minutes (50% of the total grade)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	None
<b>Module Components</b>	Law & Economics Lecture - 2 hours per week Law & Economics Exercise - 2 hours per week
<b>Components to be offered in the Current Semester</b>	<b>530637</b> Lecture Law and Economics - 2 Hours per Term <b>530638</b> Exercise Law and Economics - 2 Hours per Term

## 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

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

- 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 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.

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	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.
<b>Module Components</b>	Summerterm: NN - Lecture Transformation: Law, Governance, Ethical Foundations NN - Seminar Transformation: Law, Governance, Ethical Foundations
<b>Components to be offered in the Current Semester</b>	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** 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:

- 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.

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

- 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**

**530960** Lecture  
Psychology of Entrepreneurship and Change - 2 Hours per Term  
**530961** Seminar  
Psychology of Entrepreneurship and Change - 2 Hours per Term  
**530962** Examination  
Psychology of Entrepreneurship and Change

## 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

<b>Modul Title</b>	<b>Fit4Future Summer School</b> Fit4Future Sommerschule
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	After successful completion, students have in-depth knowledge of various transformation dynamics and forms. They are experienced in discussing and reflecting on various analytical and evaluation concepts of transformation dynamics. They can classify various theoretical and methodological approaches in the present day and discuss them in light of relevant evaluation criteria that apply to transformations in the face of pressing crises such as climate catastrophe, biodiversity loss or land overuse. They are also able to understand the complexity of the design challenges of a transformation on a global scale and to analyze the various roles, e.g. of the state or niche actors. They can apply conceptual perspectives such as the multi-level perspective, the ecosystem approach or evolutionary innovation theory.
<b>Contents</b>	<p>The Fit4Future Summer School series provide a dynamic learning environment where students engage with challenges of tomorrow. Every year the thematic focus shifts towards current transition dynamics and transformation processes. The Summer School provides a mix of online lecture and offline exercises, with a full-week course during September every year.</p> <p>Topics are:</p> <ul style="list-style-type: none"> <li>• Just Transitions to sustainable and clean energy</li> <li>• Circular Economy and Society</li> <li>• Digitalisation and Sustainability</li> <li>• Globalisation and Global Studies</li> <li>• De- and Prosgrowth</li> </ul>



Throughout the programme, participants will engage with the various aspects of the chosen topic, explore the role of different transformation paradigms and assess the transformative power of different pathways towards sustainable future in an interdisciplinary setting. Renowned international experts will provide participants with a comprehensive understanding of the latest developments through lectures, workshops and field trips, creating a dynamic learning environment that encourages critical thinking and collaborative problem-solving.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Haberl, H., Fischer-Kowalski, M., Krausmann, F., Martinez-Atlier, J., &amp; Winiwarter, V. (2011). A socio-metabolic transition towards sustainability? Challenges for another Great Transformation. <i>Sustainable development</i>, 19(1), 1-14.</li> <li>• Voulvoulis, N., Giakoumis, T., Hunt, C., Kioupi, V., Petrou, N., Souliotis, I., &amp; Vaghela, C.J.G.E.C. (2022). systems thinking as a paradigm shift for sustainability transformation. <i>Global Environmental Change</i>, 75, 102544.</li> <li>• Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., ... &amp; Lang, D. J. (2017). Leverage points for sustainability transformation. <i>Ambio</i>, 46, 30-39</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Essay on selected transformation dynamics, 5000 words, (40%)</li> <li>• 2 protocols of two events during the summer school, 1500 words each (20% each)</li> <li>• Learning diary, 3000 words (20%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	- Summer School Fit4Future
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>The Political Economy of Transformation</b> Die politische Ökonomie der Transformation
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. habil. Berger, Wolfram
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	By the end of the semester, students will have a solid understanding of theoretical concepts tied to a critical political economy perspective. They will be able to apply these theoretical perspectives for analysing concrete empirical contexts. They will have skills for critical reflection and will be able to navigate and process complex conceptual texts. Students have inter- and transdisciplinary research competencies.
<b>Contents</b>	<p>To deal with the major challenges our societies are facing – such as the climate crisis, demographic change, geopolitical tension as well as regional and global economic restructurings – we need a profound understanding of their underlying social conditions. This interdisciplinary course offers an introduction to critical political economy approaches that examine these issues through the lenses of power, social relations, and uneven development.</p> <p>We begin with discussing core concepts through which critical political economists seek to understand how capitalist economies function and how their contradictions emerge. We then turn to the institutional arrangements that shape and mediate economic life — such as states, legal systems, and international governance — examining their roles not as neutral arbiters but as embedded in social struggles and historical formations.</p> <p>Building on this, we explore the concepts of power and hegemony. Drawing on theorists such as Antonio Gramsci and perspectives from Cultural Political Economy, we analyse how dominant economic and political ideas as well as practices become socialised, and how they are contested. Finally, the course investigates the spatial dimension of capitalism: we study how space is not merely a backdrop but actively</p>

produced through processes of uneven development, globalisation, and territorial differentiation.

Throughout the course, we will engage with both classical texts and contemporary applications, and reflect critically on the relevance of critical political economy approaches for understanding today's transformations. Students are encouraged to bring in their own interests and regional expertise, and to relate theoretical insights to empirical phenomena across scales.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 2 hours per week per semester Self organised studies - 150 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Gramsci, A., 2011. Prison notebooks. Vol. 1. Columbia Univ. Press.</li> <li>• Harvey, D., 2019. Spaces of Global Capitalism: A Theory of Uneven Geographical Development. Verso.</li> <li>• Massey, D.B., 1984. Spatial Divisions of Labour. Macmillan.</li> <li>• Moio, S. (2018). Geopolitics of the knowledge-based economy. Routledge.</li> <li>• Sum, N.-L., &amp; Jessop, B. (2013). Towards a cultural political economy: Putting culture in its place in political economy. Edward Elgar Pub. Ltd.</li> <li>• Vidal, M., Smith, T., Rotta, T., Prew, P. (Eds.), 2019. The Oxford Handbook of Karl Marx, 1st ed. Oxford University Press.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Präsentation: 15 min (50 %)</li> <li>• Hausarbeit: 6.000 Wörter (50 %)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Seminar (2 SWS)</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>530817 Seminar</b> The Political Economy of Transformation - 2 Hours per Term

## 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

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

	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"><li>• Written Test, 90 minutes</li></ul> <p>Bonus points (10 % of total points) can be earned through the group assignment and will be added to your final score <b>only if you pass the written test.</b></p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	60
Remarks	none
Module Components	Lecture and Exercise
Components to be offered in the Current Semester	<b>531099</b> Examination Optimization in Business Transformation (Wiederholungsprüfung)

## 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

<b>Modul Title</b>	<b>International Marketing</b> Internationales Marketing
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. Dost, Florian
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	Students are familiar with the problems relevant to international marketing, and can explain the special features of strategic decisions and marketing instruments in relation to international challenges. They are able to apply their knowledge to various industries and country markets. Students can evaluate foreign markets using market data and scoring models, and critically assess internationalisation decisions from a business perspective.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• <b>Introduction</b> (basics, importance, special features),</li> <li>• <b>Environmental analysis</b> and information procurement (organisations and cooperation, risk aspects in foreign trade, PESTLE, 5 forces),</li> <li>• <b>Strategic decisions</b> (reasons and motives, selection of foreign markets, forms of international activities, timing of market entry strategies),</li> <li>• <b>Product and brand portfolios</b> (extensions, adaptations, brand transfer),</li> <li>• <b>Innovation and product planning</b> (hype cycle, dynamics of the environment, life cycles)</li> <li>• <b>Financing and hedging</b> (short, medium and long-term export financing),</li> <li>• <b>Marketing management</b> (4P: product policy, pricing policy, distribution policy, communication policy)</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	No successful participation in the German-language module 11959

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Self organised studies - 150 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"><li>• Backhaus, K; Voeth, M.: Internationales Marketing, 6. Aufl., Stuttgart (Kohlhammer) 2010</li><li>• Kotler, P., Burton, S., Deans, K., Brown, L., &amp; Armstrong, G. (2015). Marketing. Pearson Higher Education AU.</li><li>• Berinato, S. (2016). Good charts: The HBR guide to making smarter, more persuasive data visualizations. Harvard Business Review Press.</li></ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Written exam 45 min (40%)</li><li>• Poster preparation, 10 min (25%)</li><li>• Poster presentation, 5 min discussion (15%)</li><li>• Critical essay, approx. 5-6 pages (20 %)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• International Marketing (Lecture)</li></ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Resourcing in Entrepreneurship</b> Ressourcenmobilisierung im Gründungsprozess
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Scheidgen, Katharina
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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-



	<p>based perspective, for example discussing the role of entrepreneurial ecosystems in providing such financial resources, and of networks in acquiring them.</p> <p>This module strongly focuses on research.</p>
<b>Recommended Prerequisites</b>	<ul style="list-style-type: none"> <li>• Experience in working with scientific texts (e.g. as part of the Bachelor's thesis), overview of qualitative and quantitative research methods</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	<p>Seminar - 4 hours per week per semester</p> <p>Self organised studies - 120 hours</p>
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• This module strongly focuses on research.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Presentation, 15 minutes (30%)</li> <li>• Essay I, max. 5 pages (Mid-term; 35%)</li> <li>• Essay II, max. 5 pages (End; 35%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Seminar 530503</li> </ul>
<b>Components to be offered in the Current Semester</b>	<p><b>530503</b> Seminar</p> <p>Resourcing in Entrepreneurship - 4 Hours per Term</p>

## 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

<b>Modul Title</b>	<b>Climate Change and Migration</b> Klimawandel und Migration
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Associate Prof. (Univ. Damaskus) Dr. agr. Ibrahim, Bachar
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	<p><b>Part "Climate Change"</b></p> <ul style="list-style-type: none"> <li>• Observations of change in the climate system</li> <li>• Critically assess the role of human activities in modern climate change</li> <li>• Assess future climate change scenarios and their potential impact on the Earth</li> <li>• climate change agenda and how this agenda impact on policy</li> <li>• Identify the Impacts and related Adaptation measures</li> </ul> <p><b>Part "Migration"</b></p> <ul style="list-style-type: none"> <li>• The potential link between climate change, migration,</li> <li>• The Task of defining 'climate refugee'</li> <li>• climate change contribution to the refugee problems</li> <li>• Gaps in the international legal framework</li> <li>• Individual and Collective Action on Mitigation</li> </ul> <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>
<b>Recommended Prerequisites</b>	none

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Environment, forced migration and social vulnerability, T. Afifi, J. Jäger - 2010 - Springer</li> <li>• Climate change, human security and violent conflict: challenges for societal stability, J. Scheffran, M. Brzoska, H.G. Brauch, P.M. Link... - 2012</li> <li>• People on the move in a changing climate: The regional impact of environmental change on migration, E. Piguet, F. Laczko - 2013</li> <li>• Global migration governance, A. Betts - 2011</li> <li>• Disentangling migration and climate change, T. Faist, J. Schade - 2013 - Springer</li> <li>• Climate change and migration: security and borders in a warming world, G. White – 2011- Oxford University Press</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Oral Exam, 30 min. (50%)</li> <li>• Two presentations on the a scientific topic (each 25%)</li> </ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	<p>An annual excursion pertaining to the module may be organised.</p> <p><b><i>Complementary Module in Master Environmental and Resource Management.</i></b></p>
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Seminar</li> <li>• Examination</li> </ul>
<b>Components to be offered in the Current Semester</b>	No assignment

## 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

<b>Modul Title</b>	<b>Philosophy of Technology and Nature</b> Technik- und Naturphilosophie
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>After passing the module, students should:</p> <ul style="list-style-type: none"> <li>• understand main philosophical theories of “nature”</li> <li>• interrogate the concept of “nature” and to expose its numerous ideological and cultural manifestations.</li> <li>• identify the main ethical dimensions of “nature”, and their crosscultural and political dimensions.</li> <li>• 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.</li> </ul>
<b>Contents</b>	<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.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	See course material in moodle.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• One short essay, max. 2 pages (20%)</li> <li>• Two reviews, max. 5 pages (each 25%)</li> <li>• 2 oral group presentations, about 15 min <b>OR</b> weekly submitted written answers to one short question on the topical readings to be determined by the instructor (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	Lectures and seminars in the corresponding field.
<b>Components to be offered in the Current Semester</b>	<b>510112</b> Lecture/Seminar How to talk about "Nature"? / Ethik und Handeln / Philosophy of Technology and Nature / Natur und Technik / Wissenschaftstheorie, Logik und Naturphilosophie - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Communication of Science and Technology</b>
	Wissenschafts- und Technikkommunikation
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. habil. Lee, Roh Pin
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>Students will know about different techniques, tools and formats for communication of science &amp; technology. They will develop skills to break down complex issues at the nexus of science, technology and society to communicate science/technical information in a clear, understandable and engaging way to different stakeholders.</p> <p>On completion of the module, students will be able to:</p> <ul style="list-style-type: none"> <li>• Articulate the key issues and challenges in communicating about science &amp; technology;</li> <li>• Understand the nature of different audiences for better stakeholder engagement;</li> <li>• Demonstrate awareness of and ability to use a variety of different techniques and media for targeted audience;</li> <li>• Improve their skills in communication of scientific/technical information in both written and oral forms;</li> <li>• work as part of a team to develop effective measures for communication of science &amp; technology;</li> <li>• Provide constructive feedback to other students on their communication skills.</li> </ul>
<b>Contents</b>	<p>Course coverage:</p> <ul style="list-style-type: none"> <li>• Key issues in communication of science &amp; technology;</li> <li>• Identify and knowing your audiences (mental models, risk perception, heuristics and biases, ...);</li> <li>• Getting your audience's attention (Types of framing);</li> <li>• Communicating risk and uncertainty;</li> <li>• Formats for communication of science &amp; technology.</li> </ul>

Students will also be given opportunities to receive feedback and improve their own written and oral skills. They will also work in small teams on team projects to further their skills for communicating about sustainability issues. These projects will focus on communicating about a given scientific topic to a particular audience using spoken, visual, written or web-based communication.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Center for Research on Environmental Decisions (CRED). 2009. <i>The Psychology of Climate Change Communication: A guide for Scientists, Journalists, Educators, Political Aides, and the Interested Public</i>. New York.</li> <li>• Nisbet, M.C., Scheufele, D.A. 2009. What's next for science communication? Promising directions and lingering distractions. <i>American Journal of Botany</i>, 96(10): 1767-1778.</li> <li>• Bubela, T., Nisbet, M., Borchelt, R. <i>et al.</i> 2009. Science communication reconsidered. <i>Nature Biotechnology</i>, 27, 514–518.</li> <li>• Nelkin, D. 1989. Communicating technological risk: The social construction of risk perception. <i>Annual Review Public Health</i>, 10, 95-113.</li> <li>• Tversky, A., Kahneman, D. 1974. Judgment under Uncertainty: Heuristics and Biases. <i>Science, New Series</i>, 185(4157), 1124-1131.</li> </ul> <p>Further material (including lecture slides and additional materials including videos, readings etc.) might be announced during the first class meeting.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Individual E-Assessment – 60 min (40%)</li> <li>• Group project - Part 1: Science Communication Material e.g., poster, video, etc. (30%)</li> <li>• Group project - Part 2: Group presentation– 15min oral presentation (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture / Seminar</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>510601</b> Lecture/Seminar Communication of Science & Technology - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Un/DisCIPLining Knowledge: Technology, Science, and Society in Transformation</b>  Epistemischer Ungehorsam: Technik, Wissenschaft und Gesellschaft im Wandel
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Knowledge from the courses <ul style="list-style-type: none"> <li>• Technik in Wissenschaft und Gesellschaft</li> <li>• Philosophy of Science in Practice</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester



	Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and learning materials are given in the course description.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• short scientific essay, max. 4000 words (45%)</li><li>• scientific review, max. 2500 words (40%)</li><li>• presentation, max. 15 minutes (15%)</li></ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	German-speaking teachers are available if required. Further information on this can be found in the course description.
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar - 4 SWS</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>510151</b> Seminar Un/disciplining Knowledge - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>What Material Culture? Transformative Processes in Technology and Art</b>  Welche materielle Kultur? Transformative Prozesse in Technik und Kunst
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Interest in media technology and creativity techniques
<b>Mandatory Prerequisites</b>	none

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	To be announced during the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• project outline (20%)</li><li>• presentation, 15 minute (20%)</li><li>• written documentation of the project work, 2500-3000 words (60%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Lecture/Seminar - 4 SWS</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>510121</b> Lecture/Seminar What Material Culture? - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Sustainability and Digitalisation</b> Digitalisierung und Nachhaltigkeit
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	The module provides knowledge and understanding of social science sustainability research at the interface of technology, environment and society. After attending the module, students will be able to adequately describe digitization as a comprehensive transformation process in terms of its advantages and disadvantages and analyse various digitization phenomena from a social science perspective. They can use digital media and communication formats (blogs, podcasts) in a targeted manner. Students are able to conduct case analyses after completing the module.
<b>Contents</b>	Digitalisation as well as sustainability are so-called mega-trends the 21st century. Digital technologies are increasingly integrated in society and economy. This process both poses environmental and social challenges, such as climate change or social injustice, as well as the potential to accelerate sustainable transition. An effective transition to renewable decentralized energy supplies for instance will only succeed with digital and connected devices. However, digitalisation is not per definition sustainable. It also has many negative impacts on the environment and society. For example, electronic devices require scarce non-renewable natural resources, and data processing uses vast amounts of energy. The reserves of the elements needed for digitalisation are depleting, while the volume of electronic waste is rapidly growing every year. How can digitalisation support sustainable transition without causing more harm than good? Is a green digitalisation possible? In the module, we cover the risks and potentials in of digital innovations in various sectors such as energy systems, mobility, agriculture o education. The module contains following topics:

	<ul style="list-style-type: none"> <li>• Part 1: Is digitalisation sustainable? - An introduction to digital technologies and their social and environmental impact</li> <li>• Part 2: Is digitalisation serving sustainability? – Diving into sustainable human, technology and nature relationships and innovations for a sustainable world</li> <li>• Part 3: Assessing the effects of specific digital technologies (e.g., Artificial intelligence, Smart Everything or Platform economy) for sustainable development as well as their effects on specific spheres of life (e.g., data protection, effects on democracy and digital divide).</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<p>The following literature can be used for preparation:</p> <ul style="list-style-type: none"> <li>• Lange, S., &amp; Santarius, T. (2020). Smart Green World?: Making Digitalisation Work for Sustainability. Routledge.</li> <li>• Hilty, L., and Aebischer, B. (2015). ICT Innovations for Sustainability. Advances in intelligent systems and computing, 310, p. 351-365.</li> <li>• Vetter, A. (2018). The matrix of convivial technology–assessing technologies for degrowth. Journal of Cleaner Production, 197, 1778-1786.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Written exam (45 min.) - (30%)</li> <li>• Group presentation (max. 10 min/person) - (30%)</li> <li>• 2 exercises from the seminar, incl. a reflection on the topic of the exercises to hand in (3 pages per exercise) - (15% per exercise)</li> <li>• Active participation in class (10%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture: Digitalisation and Sustainability: Evolution, Trends and Future Scenarios</li> <li>• Seminar: Digitalisation and Sustainability: Current Topics</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Sociology of Sustainable Development</b> Soziologie der nachhaltigen Entwicklung
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	Students overview sociological approaches, theories and research topics in the context of sustainable development. After completing the module, they will have a sound knowledge on various approaches of social-ecological transformation and will be able to critically discuss current concepts such as the Anthropocene, Green Growth or Circular Economy. They have expertise in the reception and presentation of scientific texts.
<b>Contents</b>	Sustainable development promises to meet human needs of present and future generations while maintaining the integrity and stability of natural systems. However, this concept has been criticised on various grounds. Some argue that more fundamental changes are required to solve the multiple, accelerating crises of our times. Under the umbrella term 'socio-ecological transformation', scholars discuss various political, socio-economic, socio-technical and cultural changes aimed at responding appropriately to the socio-ecological crisis. This module critically engages with current sustainability debates from a sociological perspective, thereby discussing concepts such as Green Growth, Degrowth, Circular Economy or the Anthropocene. It explores how we can move to a society and economy in which human needs are met within planetary boundaries.
<b>Recommended Prerequisites</b>	41421: Introduction to Environmental and Resource Management II
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Exercise - 2 hours per week per semester

	Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Eisenmenger et al. (2020). The Sustainable Development Goals prioritize economic growth over sustainable resource use: a critical reflection on the SDGs from a socio-ecological perspective. Sustainability Science, 15:1101-1110.</li> <li>• Haberl, H. et al. (2011). A Socio-metabolic Transition towards Sustainability? Challenges for Another Great Transformation. Sustainable Development 19, 1-14</li> <li>• Gough, I., 2017. Recomposing consumption: defining necessities for sustainable and equitable well-being. Phil. Trans. R. Soc. A. 375, 20160379.</li> <li>• Hickel, J., Kallis, G., 2020. Is Green Growth Possible? New Political Economy 25, 469–486.</li> <li>• Malm, A., Hornborg, A., 2014. The geology of mankind? A critique of the Anthropocene narrative. The Anthropocene Review 1, 62–69.</li> </ul> <p>Further literature will be announced in the module.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Reading assignments, 1.500-2000 words (20%)</li> <li>• Reflections on sessions, 1.500-2000 words (20%)</li> <li>• Pecha Kucha presentation, (7 Min.) oder Podcast (20Min.) (30%)</li> <li>• Written Test (multiple choice, 30 Min.) (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Exercise: Research and methods of a Sociology of Sustainability - 2 Hours per Week per Semester</li> <li>• Seminar: Theories of Social-Ecological Transformation - 2 Hours per Week per Semester</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Justice and Diversity in Environmental Change</b>
	Gerechtigkeit und Diversität im Kontext von Umweltveränderungen
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<ul style="list-style-type: none"> <li>• Acquiring a profound understanding of different concepts on social justice and diversity in the context of environmental change, climate change and sustainable development.</li> <li>• Discussing and critically reflecting upon current issues related to environmental justice, such as resource conflicts, land-use change or environmental movements.</li> <li>• Methodological skills in reading and discussing academic texts, preparing Pecha Kucha presentations, and recording scientific podcasts.</li> </ul>
<b>Contents</b>	<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>



<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Exercise - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Bell, K. (Ed.) (2021). Diversity and Inclusion in Environmentalism, Routledge.</li> <li>• Holifield, R., Chakraborty, J., Walker, G. (Eds.) (2018). The Routledge Handbook of Environmental Justice, Routledge.</li> <li>• Lele, S. et al. (Eds.) (2019). Rethinking environmentalism: Linking justice, sustainability, and diversity (Vol. 23). MIT Press.</li> <li>• Williams, J. (2021). Climate change is racist. Race, privilege and struggle for climate justice. Icon Books.</li> </ul> <p>Further literature will be announced during class.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Reading assignments, 1.500-2.000 words (20%)</li> <li>• Reflections on sessions, 1.500-2.000 words (20%)</li> <li>• Pecha Kucha presentation, 6:40 Min (30%)</li> <li>• written test (multiple choice) (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	50
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Exercise Theoretical approaches to Justice and Diversity in Environmental Change</li> <li>• Seminar Justice and Diversity research and methods in the context of Environmental Change</li> </ul>
<b>Components to be offered in the Current Semester</b>	<p><b>510535</b> Seminar Justice and Diversity research and methods in the context of Environmental Change - 2 Hours per Term</p> <p><b>510530</b> Lecture/Exercise Theoretical approaches to Justice and Diversity in Environmental Change - 2 Hours per Term</p>

## 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

<b>Modul Title</b>	<b>Decarbonisation of Industrial Processes</b> Dekarbonisierung von Industrieprozessen
<b>Department</b>	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. habil. Riedel, Uwe
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>Participants of the module will be able to understand the specific challenges of CO<sub>2</sub>-reduction in the industrial sectors. Readiness of current and emerging technologies (technology readiness level) and significance for a successful energy transition for various industrial sectors will be discussed. Focus is on the decarbonization of heat as a crosscutting technology and the steel, chemistry, cement sector – each having specific challenges. At the end of the module the students will be able to name the requirements for achieving climate goals in various industrial sectors. Furthermore, students will be able to assess, evaluate, and select different decarbonization strategies for specific industrial processes. Specific cognitive learning goals are:</p> <ul style="list-style-type: none"> <li>• Apply analysis tools like pinch analysis, techno-economics, and energy-hub designs</li> <li>• Analyze selected industrial processes in case studies</li> <li>• Derive and evaluate suitable decarbonization options in a group-project</li> <li>• Get insights into options for process changes and decarbonization in the sectors steel, chemistry, and cement as well as process heat</li> <li>• Understand the role of Carbon Capture and Use (CCU) and Carbon Capture and Storage (CCS) for unavoidable CO<sub>2</sub>-emissions.</li> </ul> <p>Affective learning goals are:</p> <ul style="list-style-type: none"> <li>• Integration in a team and potential conflicts,</li> <li>• deal with feedback in an open presentation session,</li> <li>• deal with potential frustration in a research project.</li> </ul>

**Contents**

The specific topics will be explained in the lecture while the exercise and the project parts will provide more in-depth deeper qualitative and quantitative analyses. The projects will focus on specific industries and their options to reduce their carbon footprint.

The lecture part is structured as follows:

- Introduction
- Techno-Economic Analysis
- Pinch Analysis
- Renewable Energy Hub Design
- Industrial Heat
- Steel Industry
- Chemical Industry
- Cement Industry

These lectures are supported by exercises on techno-economic analysis, Pinch Analysis, energy hub design and CCU/CCS. The decarbonization techniques learned will then be applied as part of a study project.

**Recommended Prerequisites**

Bachelor in Engineering or Natural Sciences

**Mandatory Prerequisites**

none

**Forms of Teaching and Proportion**

Lecture - 2 hours per week per semester  
Exercise - 1 hours per week per semester  
Study project - 2 hours per week per semester  
Self organised studies - 105 hours per week per semester

**Teaching Materials and Literature**

- Selected literature will be recommended at the beginning of the module.
- Handouts for the lecture will be provided.
- Options and guidelines for the project work will be given in the first lecture.

**Module Examination**

Continuous Assessment (MCA)

**Assessment Mode for Module Examination**

Option A:

- A 10-minute electronic presentation of the study project at the beginning of the exam (1/3 weight) and
- Oral exam, 20 minutes, questions related to the lecture and the exercise (2/3 weight)

Option B:

- Multiple-choice test, 20 minutes (30% weight)
- Written examination, 60 minutes: Questions related to the lecture, the exercise, and the outcome of study project (70% weight)

The lecturer decides and informs at the beginning of the course which option is used as assessment mode.

**Evaluation of Module Examination**

Performance Verification – graded

**Limited Number of Participants**

none

<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• VL Decarbonization of Industrial Processes</li><li>• Ü Decarbonization of Industrial Processes</li><li>• PROJ Decarbonization of Industrial Processes</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>322201</b> Lecture Decarbonization of Industrial Processes - 2 Hours per Term <b>322202</b> Exercise Decarbonization of Industrial Processes - 1 Hours per Term

## 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

<b>Modul Title</b>	<b>Anthropos in the Anthropocene</b> Anthropos im Anthropozän
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>As a result of taking part in this module students have</p> <ul style="list-style-type: none"> <li>• knowledge about theories and concepts in the field of ethics and anthropology (e.g. responsibility, care, participation).</li> </ul> <p>They are able to</p> <ul style="list-style-type: none"> <li>• critically study nature-culture debates in different discourses, mainly in STS and anthropology,</li> <li>• develop a one semester study project on the basis of the acquired theories and methods, and</li> <li>• create and present a well documented and analytically grounded written report based on a sound research design and question.</li> </ul>
<b>Contents</b>	<p>The Anthropocene is a term of the 21st century, it focuses attention on the role of humans as being virtually a natural force. When being introduced the wording was realigned according to the terminology of geology, however it became quickly adopted in a sociopolitical context and also by cultural studies. As a consequence the discourse has globally expanded and nowadays revolves around the question of the anthropos, the role of man in its environment on a global and local scale. This course offers theoretical reflections about the limits and opportunities of human action in an age, in which humans do not only encounter themselves in technical and artistic works, but also in nature. The module deals with anthropological questions and challenges a method of philosophical field work: how can technology-environment assemblages be described adequately, and how is the historical and media dimension to be included. Empirical-based models and cultural studies analysis are investigated, issues such</p>

as geoengineering, design with nature, extraction, in general environmental degradation is scrutinized. How become socio-economic and eco-cultural contexts relevant for local realities of life, how do responsibility, participation, or empowerment do play out as action guiding values in this game of transformation.  
The course is organised around lectures and student's study projects; topics of the study project are chosen together and intermediate results discussed in class.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and learning materials are given in the course description and will be announced during the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• project proposal, max. 3 pages (25 %)</li> <li>• final presentation, 5-25 min (15 %)</li> <li>• project report, min. 12 pages (60 %)</li> </ul> <p>The duration of the final presentation will be announced in the first class meeting.</p>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Project/Seminar - 4 SWS</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Market Integration of Renewable Energies and Sector Coupling</b>
	Marktintegration erneuerbarer Energien und Sektorenkopplung
<b>Department</b>	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. Ragwitz, Mario
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Scenarios for the development of future energy systems</li> <li>• Definition and challenges of market integration of renewable energies</li> <li>• Instruments for market-based investment decisions and dispatch of renewable energies</li> <li>• Technology options for the integration of energy sectors</li> <li>• Flexibility options on the supply and demand side and based on based on storage technologies</li> </ul>

	<ul style="list-style-type: none"> <li>• Value of flexibility at the energy market</li> <li>• The role of grid infrastructures for the market integration of renewable energies</li> <li>• Python Programming Fundamentals: Introduction to reading and writing Python code, focusing on important programming concepts necessary for energy modeling.</li> <li>• Introduction to simulation and optimisation techniques in energy system modelling</li> <li>• Methodologies for analyzing and managing datasets</li> <li>• Policies for renewable energy sources in the power sector</li> </ul>
<b>Recommended Prerequisites</b>	<p>Participation at</p> <ul style="list-style-type: none"> <li>• module 35303 - "Power System Economics I" and</li> <li>• module 35401 - "Power System Economics II"</li> </ul> <p>is strongly recommended</p>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	<p>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</p>
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Script (slides)</li> <li>• Reference books</li> <li>• 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</li> <li>• IEA (2022), World Energy Outlook 2022, IEA, Paris <a href="https://www.iea.org/reports/world-energy-outlook-2022">https://www.iea.org/reports/world-energy-outlook-2022</a></li> <li>• IEA (2011), Integration of Renewables, IEA, Paris <a href="https://www.iea.org/reports/integration-of-renewables">https://www.iea.org/reports/integration-of-renewables</a></li> <li>• 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.</li> <li>• 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.</li> <li>• Wietschel, M.; Held, A.; Pfluger, B.; Ragwitz, M. (2020): Energy integration across electricity, heating &amp; cooling and the transport sector – Sector coupling. Fraunhofer ISI Working Paper Sustainability and Innovation, No. S 08/2020</li> <li>• Energy sector magazines</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Written examination, 60 minutes OR oral examination, 30 minutes (the lecturer decides and informs at the beginning of the course) 60 %</li> <li>• 2 Seminar works including presentation (duration 15 minutes, presentation ca. 10 slides) 40 %</li> </ul>



<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	20
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• VL Market Integration of Renewable Energies and Sector Coupling</li><li>• Proj Market Integration of Renewable Energies and Sector Coupling</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>322101</b> Lecture Market Integration of Renewable Energies and Sector Coupling - 2 Hours per Term <b>322102</b> Seminar/Exercise Market Integration of Renewable Energies and Sector Coupling - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Just Energy Transition</b> Energiewende gerecht gestalten
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Hirschl, Bernd
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>On completion of this unit, students will be able to demonstrate the main conceptual debates surrounding just energy transitions. Students will be equipped with in-depth critical theoretical and empirical knowledge of the patterns of energy transition governance. After attending the module, students are able to conduct case analyses.</p> <p>The module is designed for Master students to develop their research, argumentation and presentation skills, as well as their capacities for collaborative work and group learning.</p>
<b>Contents</b>	<p>This module will discuss key opportunities and challenges of transitioning towards climate neutral energy systems, primarily through a social science lens. "Leaving no one behind" is a catchphrase used in contemporary climate and energy policies, that we will explore in more detail with texts from political science (policy analysis and political economy), philosophy, economics and sociology. We will discuss the dynamics of capitalism, questions of culture and everyday life, the role of the state, and international governance structures.</p> <p>The course is guided by the following questions:</p> <ul style="list-style-type: none"> <li>• What are the <i>conceptual foundations</i> of just energy transitions?</li> <li>• What are <i>universal and country-specific challenges</i> to just energy transitions?</li> <li>• What are <i>national and international responses</i> from society, politics and businesses to these challenges?</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none

<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<p>There are no core texts for this course. Essential readings for the seminars will be indicated with the course start. The following literature can be used for preparation:</p> <ul style="list-style-type: none"> <li>• Scoones, I., Leach, M., and Newell, P., eds. 2015. The politics of green transformations. Abingdon: Routledge</li> <li>• Unruh, G. C. (2000) 'Understanding carbon lock-in', Energy Policy, Vol 28, no 12, pp 817–830</li> <li>• Peter Newell &amp; Andrew Simms (2021) How Did We Do That? Histories and Political Economies of Rapid and Just Transitions, New Political Economy, 26:6, 907-922</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Case study, about 2,500 words (50 %) <ul style="list-style-type: none"> <li>Empirical case study with theoretical underpinnings of a region/ country of the student's choice (not restricted to Global North): What are specific opportunities and challenges of a just energy transition and which responses have been implemented/are lacking?</li> </ul> </li> <li>• Presentation, 15 min + 5 min Discussion (topics to be announced) (40 %) <ul style="list-style-type: none"> <li>topics to be announced</li> </ul> </li> <li>• Class Participation (10 %)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	20
<b>Remarks</b>	<b><i>Module with limited number of participants - Registration two weeks prior to the commencement of lectures!</i></b>
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Seminar</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Urban Transformation / Urban Studies</b> Urban Transformation / Urban Studies
<b>Department</b>	Faculty 6 - Architecture, Civil Engineering and Urban Planning
<b>Responsible Staff Member</b>	Dr. phil. Binder, Julia
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	The module addresses questions regarding transforming planning visions that link with urban transformation. The students are asked to reflect on the disciplinary understanding to plan the cities according to the problems of the cities and to analyse urban transformation as a multidimensional spatial process.
<b>Contents</b>	The module focuses on planning as a system of visions and ideas. Against the backdrop of current debates regarding urban development, the students will discuss German and English papers of the 20th and 21st Century in order to reflect on the planners' key terminologies (common good, sustainability, inequality). The students will have to design their own empirical research projects that deal with questions of urban transformation.
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	to be announced in the first lecture
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Presentation, 45 min (30%)</li> <li>• Research paper, max. 20 DIN A4-pages without attachments (70%)</li> </ul>

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	Seminar
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Heritage and Transformation in Regional and Urban Studies</b>
	Kulturerbe und Transformation in der Regional- und Stadtforschung
<b>Department</b>	Faculty 6 - Architecture, Civil Engineering and Urban Planning
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. Gailing, Ludger
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>The aims of this module are:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• To develop knowledge of the interfaces between heritage studies and regional and urban studies.</li> <li>• 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</li> </ul>
<b>Contents</b>	<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-20<sup>th</sup> 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).

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	The bibliography will be presented in class.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• 20% Presentation (15 minutes per student)</li> <li>• 80% Research paper (3000-3500 words including references)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<i>Seminar Heritage and Transformation in Regional and Urban Studies</i>
<b>Components to be offered in the Current Semester</b>	No assignment

## 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

<b>Modul Title</b>	<b>Concepts of Social Criticism and Social Transformation</b> Konzepte von Gesellschaftskritik und sozialer Transformation
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. habil. Havlin, Tetiana
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Students can apply these concepts in their own research and are able to use these concepts to analyse real-life examples.</li> <li>• Students are able to understand and critically examine 'classical' as well as contemporary texts.</li> <li>• Students can articulate and present their own perspective on course contents in an academically adequate and sound manner.</li> <li>• Students are able to write academically and are capable to orally present their ideas convincingly in an academic context.</li> </ul>
<b>Contents</b>	<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.

<b>Recommended Prerequisites</b>	Students have knowledge of at least one of the following modules <ul style="list-style-type: none"> <li>• 13922 Introduction to Transformation Studies</li> <li>• 13932 Transformation Theories</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and teaching materials will be provided on moodle at start of the semester.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• One oral presentation (10 to 15 minutes) (10%)</li> <li>• Three writing assignments (750 to 1500 words per assignment) (30%)</li> <li>• A final essay (5000 to 10000 words) (60%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Seminar Critical Theories of Social Transformation</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>510200 Seminar</b> Critical Theories of Social Transformation - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Europe in Transformation</b> Europa im Wandel
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. Amelina, Anna
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>Students know how to approach Europe and European transformation by using sociological theories of belonging, culture, and power, and to apply these to historical and current theoretical discourses in European contexts. What is more, students have fundamental knowledge in central approaches to European Studies, Post- and Decolonial Studies as well as Postsocialist Studies, Migration Studies and Transnationalization Studies and to apply these to the societal realities of Europe at the beginning of the 21st century.</p> <p>They are able to:</p> <ul style="list-style-type: none"> <li>· understand the central positions and methods used in social and - cultural studies research</li> <li>· Understand and explain relations between culture, belonging, migration and transformation</li> <li>· Independently analyze, compare and discuss scientific texts and apply these to social phenomena</li> </ul>
<b>Contents</b>	<p>In the module, classical and newer approaches in European Studies, Post- and Decolonial Studies, Postsocialist Studies, Migration and Transnationalization Studies will be read and discussed. Against this background, contemporary and historical questions/ debates in the field of "Europe in Transformation" will be analyzed and discussed from the perspective of the social sciences. Towards a better understanding of transformation processes, a special focus lies on relational approaches to transnational realities and migratory movements, the European history of both Colonialism and Socialism,</p>

	present processes of racialization and othering (coloniality), forms of remembering etc..
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature will be provided in the moodle.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Oral presentation, 15 min (40%)</li><li>• Essay, 10-15 pages (30 %)</li><li>• Participation in exercises and discussions (30%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	No offer in summer semester 2025
<b>Module Components</b>	none
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Mobility and Digitalisation</b> Mobilität und Digitalisierung
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	No assignment
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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"> <li>• to understand current transformations of economy, society and politics,</li> <li>• to reflect on how both institutions and everyday settings are co-constituted by specific patterns of mobility, both in the international and domestic</li> <li>• realms.</li> <li>• 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)</li> <li>• to analyse and compare texts and apply their theories to social phenomena</li> <li>• to reflect their own positionality within the nexus mobilities and digitalization.</li> <li>• to present these positions and analyses in a concise manner</li> </ul>
<b>Contents</b>	<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.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	No assignment
<b>Teaching Materials and Literature</b>	Literature will be provided in the moodle at the beginning of the semester
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ol style="list-style-type: none"> <li>1. Oral presentation 15 min (40%)</li> <li>2. Essay: 10-15 pages (30 %)</li> <li>3. Participation in exercises and discussions (30%)</li> </ol>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	none
<b>Components to be offered in the Current Semester</b>	<b>510274 Seminar</b> Digital Cultures and (Im)Mobilities: Theorizing Global Connectivity - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Biomass and Bioenergy</b> Biomasse und Bioenergie
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Hirschl, Bernd
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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"> <li>• Overview on biomass production (agriculture and forestry)</li> <li>• Biomass residual waste</li> <li>• Energy conversion technologies</li> <li>• Social and ecological aspects of biomass use</li> <li>• Current bioenergy policies</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	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**

none

**Module Components**

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

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

**538908** Seminar  
Biomass and Bioenergy - 4 Hours per Term  
**538912** Examination  
Biomass and Bioenergy

## 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

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



	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	<p>Lecture - 1 hours per week per semester</p> <p>Exercise - 1 hours per week per semester</p> <p>Study project - 2 hours per week per semester</p> <p>Self organised studies - 120 hours</p>
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> </ul> <p>Further materials are provided via Moodle (including lecture slides and additional materials including videos, readings etc.)</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Individual component (E-assessment), 60-90 min - 50%</li> <li>• Group Project - Part 1: Create a scientific poster (Analysis of e.g., a scientific article, industry report, case study, ...) - 25%</li> <li>• Group Project - Part 2: Presentation, 15min - 25%</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lectures &amp; Exercises</li> <li>• Projects</li> </ul>

**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: Sozioökonomische und institutionelle Transformation

### Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14148	Compulsory elective

<b>Modul Title</b>	<b>Media in Transformation - Media Theory and Analysis</b> Medien im Wandel - Medientheorie und -analyse
<b>Department</b>	Faculty 1 - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology
<b>Responsible Staff Member</b>	Prof. Dr. phil. Petersen, Christer
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>Joachim Friedmann: Storytelling for Media: Introduction to the Theory and Practice of Narrative Design. München, Tübingen: UVK 2021.</li> <li>Niklas Luhmann: Reality of the Mass Media. Hoboken, N.J.: Blackwell Publishers 2000.</li> <li>Material is available for download on the Internet. More information at the beginning of course.</li> </ul>

<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Successful completion of an essay of 10-20 pages or practical/project work of correspondending scope (60%)</li><li>• Presentation of a research topic or a project work, approx. 20 minutes (40%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar: Media in Transformation - Media Theory and Analysis Current Description</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>110306</b> Seminar/Exercise Methods and Analysis from the perspective of media psychology - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Fit4Future Summer School</b> Fit4Future Sommerschule
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	After successful completion, students have in-depth knowledge of various transformation dynamics and forms. They are experienced in discussing and reflecting on various analytical and evaluation concepts of transformation dynamics. They can classify various theoretical and methodological approaches in the present day and discuss them in light of relevant evaluation criteria that apply to transformations in the face of pressing crises such as climate catastrophe, biodiversity loss or land overuse. They are also able to understand the complexity of the design challenges of a transformation on a global scale and to analyze the various roles, e.g. of the state or niche actors. They can apply conceptual perspectives such as the multi-level perspective, the ecosystem approach or evolutionary innovation theory.
<b>Contents</b>	<p>The Fit4Future Summer School series provide a dynamic learning environment where students engage with challenges of tomorrow. Every year the thematic focus shifts towards current transition dynamics and transformation processes. The Summer School provides a mix of online lecture and offline exercises, with a full-week course during September every year.</p> <p>Topics are:</p> <ul style="list-style-type: none"> <li>• Just Transitions to sustainable and clean energy</li> <li>• Circular Economy and Society</li> <li>• Digitalisation and Sustainability</li> <li>• Globalisation and Global Studies</li> <li>• De- and Prosgrowth</li> </ul>

Throughout the programme, participants will engage with the various aspects of the chosen topic, explore the role of different transformation paradigms and assess the transformative power of different pathways towards sustainable future in an interdisciplinary setting. Renowned international experts will provide participants with a comprehensive understanding of the latest developments through lectures, workshops and field trips, creating a dynamic learning environment that encourages critical thinking and collaborative problem-solving.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Haberl, H., Fischer-Kowalski, M., Krausmann, F., Martinez-Atlier, J., &amp; Winiwarter, V. (2011). A socio-metabolic transition towards sustainability? Challenges for another Great Transformation. <i>Sustainable development</i>, 19(1), 1-14.</li> <li>• Voulvoulis, N., Giakoumis, T., Hunt, C., Kioupi, V., Petrou, N., Souliotis, I., &amp; Vaghela, C.J.G.E.C. (2022). systems thinking as a paradigm shift for sustainability transformation. <i>Global Environmental Change</i>, 75, 102544.</li> <li>• Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., ... &amp; Lang, D. J. (2017). Leverage points for sustainability transformation. <i>Ambio</i>, 46, 30-39</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Essay on selected transformation dynamics, 5000 words, (40%)</li> <li>• 2 protocols of two events during the summer school, 1500 words each (20% each)</li> <li>• Learning diary, 3000 words (20%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	- Summer School Fit4Future
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Social Change and Continuity</b> Sozialer Wandel und Kontinuität
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. Puder, Janina
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<ul style="list-style-type: none"> <li>• Introduction into main topics of the sociological debate on social change</li> <li>• Overview of core theories on social change and continuity</li> <li>• Improve students competence to apply key-concepts for the analysis on social change to specific dimensions, theoretical and empirical problems or ongoing economic and social challenges</li> </ul>
<b>Contents</b>	<p>In the wake of increasing globalization of the economy and transformations in the relationship between states and markets, many scholars have become increasingly aware of the need for systematic analysis of the social dimensions of economic institutions and practices. This seminar provides an introduction into main topics of the sociological debate on social change and economic phenomena and gives an overview of core theories in this field.</p> <p>Topics: The (changed) economic and social role of flexible labour markets, processes of rationalization, production regimes and management concepts, finance markets and (informal) networks; comparative analysis of industrial organisations in different countries; capitalism in (non)-western societies; transformation in Eastern Germany and Europe; migration flows and social cohesion.</p>
<b>Recommended Prerequisites</b>	<p>Knowledge:</p> <ul style="list-style-type: none"> <li>• Fundamentals of sociology</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester

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

**Teaching Materials and Literature**

- Boltanski, Luc/Chiapello, Eve, 2005: "The New Spirit of Capitalism", International Journal of Politics, Culture, and Society, vol. 18, n° 3-4, pp. 161-188.
- Granovetter, Mark: Economic Institutions as Social Constructions: A Framework for Analysis. In: Acta Sociologica, 1992, Vol. 35, p. 3-11
- Polanyi, Karl, The great Transformation. Dt. 1978 (1944)
- Giddens, Anthony, 1990: The consequences of modernity. Stanford, Calif: Stanford University Press.
- Jackson, Stevi/Scott, Sue, 2001: Gender. A sociological reader. New York: Routledge

**Module Examination**

Continuous Assessment (MCA)

**Assessment Mode for Module Examination**

1. Oral presentation, 10 minutes (worth 30%)
2. Essay, 4 pages (worth 30%)
3. Written examination, 60 minutes (worth 40%)

**Evaluation of Module Examination**

Performance Verification – graded

**Limited Number of Participants**

none

**Remarks**

none

**Module Components**

- Social Change and Continuity (seminar) - It is a lecture/seminar with a seminaristic character.

**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

<b>Modul Title</b>	<b>Culture and Globalisation</b> Kultur und Globalisierung
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. habil. Havlin, Tetiana
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	After completion of this module, students are able to identify and differentiate central areas, approaches, concepts and methods within the interdisciplinary field of World Heritage Studies. They have critical reading skills, know a number of key concepts to Heritage Studies and how to link conceptual ideas to current phenomena in the field of World Heritage. In addition, the students are able to apply knowledge about standards in scientific techniques and presentation skills.
<b>Contents</b>	The first part of the module gives an overview over the key areas and disciplines of the World Heritage Studies Program. The second part provides basic knowledge about key interdisciplinary approaches, concepts and skills within the field of World Heritage Studies.
<b>Recommended Prerequisites</b>	None
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Students will be provided with weekly meetings and lectures, reading materials, and bibliographical references. All materials and literature will be provided in a moodle course.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• presentation of a concept, 10 min., + handout (30 % of the grade)</li> <li>• final essay, 5000 words + references (70 % of the grade)</li> </ul>

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	Participation and active involvement are expected. 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., homepage or Moodle) shall apply.
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar Culture and Globalisation I - 2 Hours per Week per Semester</li><li>• Seminar Culture and Globalisation II - 2 Hours per Week per Semester</li></ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Philosophy of Technology and Nature</b> Technik- und Naturphilosophie
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>After passing the module, students should:</p> <ul style="list-style-type: none"> <li>• understand main philosophical theories of “nature”</li> <li>• interrogate the concept of “nature” and to expose its numerous ideological and cultural manifestations.</li> <li>• identify the main ethical dimensions of “nature”, and their crosscultural and political dimensions.</li> <li>• 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.</li> </ul>
<b>Contents</b>	<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.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	See course material in moodle.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• One short essay, max. 2 pages (20%)</li> <li>• Two reviews, max. 5 pages (each 25%)</li> <li>• 2 oral group presentations, about 15 min <b>OR</b> weekly submitted written answers to one short question on the topical readings to be determined by the instructor (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	Lectures and seminars in the corresponding field.
<b>Components to be offered in the Current Semester</b>	<b>510112</b> Lecture/Seminar How to talk about "Nature"? / Ethik und Handeln / Philosophy of Technology and Nature / Natur und Technik / Wissenschaftstheorie, Logik und Naturphilosophie - 4 Hours per Term

## 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** Prof. Dr. rer. pol. habil. Lee, Roh Pin

**Language of Teaching / Examination** English

**Duration** 1 semester

**Frequency of Offer** Every semester

**Credits** 6

**Learning Outcome** Students will know about different techniques, tools and formats for communication of science & technology. They will develop skills to break down complex issues at the nexus of science, technology and society to communicate science/technical information in a clear, understandable and engaging way to different stakeholders.

On completion of the module, students will be able to:

- Articulate the key issues and challenges in communicating about science & technology;
- Understand the nature of different audiences for better stakeholder engagement;
- Demonstrate awareness of and ability to use a variety of different techniques and media for targeted audience;
- Improve their skills in communication of scientific/technical information in both written and oral forms;
- work as part of a team to develop effective measures for communication of science & technology;
- Provide constructive feedback to other students on their communication skills.

**Contents** Course coverage:

- Key issues in communication of science & technology;
- Identify and knowing your audiences (mental models, risk perception, heuristics and biases, ...);
- Getting your audience's attention (Types of framing);
- Communicating risk and uncertainty;
- Formats for communication of science & technology.

Students will also be given opportunities to receive feedback and improve their own written and oral skills. They will also work in small teams on team projects to further their skills for communicating about sustainability issues. These projects will focus on communicating about a given scientific topic to a particular audience using spoken, visual, written or web-based communication.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Center for Research on Environmental Decisions (CRED). 2009. <i>The Psychology of Climate Change Communication: A guide for Scientists, Journalists, Educators, Political Aides, and the Interested Public</i>. New York.</li> <li>• Nisbet, M.C., Scheufele, D.A. 2009. What's next for science communication? Promising directions and lingering distractions. <i>American Journal of Botany</i>, 96(10): 1767-1778.</li> <li>• Bubela, T., Nisbet, M., Borchelt, R. <i>et al.</i> 2009. Science communication reconsidered. <i>Nature Biotechnology</i>, 27, 514–518.</li> <li>• Nelkin, D. 1989. Communicating technological risk: The social construction of risk perception. <i>Annual Review Public Health</i>, 10, 95-113.</li> <li>• Tversky, A., Kahneman, D. 1974. Judgment under Uncertainty: Heuristics and Biases. <i>Science, New Series</i>, 185(4157), 1124-1131.</li> </ul> <p>Further material (including lecture slides and additional materials including videos, readings etc.) might be announced during the first class meeting.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Individual E-Assessment – 60 min (40%)</li> <li>• Group project - Part 1: Science Communication Material e.g., poster, video, etc. (30%)</li> <li>• Group project - Part 2: Group presentation– 15min oral presentation (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture / Seminar</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>510601</b> Lecture/Seminar Communication of Science & Technology - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>What Material Culture? Transformative Processes in Technology and Art</b>  Welche materielle Kultur? Transformative Prozesse in Technik und Kunst
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Interest in media technology and creativity techniques
<b>Mandatory Prerequisites</b>	none

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	To be announced during the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• project outline (20%)</li><li>• presentation, 15 minute (20%)</li><li>• written documentation of the project work, 2500-3000 words (60%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Lecture/Seminar - 4 SWS</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>510121</b> Lecture/Seminar What Material Culture? - 4 Hours per Term



## 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

<b>Modul Title</b>	<b>Sustainability and Digitalisation</b> Digitalisierung und Nachhaltigkeit
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	The module provides knowledge and understanding of social science sustainability research at the interface of technology, environment and society. After attending the module, students will be able to adequately describe digitization as a comprehensive transformation process in terms of its advantages and disadvantages and analyse various digitization phenomena from a social science perspective. They can use digital media and communication formats (blogs, podcasts) in a targeted manner. Students are able to conduct case analyses after completing the module.
<b>Contents</b>	Digitalisation as well as sustainability are so-called mega-trends the 21st century. Digital technologies are increasingly integrated in society and economy. This process both poses environmental and social challenges, such as climate change or social injustice, as well as the potential to accelerate sustainable transition. An effective transition to renewable decentralized energy supplies for instance will only succeed with digital and connected devices. However, digitalisation is not per definition sustainable. It also has many negative impacts on the environment and society. For example, electronic devices require scarce non-renewable natural resources, and data processing uses vast amounts of energy. The reserves of the elements needed for digitalisation are depleting, while the volume of electronic waste is rapidly growing every year. How can digitalisation support sustainable transition without causing more harm than good? Is a green digitalisation possible? In the module, we cover the risks and potentials in of digital innovations in various sectors such as energy systems, mobility, agriculture o education. The module contains following topics:

	<ul style="list-style-type: none"> <li>• Part 1: Is digitalisation sustainable? - An introduction to digital technologies and their social and environmental impact</li> <li>• Part 2: Is digitalisation serving sustainability? – Diving into sustainable human, technology and nature relationships and innovations for a sustainable world</li> <li>• Part 3: Assessing the effects of specific digital technologies (e.g., Artificial intelligence, Smart Everything or Platform economy) for sustainable development as well as their effects on specific spheres of life (e.g., data protection, effects on democracy and digital divide).</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<p>The following literature can be used for preparation:</p> <ul style="list-style-type: none"> <li>• Lange, S., &amp; Santarius, T. (2020). Smart Green World?: Making Digitalisation Work for Sustainability. Routledge.</li> <li>• Hilty, L., and Aebischer, B. (2015). ICT Innovations for Sustainability. Advances in intelligent systems and computing, 310, p. 351-365.</li> <li>• Vetter, A. (2018). The matrix of convivial technology–assessing technologies for degrowth. Journal of Cleaner Production, 197, 1778-1786.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Written exam (45 min.) - (30%)</li> <li>• Group presentation (max. 10 min/person) - (30%)</li> <li>• 2 exercises from the seminar, incl. a reflection on the topic of the exercises to hand in (3 pages per exercise) - (15% per exercise)</li> <li>• Active participation in class (10%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture: Digitalisation and Sustainability: Evolution, Trends and Future Scenarios</li> <li>• Seminar: Digitalisation and Sustainability: Current Topics</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Decarbonisation of Industrial Processes</b> Dekarbonisierung von Industrieprozessen
<b>Department</b>	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. habil. Riedel, Uwe
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>Participants of the module will be able to understand the specific challenges of CO<sub>2</sub>-reduction in the industrial sectors. Readiness of current and emerging technologies (technology readiness level) and significance for a successful energy transition for various industrial sectors will be discussed. Focus is on the decarbonization of heat as a crosscutting technology and the steel, chemistry, cement sector – each having specific challenges. At the end of the module the students will be able to name the requirements for achieving climate goals in various industrial sectors. Furthermore, students will be able to assess, evaluate, and select different decarbonization strategies for specific industrial processes. Specific cognitive learning goals are:</p> <ul style="list-style-type: none"> <li>• Apply analysis tools like pinch analysis, techno-economics, and energy-hub designs</li> <li>• Analyze selected industrial processes in case studies</li> <li>• Derive and evaluate suitable decarbonization options in a group-project</li> <li>• Get insights into options for process changes and decarbonization in the sectors steel, chemistry, and cement as well as process heat</li> <li>• Understand the role of Carbon Capture and Use (CCU) and Carbon Capture and Storage (CCS) for unavoidable CO<sub>2</sub>-emissions.</li> </ul> <p>Affective learning goals are:</p> <ul style="list-style-type: none"> <li>• Integration in a team and potential conflicts,</li> <li>• deal with feedback in an open presentation session,</li> <li>• deal with potential frustration in a research project.</li> </ul>

**Contents**

The specific topics will be explained in the lecture while the exercise and the project parts will provide more in-depth deeper qualitative and quantitative analyses. The projects will focus on specific industries and their options to reduce their carbon footprint.

The lecture part is structured as follows:

- Introduction
- Techno-Economic Analysis
- Pinch Analysis
- Renewable Energy Hub Design
- Industrial Heat
- Steel Industry
- Chemical Industry
- Cement Industry

These lectures are supported by exercises on techno-economic analysis, Pinch Analysis, energy hub design and CCU/CCS. The decarbonization techniques learned will then be applied as part of a study project.

**Recommended Prerequisites**

Bachelor in Engineering or Natural Sciences

**Mandatory Prerequisites**

none

**Forms of Teaching and Proportion**

Lecture - 2 hours per week per semester  
Exercise - 1 hours per week per semester  
Study project - 2 hours per week per semester  
Self organised studies - 105 hours per week per semester

**Teaching Materials and Literature**

- Selected literature will be recommended at the beginning of the module.
- Handouts for the lecture will be provided.
- Options and guidelines for the project work will be given in the first lecture.

**Module Examination**

Continuous Assessment (MCA)

**Assessment Mode for Module Examination**

Option A:

- A 10-minute electronic presentation of the study project at the beginning of the exam (1/3 weight) and
- Oral exam, 20 minutes, questions related to the lecture and the exercise (2/3 weight)

Option B:

- Multiple-choice test, 20 minutes (30% weight)
- Written examination, 60 minutes: Questions related to the lecture, the exercise, and the outcome of study project (70% weight)

The lecturer decides and informs at the beginning of the course which option is used as assessment mode.

**Evaluation of Module Examination**

Performance Verification – graded

**Limited Number of Participants**

none

<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• VL Decarbonization of Industrial Processes</li><li>• Ü Decarbonization of Industrial Processes</li><li>• PROJ Decarbonization of Industrial Processes</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>322201</b> Lecture Decarbonization of Industrial Processes - 2 Hours per Term <b>322202</b> Exercise Decarbonization of Industrial Processes - 1 Hours per Term

## 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

<b>Modul Title</b>	<b>Market Integration of Renewable Energies and Sector Coupling</b>
	Marktintegration erneuerbarer Energien und Sektorenkopplung
<b>Department</b>	Faculty 3 - Mechanical Engineering, Electrical and Energy Systems
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. Ragwitz, Mario
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Scenarios for the development of future energy systems</li> <li>• Definition and challenges of market integration of renewable energies</li> <li>• Instruments for market-based investment decisions and dispatch of renewable energies</li> <li>• Technology options for the integration of energy sectors</li> <li>• Flexibility options on the supply and demand side and based on based on storage technologies</li> </ul>

	<ul style="list-style-type: none"><li>• Value of flexibility at the energy market</li><li>• The role of grid infrastructures for the market integration of renewable energies</li><li>• Python Programming Fundamentals: Introduction to reading and writing Python code, focusing on important programming concepts necessary for energy modeling.</li><li>• Introduction to simulation and optimisation techniques in energy system modelling</li><li>• Methodologies for analyzing and managing datasets</li><li>• Policies for renewable energy sources in the power sector</li></ul>
<b>Recommended Prerequisites</b>	<p>Participation at</p> <ul style="list-style-type: none"><li>• module 35303 - "Power System Economics I" and</li><li>• module 35401 - "Power System Economics II"</li></ul> <p>is strongly recommended</p>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	<p>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</p>
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"><li>• Script (slides)</li><li>• Reference books</li><li>• 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</li><li>• IEA (2022), World Energy Outlook 2022, IEA, Paris <a href="https://www.iea.org/reports/world-energy-outlook-2022">https://www.iea.org/reports/world-energy-outlook-2022</a></li><li>• IEA (2011), Integration of Renewables, IEA, Paris <a href="https://www.iea.org/reports/integration-of-renewables">https://www.iea.org/reports/integration-of-renewables</a></li><li>• 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.</li><li>• 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.</li><li>• Wietschel, M.; Held, A.; Pfluger, B.; Ragwitz, M. (2020): Energy integration across electricity, heating &amp; cooling and the transport sector – Sector coupling. Fraunhofer ISI Working Paper Sustainability and Innovation, No. S 08/2020</li><li>• Energy sector magazines</li></ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Written examination, 60 minutes OR oral examination, 30 minutes (the lecturer decides and informs at the beginning of the course) 60 %</li><li>• 2 Seminar works including presentation (duration 15 minutes, presentation ca. 10 slides) 40 %</li></ul>

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	20
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• VL Market Integration of Renewable Energies and Sector Coupling</li><li>• Proj Market Integration of Renewable Energies and Sector Coupling</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>322101</b> Lecture Market Integration of Renewable Energies and Sector Coupling - 2 Hours per Term <b>322102</b> Seminar/Exercise Market Integration of Renewable Energies and Sector Coupling - 4 Hours per Term



## 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

<b>Modul Title</b>	<b>Just Energy Transition</b> Energiewende gerecht gestalten
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Hirschl, Bernd
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>On completion of this unit, students will be able to demonstrate the main conceptual debates surrounding just energy transitions. Students will be equipped with in-depth critical theoretical and empirical knowledge of the patterns of energy transition governance. After attending the module, students are able to conduct case analyses.</p> <p>The module is designed for Master students to develop their research, argumentation and presentation skills, as well as their capacities for collaborative work and group learning.</p>
<b>Contents</b>	<p>This module will discuss key opportunities and challenges of transitioning towards climate neutral energy systems, primarily through a social science lens. "Leaving no one behind" is a catchphrase used in contemporary climate and energy policies, that we will explore in more detail with texts from political science (policy analysis and political economy), philosophy, economics and sociology. We will discuss the dynamics of capitalism, questions of culture and everyday life, the role of the state, and international governance structures.</p> <p>The course is guided by the following questions:</p> <ul style="list-style-type: none"> <li>• What are the <i>conceptual foundations</i> of just energy transitions?</li> <li>• What are <i>universal and country-specific challenges</i> to just energy transitions?</li> <li>• What are <i>national and international responses</i> from society, politics and businesses to these challenges?</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none

<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<p>There are no core texts for this course. Essential readings for the seminars will be indicated with the course start.</p> <p>The following literature can be used for preparation:</p> <ul style="list-style-type: none"> <li>• Scoones, I., Leach, M., and Newell, P., eds. 2015. The politics of green transformations. Abingdon: Routledge</li> <li>• Unruh, G. C. (2000) 'Understanding carbon lock-in', Energy Policy, Vol 28, no 12, pp 817–830</li> <li>• Peter Newell &amp; Andrew Simms (2021) How Did We Do That? Histories and Political Economies of Rapid and Just Transitions, New Political Economy, 26:6, 907-922</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Case study, about 2,500 words (50 %) <ul style="list-style-type: none"> <li>Empirical case study with theoretical underpinnings of a region/ country of the student's choice (not restricted to Global North): What are specific opportunities and challenges of a just energy transition and which responses have been implemented/are lacking?</li> </ul> </li> <li>• Presentation, 15 min + 5 min Discussion (topics to be announced) (40 %) <ul style="list-style-type: none"> <li>topics to be announced</li> </ul> </li> <li>• Class Participation (10 %)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	20
<b>Remarks</b>	<b><i>Module with limited number of participants - Registration two weeks prior to the commencement of lectures!</i></b>
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Seminar</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Biomass and Bioenergy</b> Biomasse und Bioenergie
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Hirschl, Bernd
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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"> <li>• Overview on biomass production (agriculture and forestry)</li> <li>• Biomass residual waste</li> <li>• Energy conversion technologies</li> <li>• Social and ecological aspects of biomass use</li> <li>• Current bioenergy policies</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	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**

none

**Module Components**

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

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

**538908** Seminar  
Biomass and Bioenergy - 4 Hours per Term  
**538912** Examination  
Biomass and Bioenergy

## 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

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

	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	<p>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</p>
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> </ul> <p>Further materials are provided via Moodle (including lecture slides and additional materials including videos, readings etc.)</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Individual component (E-assessment), 60-90 min - 50%</li> <li>• Group Project - Part 1: Create a scientific poster (Analysis of e.g., a scientific article, industry report, case study, ...) - 25%</li> <li>• Group Project - Part 2: Presentation, 15min - 25%</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lectures &amp; Exercises</li> <li>• Projects</li> </ul>

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

No assignment

## 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

<b>Modul Title</b>	<b>Fit4Future Summer School</b> Fit4Future Sommerschule
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	After successful completion, students have in-depth knowledge of various transformation dynamics and forms. They are experienced in discussing and reflecting on various analytical and evaluation concepts of transformation dynamics. They can classify various theoretical and methodological approaches in the present day and discuss them in light of relevant evaluation criteria that apply to transformations in the face of pressing crises such as climate catastrophe, biodiversity loss or land overuse. They are also able to understand the complexity of the design challenges of a transformation on a global scale and to analyze the various roles, e.g. of the state or niche actors. They can apply conceptual perspectives such as the multi-level perspective, the ecosystem approach or evolutionary innovation theory.
<b>Contents</b>	<p>The Fit4Future Summer School series provide a dynamic learning environment where students engage with challenges of tomorrow. Every year the thematic focus shifts towards current transition dynamics and transformation processes. The Summer School provides a mix of online lecture and offline exercises, with a full-week course during September every year.</p> <p>Topics are:</p> <ul style="list-style-type: none"> <li>• Just Transitions to sustainable and clean energy</li> <li>• Circular Economy and Society</li> <li>• Digitalisation and Sustainability</li> <li>• Globalisation and Global Studies</li> <li>• De- and Prosgrowth</li> </ul>



Throughout the programme, participants will engage with the various aspects of the chosen topic, explore the role of different transformation paradigms and assess the transformative power of different pathways towards sustainable future in an interdisciplinary setting. Renowned international experts will provide participants with a comprehensive understanding of the latest developments through lectures, workshops and field trips, creating a dynamic learning environment that encourages critical thinking and collaborative problem-solving.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Haberl, H., Fischer-Kowalski, M., Krausmann, F., Martinez-Atlier, J., &amp; Winiwarter, V. (2011). A socio-metabolic transition towards sustainability? Challenges for another Great Transformation. <i>Sustainable development</i>, 19(1), 1-14.</li> <li>• Voulvoulis, N., Giakoumis, T., Hunt, C., Kioupi, V., Petrou, N., Souliotis, I., &amp; Vaghela, C.J.G.E.C. (2022). systems thinking as a paradigm shift for sustainability transformation. <i>Global Environmental Change</i>, 75, 102544.</li> <li>• Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., ... &amp; Lang, D. J. (2017). Leverage points for sustainability transformation. <i>Ambio</i>, 46, 30-39</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Essay on selected transformation dynamics, 5000 words, (40%)</li> <li>• 2 protocols of two events during the summer school, 1500 words each (20% each)</li> <li>• Learning diary, 3000 words (20%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	- Summer School Fit4Future
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Autumn School Technoscience, Environment and Society</b> Herbstschule Technowissenschaften, Umwelt und Gesellschaft
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	At the end of the module students are able to: <ul style="list-style-type: none"> <li>• develop a research question within the interdisciplinary field of Science and Technology Studies;</li> <li>• identify and compare at least two perspectives on practices of research fields;</li> <li>• analyse developments in fields of science and technology with respect to forms of disciplining knowledge;</li> <li>• adopt knowledge about theories and concepts in the field (e.g. responsibility, care, ethnomethodology, participation, action theory)</li> <li>• act as part of a community of practice created during a workshop in presence</li> </ul>
<b>Contents</b>	<p>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.</p> <p>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.</p>

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 2 hours per week per semester Study project - 30 hours Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Burnard, P., L. Colucci-Gray &amp; S. Pallawi Sinha (2021). Transdisciplinarity: letting arts and science teach together. In: Curriculum Perspectives 41: 113-118.</li> <li>• Eustáquio, L. &amp; 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.</li> <li>• Hirsch-Hadorn, G. et al. (2008). Handbook of Transdisciplinary Research. Berlin, New York: Springer</li> <li>• Martinez, F. (2019). Doing nothing: Anthropology sits at the same table with contemporary art in Lisbon and Tbilisi. In: Ethnography 20 (4), 541-539.</li> <li>• Moallem, M. et al. (eds.) / 2019). The Wiley Handbook of Problem-Based Learning. Hoboken: Wiley.</li> <li>• Morris, J.E. &amp; 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 &amp; Method in Education 45 (1), 99-112.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• written contribution max. 2000 words (50%)</li> <li>• outline of study project max. 600 words (20%)</li> <li>• two presentation each max. 15 minutes (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	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.
<b>Module Components</b>	none
<b>Components to be offered in the Current Semester</b>	No assignment

## Module 11284 Advanced Studies of International Environmental Law

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	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)

- Examination: Advanced Studies in International Environmental Law

**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: Soziotechnische Transformation

### Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	12983	Compulsory elective

<b>Modul Title</b>	<b>Climate Change and Migration</b> Klimawandel und Migration
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Associate Prof. (Univ. Damaskus) Dr. agr. Ibrahim, Bachar
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	<p><b>Part "Climate Change"</b></p> <ul style="list-style-type: none"> <li>• Observations of change in the climate system</li> <li>• Critically assess the role of human activities in modern climate change</li> <li>• Assess future climate change scenarios and their potential impact on the Earth</li> <li>• climate change agenda and how this agenda impact on policy</li> <li>• Identify the Impacts and related Adaptation measures</li> </ul> <p><b>Part "Migration"</b></p> <ul style="list-style-type: none"> <li>• The potential link between climate change, migration,</li> <li>• The Task of defining 'climate refugee'</li> <li>• climate change contribution to the refugee problems</li> <li>• Gaps in the international legal framework</li> <li>• Individual and Collective Action on Mitigation</li> </ul> <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>
<b>Recommended Prerequisites</b>	none



<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Environment, forced migration and social vulnerability, T. Afifi, J. Jäger - 2010 - Springer</li> <li>• Climate change, human security and violent conflict: challenges for societal stability, J. Scheffran, M. Brzoska, H.G. Brauch, P.M. Link... - 2012</li> <li>• People on the move in a changing climate: The regional impact of environmental change on migration, E. Piguet, F. Laczko - 2013</li> <li>• Global migration governance, A. Betts - 2011</li> <li>• Disentangling migration and climate change, T. Faist, J. Schade - 2013 - Springer</li> <li>• Climate change and migration: security and borders in a warming world, G. White – 2011- Oxford University Press</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Oral Exam, 30 min. (50%)</li> <li>• Two presentations on the a scientific topic (each 25%)</li> </ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	<p>An annual excursion pertaining to the module may be organised.</p> <p><b><i>Complementary Module in Master Environmental and Resource Management.</i></b></p>
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Seminar</li> <li>• Examination</li> </ul>
<b>Components to be offered in the Current Semester</b>	No assignment

## 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

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

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Birnie/Boyle/Redgwell, International Law and the Environment, 4th edition, Oxford University Press, 2021</li> <li>• Knopp/Epstein/Hoffmann, International and European Environmental Law with Reference to German Environmental Law – A Guide for International Study Programs, 2nd edition, Berlin 2019</li> <li>• Albrecht, Egute, Wanki, Ezeamama (Eds.), International environmental law (IEL) – Agreements and introduction. 6th expanded and updated edition, 2022.</li> <li>• 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.</li> <li>• 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</li> <li>• 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 <a href="https://doi.org/10.1017/9781009157940.001">https://doi.org/10.1017/9781009157940.001</a>.</li> <li>• German Advisory council on Global Change (2019): Towards our Common Digital Future. Berlin. WGBU. <a href="https://www.wbgu.de/en/publications/publication/towards-our-common-digital-future">https://www.wbgu.de/en/publications/publication/towards-our-common-digital-future</a></li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Written Exam, 120 minutes (maximum 40 points)</li> <li>• Presentation, 15 min. (maximum 20 points)</li> </ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded

Limited Number of Participants	none
Remarks	none
Module Components	<ul style="list-style-type: none"><li>• Lecture: Global Change and Legal Response</li><li>• Seminar: Will be announced during the lecture</li><li>• Examination: Global Change and Legal Response</li></ul>
Components to be offered in the Current Semester	<p><b>520260</b> Lecture Global Change and Legal Response - 2 Hours per Term</p> <p><b>520261</b> Seminar Climate Adaptation with a Focus on Nature-Based Solutions: An Overview of the EU Policy Framework - 2 Hours per Term</p>

## 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

<b>Modul Title</b>	<b>Un/DisCIPLining Knowledge: Technology, Science, and Society in Transformation</b>  Epistemischer Ungehorsam: Technik, Wissenschaft und Gesellschaft im Wandel
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Knowledge from the courses <ul style="list-style-type: none"> <li>• Technik in Wissenschaft und Gesellschaft</li> <li>• Philosophy of Science in Practice</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester

	Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and learning materials are given in the course description.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• short scientific essay, max. 4000 words (45%)</li><li>• scientific review, max. 2500 words (40%)</li><li>• presentation, max. 15 minutes (15%)</li></ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	German-speaking teachers are available if required. Further information on this can be found in the course description.
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar - 4 SWS</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>510151</b> Seminar Un/disciplining Knowledge - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>What Material Culture? Transformative Processes in Technology and Art</b>  Welche materielle Kultur? Transformative Prozesse in Technik und Kunst
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Interest in media technology and creativity techniques
<b>Mandatory Prerequisites</b>	none

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	To be announced during the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• project outline (20%)</li><li>• presentation, 15 minute (20%)</li><li>• written documentation of the project work, 2500-3000 words (60%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Lecture/Seminar - 4 SWS</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>510121</b> Lecture/Seminar What Material Culture? - 4 Hours per Term



## 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

<b>Modul Title</b>	<b>Sociology of Sustainable Development</b> Soziologie der nachhaltigen Entwicklung
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	Students overview sociological approaches, theories and research topics in the context of sustainable development. After completing the module, they will have a sound knowledge on various approaches of social-ecological transformation and will be able to critically discuss current concepts such as the Anthropocene, Green Growth or Circular Economy. They have expertise in the reception and presentation of scientific texts.
<b>Contents</b>	Sustainable development promises to meet human needs of present and future generations while maintaining the integrity and stability of natural systems. However, this concept has been criticised on various grounds. Some argue that more fundamental changes are required to solve the multiple, accelerating crises of our times. Under the umbrella term 'socio-ecological transformation', scholars discuss various political, socio-economic, socio-technical and cultural changes aimed at responding appropriately to the socio-ecological crisis. This module critically engages with current sustainability debates from a sociological perspective, thereby discussing concepts such as Green Growth, Degrowth, Circular Economy or the Anthropocene. It explores how we can move to a society and economy in which human needs are met within planetary boundaries.
<b>Recommended Prerequisites</b>	41421: Introduction to Environmental and Resource Management II
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Exercise - 2 hours per week per semester

	Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Eisenmenger et al. (2020). The Sustainable Development Goals prioritize economic growth over sustainable resource use: a critical reflection on the SDGs from a socio-ecological perspective. Sustainability Science, 15:1101-1110.</li> <li>• Haberl, H. et al. (2011). A Socio-metabolic Transition towards Sustainability? Challenges for Another Great Transformation. Sustainable Development 19, 1-14</li> <li>• Gough, I., 2017. Recomposing consumption: defining necessities for sustainable and equitable well-being. Phil. Trans. R. Soc. A. 375, 20160379.</li> <li>• Hickel, J., Kallis, G., 2020. Is Green Growth Possible? New Political Economy 25, 469–486.</li> <li>• Malm, A., Hornborg, A., 2014. The geology of mankind? A critique of the Anthropocene narrative. The Anthropocene Review 1, 62–69.</li> </ul> <p>Further literature will be announced in the module.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Reading assignments, 1.500-2000 words (20%)</li> <li>• Reflections on sessions, 1.500-2000 words (20%)</li> <li>• Pecha Kucha presentation, (7 Min.) oder Podcast (20Min.) (30%)</li> <li>• Written Test (multiple choice, 30 Min.) (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Exercise: Research and methods of a Sociology of Sustainability - 2 Hours per Week per Semester</li> <li>• Seminar: Theories of Social-Ecological Transformation - 2 Hours per Week per Semester</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Justice and Diversity in Environmental Change</b>
	Gerechtigkeit und Diversität im Kontext von Umweltveränderungen
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<ul style="list-style-type: none"> <li>• Acquiring a profound understanding of different concepts on social justice and diversity in the context of environmental change, climate change and sustainable development.</li> <li>• Discussing and critically reflecting upon current issues related to environmental justice, such as resource conflicts, land-use change or environmental movements.</li> <li>• Methodological skills in reading and discussing academic texts, preparing Pecha Kucha presentations, and recording scientific podcasts.</li> </ul>
<b>Contents</b>	<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>

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Exercise - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Bell, K. (Ed.) (2021). Diversity and Inclusion in Environmentalism, Routledge.</li> <li>• Holifield, R., Chakraborty, J., Walker, G. (Eds.) (2018). The Routledge Handbook of Environmental Justice, Routledge.</li> <li>• Lele, S. et al. (Eds.) (2019). Rethinking environmentalism: Linking justice, sustainability, and diversity (Vol. 23). MIT Press.</li> <li>• Williams, J. (2021). Climate change is racist. Race, privilege and struggle for climate justice. Icon Books.</li> </ul> <p>Further literature will be announced during class.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Reading assignments, 1.500-2.000 words (20%)</li> <li>• Reflections on sessions, 1.500-2.000 words (20%)</li> <li>• Pecha Kucha presentation, 6:40 Min (30%)</li> <li>• written test (multiple choice) (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	50
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Exercise Theoretical approaches to Justice and Diversity in Environmental Change</li> <li>• Seminar Justice and Diversity research and methods in the context of Environmental Change</li> </ul>
<b>Components to be offered in the Current Semester</b>	<p><b>510535</b> Seminar Justice and Diversity research and methods in the context of Environmental Change - 2 Hours per Term</p> <p><b>510530</b> Lecture/Exercise Theoretical approaches to Justice and Diversity in Environmental Change - 2 Hours per Term</p>

## 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

<b>Modul Title</b>	<b>Anthropos in the Anthropocene</b> Anthropos im Anthropozän
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>As a result of taking part in this module students have</p> <ul style="list-style-type: none"> <li>• knowledge about theories and concepts in the field of ethics and anthropology (e.g. responsibility, care, participation).</li> </ul> <p>They are able to</p> <ul style="list-style-type: none"> <li>• critically study nature-culture debates in different discourses, mainly in STS and anthropology,</li> <li>• develop a one semester study project on the basis of the acquired theories and methods, and</li> <li>• create and present a well documented and analytically grounded written report based on a sound research design and question.</li> </ul>
<b>Contents</b>	<p>The Anthropocene is a term of the 21st century, it focuses attention on the role of humans as being virtually a natural force. When being introduced the wording was realigned according to the terminology of geology, however it became quickly adopted in a sociopolitical context and also by cultural studies. As a consequence the discourse has globally expanded and nowadays revolves around the question of the anthropos, the role of man in its environment on a global and local scale. This course offers theoretical reflections about the limits and opportunities of human action in an age, in which humans do not only encounter themselves in technical and artistic works, but also in nature. The module deals with anthropological questions and challenges a method of philosophical field work: how can technology-environment assemblages be described adequately, and how is the historical and media dimension to be included. Empirical-based models and cultural studies analysis are investigated, issues such</p>

as geoengineering, design with nature, extraction, in general environmental degradation is scrutinized. How become socio-economic and eco-cultural contexts relevant for local realities of life, how do responsibility, participation, or empowerment do play out as action guiding values in this game of transformation.  
The course is organised around lectures and student's study projects; topics of the study project are chosen together and intermediate results discussed in class.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and learning materials are given in the course description and will be announced during the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• project proposal, max. 3 pages (25 %)</li><li>• final presentation, 5-25 min (15 %)</li><li>• project report, min. 12 pages (60 %)</li></ul> <p>The duration of the final presentation will be announced in the first class meeting.</p>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Project/Seminar - 4 SWS</li></ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Urban Transformation / Urban Studies</b> Urban Transformation / Urban Studies
<b>Department</b>	Faculty 6 - Architecture, Civil Engineering and Urban Planning
<b>Responsible Staff Member</b>	Dr. phil. Binder, Julia
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	The module addresses questions regarding transforming planning visions that link with urban transformation. The students are asked to reflect on the disciplinary understanding to plan the cities according to the problems of the cities and to analyse urban transformation as a multidimensional spatial process.
<b>Contents</b>	The module focuses on planning as a system of visions and ideas. Against the backdrop of current debates regarding urban development, the students will discuss German and English papers of the 20th and 21st Century in order to reflect on the planners' key terminologies (common good, sustainability, inequality). The students will have to design their own empirical research projects that deal with questions of urban transformation.
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	to be announced in the first lecture
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Presentation, 45 min (30%)</li> <li>• Research paper, max. 20 DIN A4-pages without attachments (70%)</li> </ul>

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	Seminar
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Heritage and Transformation in Regional and Urban Studies</b>
	Kulturerbe und Transformation in der Regional- und Stadtforschung
<b>Department</b>	Faculty 6 - Architecture, Civil Engineering and Urban Planning
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. Gailing, Ludger
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>The aims of this module are:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• To develop knowledge of the interfaces between heritage studies and regional and urban studies.</li> <li>• 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</li> </ul>
<b>Contents</b>	<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-20<sup>th</sup> 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).

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	The bibliography will be presented in class.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• 20% Presentation (15 minutes per student)</li> <li>• 80% Research paper (3000-3500 words including references)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<i>Seminar Heritage and Transformation in Regional and Urban Studies</i>
<b>Components to be offered in the Current Semester</b>	No assignment

## Module 13907 Anthropocene and Law

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	13907	Compulsory elective

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

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and learning materials are given in the course description and will be announced within the first class meeting.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• project proposal, max. 3 pages (25 %)</li><li>• final presentation, 15-25 min (15 %)</li><li>• project report, min. 12 pages (60 %)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• NN - Lecture Anthropocene and Law</li><li>• NN - Seminar Anthropocene and Law</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>915110</b> Lecture/Seminar Anthropocene and Law - 4 Hours per Term

## 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

<b>Modul Title</b>	<b>Alternative Economies</b> Alternative Ökonomien
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	Upon successful completion students will have a comprehensive understanding of the concept of alternative economies and its role in transformation processes. They have acquired critical reflection skills and will be able to navigate through diverse debate and discourse formats. The module will provide them with know-how on specific formats of field research as well as scenario development. Students acquire inter- and transdisciplinary research competencies.
<b>Contents</b>	Alternative economies refer to all economic views that deal with other possibilities to the private-industrial economy. In a series of guest lectures, students will learn about different approaches, such as care economy, solidarity economy, resource-based economy, donut economy, complementary currencies, etc., and critically reflect and discuss their role in transformation processes. In excursions and case studies, students will visit places where alternative economies are being tested. Different approaches will be elaborated in scenario workshops.
<b>Recommended Prerequisites</b>	Knowledge of the contents of module • 13922 <i>Introduction to Transformation Studies</i>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	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](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**

- paper review, 1500-2000 words (20%)
- 3 reflections of Guest Lectures, 1500-2000 words each (30%)
- 2 reflections from field trips, approx. 5000 characters each (20%)
- Written test, 20 minutes (multiple choice) (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 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

<b>Modul Title</b>	<b>Concepts of Social Criticism and Social Transformation</b> Konzepte von Gesellschaftskritik und sozialer Transformation
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. habil. Havlin, Tetiana
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Students can apply these concepts in their own research and are able to use these concepts to analyse real-life examples.</li> <li>• Students are able to understand and critically examine 'classical' as well as contemporary texts.</li> <li>• Students can articulate and present their own perspective on course contents in an academically adequate and sound manner.</li> <li>• Students are able to write academically and are capable to orally present their ideas convincingly in an academic context.</li> </ul>
<b>Contents</b>	<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.

<b>Recommended Prerequisites</b>	Students have knowledge of at least one of the following modules <ul style="list-style-type: none"><li>• 13922 Introduction to Transformation Studies</li><li>• 13932 Transformation Theories</li></ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature and teaching materials will be provided on moodle at start of the semester.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• One oral presentation (10 to 15 minutes) (10%)</li><li>• Three writing assignments (750 to 1500 words per assignment) (30%)</li><li>• A final essay (5000 to 10000 words) (60%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar Critical Theories of Social Transformation</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>510200 Seminar</b> Critical Theories of Social Transformation - 4 Hours per Term



## 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

<b>Modul Title</b>	<b>Europe in Transformation</b> Europa im Wandel
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. Amelina, Anna
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>Students know how to approach Europe and European transformation by using sociological theories of belonging, culture, and power, and to apply these to historical and current theoretical discourses in European contexts. What is more, students have fundamental knowledge in central approaches to European Studies, Post- and Decolonial Studies as well as Postsocialist Studies, Migration Studies and Transnationalization Studies and to apply these to the societal realities of Europe at the beginning of the 21st century.</p> <p>They are able to:</p> <ul style="list-style-type: none"> <li>· understand the central positions and methods used in social and - cultural studies research</li> <li>· Understand and explain relations between culture, belonging, migration and transformation</li> <li>· Independently analyze, compare and discuss scientific texts and apply these to social phenomena</li> </ul>
<b>Contents</b>	<p>In the module, classical and newer approaches in European Studies, Post- and Decolonial Studies, Postsocialist Studies, Migration and Transnationalization Studies will be read and discussed. Against this background, contemporary and historical questions/ debates in the field of "Europe in Transformation" will be analyzed and discussed from the perspective of the social sciences. Towards a better understanding of transformation processes, a special focus lies on relational approaches to transnational realities and migratory movements, the European history of both Colonialism and Socialism,</p>

	present processes of racialization and othering (coloniality), forms of remembering etc..
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature will be provided in the moodle.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Oral presentation, 15 min (40%)</li><li>• Essay, 10-15 pages (30 %)</li><li>• Participation in exercises and discussions (30%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	No offer in summer semester 2025
<b>Module Components</b>	none
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Mobility and Digitalisation</b> Mobilität und Digitalisierung
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. habil. Havlin, Tetiana
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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"> <li>• to understand current transformations of economy, society and politics,</li> <li>• to reflect on how both institutions and everyday settings are co-constituted by specific patterns of mobility, both in the international and domestic</li> <li>• realms.</li> <li>• 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)</li> <li>• to analyse and compare texts and apply their theories to social phenomena</li> <li>• to reflect their own positionality within the nexus mobilities and digitalization.</li> <li>• to present these positions and analyses in a concise manner</li> </ul>
<b>Contents</b>	<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.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Literature will be provided in the moodle at the beginning of the semester
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	1. Oral presentation 15 min (40%) 2. Essay: 10-15 pages (30 %) 3. Participation in exercises and discussions (30%)
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	none
<b>Components to be offered in the Current Semester</b>	<b>510274 Seminar</b> Digital Cultures and (Im)Mobilities: Theorizing Global Connectivity - 4 Hours per Term

## Module 13953 Economic Perspectives on Climate Neutrality

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	13953	Compulsory elective

<b>Modul Title</b>	<b>Economic Perspectives on Climate Neutrality</b> Ökonomische Perspektiven der Klimaneutralität
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Hirschl, Bernd
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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>
<b>Contents</b>	<p>Among other things:</p> <ul style="list-style-type: none"> <li>• Basics of climate neutrality - terms, concepts, political framework</li> <li>• macroeconomic aspects (e.g. costs, benefits, damages etc.)</li> <li>• economic aspects (e.g. economic efficiency in the context of political framework)</li> <li>• Distributional and equity aspects, social dimension (e.g. distribution of costs and benefits among different social groups, conception of relevant levies, investor-user dilemmas)</li> <li>• Regional economic effects (e.g. value-added and employment effects on site and prerequisites for this)</li> <li>• Systemic aspects and infrastructures (e.g. economic evaluation and sustainability of relevant infrastructures)</li> <li>• Energy economy in transition (including new actors and business models)</li> </ul>
<b>Recommended Prerequisites</b>	none

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Slides and working materials/literature will be announced in the lecture
<b>Module Examination</b>	Final Module Examination (MAP)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• 120 min written examination</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	20
<b>Remarks</b>	Please register your participation by email with the department before the start of the semester
<b>Module Components</b>	<ul style="list-style-type: none"><li>• lecture with integrated seminar elements and exercises</li><li>• examination</li></ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Behavioural Economics</b> Verhaltensökonomie
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. oec. habil. Schnellenbach, Jan
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Homo Economicus: The economic concept of human behaviour</li> <li>• The economic theory of moral action</li> <li>• Behavioural anomalies: an overview</li> <li>• Bounded rationality</li> <li>• Dealing with risk and uncertainty</li> <li>• Prospect theory</li> <li>• Heuristics: Curse or blessing?</li> <li>• Fairness and social norms</li> <li>• Economic happiness research</li> <li>• Behavioural political economy</li> <li>• Behavioural public economics</li> </ul>
<b>Recommended Prerequisites</b>	Good knowledge of microeconomics.
<b>Mandatory Prerequisites</b>	No successful participation in the corresponding discontinued module 11814 Behavioral Economics.

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Foundational literature: <ul style="list-style-type: none"><li>• Angner, E. (2012). A Course in Behavioral Economics, Houndmills: Palgrave Macmillan.</li><li>• Additional literature will be announced during the lecture.</li></ul> In the exercise: <ul style="list-style-type: none"><li>• Wilkinson, N. and Klaes, M. (2012), An Introduction to Behavioral Economics. 2nd edition, Houndmills: Palgrave Macmillan.</li></ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Term paper with a maximum of 15.000 characters incl. spaces (roughly 6 pages), 50 points</li><li>• Final exam, 40 minutes, 50 points.</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	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.
<b>Module Components</b>	Behavioral Economics (Lecture) Behavioral Economics (Exercise)
<b>Components to be offered in the Current Semester</b>	<b>530631</b> Lecture Behavioral Economics - 2 Hours per Term <b>530632</b> Exercise Behavioral Economics - 2 Hours per Term



## 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

<b>Modul Title</b>	<b>Economics of Innovation</b>
	Innovationsökonomik
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. oec. habil. Schnellenbach, Jan
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Each winter semester even year
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	Good knowledge of microeconomics.
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Exercise - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	G.M. Swann, The Economics of Innovation: An Introduction, Elgar, 2013 as well as additional articles and book chapters announced during the lecture
<b>Module Examination</b>	Continuous Assessment (MCA)

<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50%)</li><li>• Exam, 40 minutes, which can also be conducted digitally (50%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	No offer in the winter semester 2025/26.
<b>Module Components</b>	Innovation Economics Lecture - 2 hours per week Innovation Economics Exercise - 2 hours per week
<b>Components to be offered in the Current Semester</b>	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**
1. Fundamentals of the theory of private property rights
    - 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
    - a) Complete and incomplete contracts
    - b) Moral hazard and adverse selection
    - c) Efficient responses to contract breaches
  3. Economic analysis of tort law
    - a) The Coase theorem
    - b) Economic analysis of liability rules
  4. Economic analysis of criminal law
    - a) Differentiating between tort law and criminal law
    - b) Deterrence effects of criminal law
    - c) Optimal deterrence effects
  5. Constitutional economics

	<p>a) Fundamentals of the economic theory of public law</p> <p>b) Empirical analysis of the economic effects of constitutional rules</p>
<b>Recommended Prerequisites</b>	Basic knowledge of microeconomics
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	<p>Lecture - 2 hours per week per semester</p> <p>Exercise - 2 hours per week per semester</p> <p>Self organised studies - 120 hours</p>
<b>Teaching Materials and Literature</b>	<p>H. Schäfer and C. Ott, Lehrbuch der ökonomischen Analyse des Zivilrechts, 5th edition, Heidelberg: Springer, 2012</p> <p>Additional articles and book chapters announced during the lecture</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Term paper with a maximum of 15,000 characters including spaces (equivalent to approximately 6 pages); (50% of the total grade)</li> <li>• Exam, 40 minutes (50% of the total grade)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	None
<b>Module Components</b>	<p>Law &amp; Economics Lecture - 2 hours per week</p> <p>Law &amp; Economics Exercise - 2 hours per week</p>
<b>Components to be offered in the Current Semester</b>	<p><b>530637</b> Lecture</p> <p>Law and Economics - 2 Hours per Term</p> <p><b>530638</b> Exercise</p> <p>Law and Economics - 2 Hours per Term</p>

## 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

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

- 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 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.

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	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.
<b>Module Components</b>	Summerterm: NN - Lecture Transformation: Law, Governance, Ethical Foundations NN - Seminar Transformation: Law, Governance, Ethical Foundations
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Media in Transformation - Media Theory and Analysis</b> Medien im Wandel - Medientheorie und -analyse
<b>Department</b>	Faculty 1 - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology
<b>Responsible Staff Member</b>	Prof. Dr. phil. Petersen, Christer
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>Joachim Friedmann: Storytelling for Media: Introduction to the Theory and Practice of Narrative Design. München, Tübingen: UVK 2021.</li> <li>Niklas Luhmann: Reality of the Mass Media. Hoboken, N.J.: Blackwell Publishers 2000.</li> <li>Material is available for download on the Internet. More information at the beginning of course.</li> </ul>



<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Successful completion of an essay of 10-20 pages or practical/project work of correspondending scope (60%)</li><li>• Presentation of a research topic or a project work, approx. 20 minutes (40%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar: Media in Transformation - Media Theory and Analysis Current Description</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>110306</b> Seminar/Exercise Methods and Analysis from the perspective of media psychology - 4 Hours per Term

## Module 14288 Psychology of Entrepreneurship and Change

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	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:

- 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.

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

- 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**

**530960** Lecture  
Psychology of Entrepreneurship and Change - 2 Hours per Term  
**530961** Seminar  
Psychology of Entrepreneurship and Change - 2 Hours per Term  
**530962** Examination  
Psychology of Entrepreneurship and Change

## 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

<b>Modul Title</b>	<b>Fit4Future Summer School</b> Fit4Future Sommerschule
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	After successful completion, students have in-depth knowledge of various transformation dynamics and forms. They are experienced in discussing and reflecting on various analytical and evaluation concepts of transformation dynamics. They can classify various theoretical and methodological approaches in the present day and discuss them in light of relevant evaluation criteria that apply to transformations in the face of pressing crises such as climate catastrophe, biodiversity loss or land overuse. They are also able to understand the complexity of the design challenges of a transformation on a global scale and to analyze the various roles, e.g. of the state or niche actors. They can apply conceptual perspectives such as the multi-level perspective, the ecosystem approach or evolutionary innovation theory.
<b>Contents</b>	<p>The Fit4Future Summer School series provide a dynamic learning environment where students engage with challenges of tomorrow. Every year the thematic focus shifts towards current transition dynamics and transformaton processes. The Summer School provides a mix of online lecture and offline exercises, with a full-week course during September every year.</p> <p>Topics are:</p> <ul style="list-style-type: none"> <li>• Just Transitions to sustainable and clean energy</li> <li>• Circular Economy and Society</li> <li>• Digitalisation and Sustainability</li> <li>• Globalisation and Global Studies</li> <li>• De- and Prosgrowth</li> </ul>

Throughout the programme, participants will engage with the various aspects of the chosen topic, explore the role of different transformation paradigms and assess the transformative power of different pathways towards sustainable future in an interdisciplinary setting. Renowned international experts will provide participants with a comprehensive understanding of the latest developments through lectures, workshops and field trips, creating a dynamic learning environment that encourages critical thinking and collaborative problem-solving.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Haberl, H., Fischer-Kowalski, M., Krausmann, F., Martinez-Atlier, J., &amp; Winiwarter, V. (2011). A socio-metabolic transition towards sustainability? Challenges for another Great Transformation. <i>Sustainable development</i>, 19(1), 1-14.</li> <li>• Voulvoulis, N., Giakoumis, T., Hunt, C., Kioupi, V., Petrou, N., Souliotis, I., &amp; Vaghela, C.J.G.E.C. (2022). systems thinking as a paradigm shift for sustainability transformation. <i>Global Environmental Change</i>, 75, 102544.</li> <li>• Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., ... &amp; Lang, D. J. (2017). Leverage points for sustainability transformation. <i>Ambio</i>, 46, 30-39</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Essay on selected transformation dynamics, 5000 words, (40%)</li> <li>• 2 protocols of two events during the summer school, 1500 words each (20% each)</li> <li>• Learning diary, 3000 words (20%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	- Summer School Fit4Future
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>The Political Economy of Transformation</b> Die politische Ökonomie der Transformation
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. habil. Berger, Wolfram
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	By the end of the semester, students will have a solid understanding of theoretical concepts tied to a critical political economy perspective. They will be able to apply these theoretical perspectives for analysing concrete empirical contexts. They will have skills for critical reflection and will be able to navigate and process complex conceptual texts. Students have inter- and transdisciplinary research competencies.
<b>Contents</b>	<p>To deal with the major challenges our societies are facing – such as the climate crisis, demographic change, geopolitical tension as well as regional and global economic restructurings – we need a profound understanding of their underlying social conditions. This interdisciplinary course offers an introduction to critical political economy approaches that examine these issues through the lenses of power, social relations, and uneven development.</p> <p>We begin with discussing core concepts through which critical political economists seeks to understand how capitalist economies function and how their contradictions emerge. We then turn to the institutional arrangements that shape and mediate economic life — such as states, legal systems, and international governance — examining their roles not as neutral arbiters but as embedded in social struggles and historical formations.</p> <p>Building on this, we explore the concepts of power and hegemony. Drawing on theorists such as Antonio Gramsci and perspectives from Cultural Political Economy, we analyse how dominant economic and political ideas as well as practices become socialised, and how they are contested. Finally, the course investigates the spatial dimension of capitalism: we study how space is not merely a backdrop but actively</p>

produced through processes of uneven development, globalisation, and territorial differentiation.

Throughout the course, we will engage with both classical texts and contemporary applications, and reflect critically on the relevance of critical political economy approaches for understanding today's transformations. Students are encouraged to bring in their own interests and regional expertise, and to relate theoretical insights to empirical phenomena across scales.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 2 hours per week per semester Self organised studies - 150 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Gramsci, A., 2011. Prison notebooks. Vol. 1. Columbia Univ. Press.</li> <li>• Harvey, D., 2019. Spaces of Global Capitalism: A Theory of Uneven Geographical Development. Verso.</li> <li>• Massey, D.B., 1984. Spatial Divisions of Labour. Macmillan.</li> <li>• Moio, S. (2018). Geopolitics of the knowledge-based economy. Routledge.</li> <li>• Sum, N.-L., &amp; Jessop, B. (2013). Towards a cultural political economy: Putting culture in its place in political economy. Edward Elgar Pub. Ltd.</li> <li>• Vidal, M., Smith, T., Rotta, T., Prew, P. (Eds.), 2019. The Oxford Handbook of Karl Marx, 1st ed. Oxford University Press.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Präsentation: 15 min (50 %)</li> <li>• Hausarbeit: 6.000 Wörter (50 %)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Seminar (2 SWS)</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>530817 Seminar</b> The Political Economy of Transformation - 2 Hours per Term



## Module 14495 Optimization in Business Transformation

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	14495	Compulsory elective

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

	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"><li>• Written Test, 90 minutes</li></ul> <p>Bonus points (10 % of total points) can be earned through the group assignment and will be added to your final score <b>only if you pass the written test.</b></p>
Evaluation of Module Examination	Performance Verification – graded
Limited Number of Participants	60
Remarks	none
Module Components	Lecture and Exercise
Components to be offered in the Current Semester	<b>531099</b> Examination Optimization in Business Transformation (Wiederholungsprüfung)

## 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

<b>Modul Title</b>	<b>International Marketing</b>
	Internationales Marketing
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. Dost, Florian
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	Students are familiar with the problems relevant to international marketing, and can explain the special features of strategic decisions and marketing instruments in relation to international challenges. They are able to apply their knowledge to various industries and country markets. Students can evaluate foreign markets using market data and scoring models, and critically assess internationalisation decisions from a business perspective.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• <b>Introduction</b> (basics, importance, special features),</li> <li>• <b>Environmental analysis</b> and information procurement (organisations and cooperation, risk aspects in foreign trade, PESTLE, 5 forces),</li> <li>• <b>Strategic decisions</b> (reasons and motives, selection of foreign markets, forms of international activities, timing of market entry strategies),</li> <li>• <b>Product and brand portfolios</b> (extensions, adaptations, brand transfer),</li> <li>• <b>Innovation and product planning</b> (hype cycle, dynamics of the environment, life cycles)</li> <li>• <b>Financing and hedging</b> (short, medium and long-term export financing),</li> <li>• <b>Marketing management</b> (4P: product policy, pricing policy, distribution policy, communication policy)</li> </ul>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	No successful participation in the German-language module 11959

<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Self organised studies - 150 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"><li>• Backhaus, K; Voeth, M.: Internationales Marketing, 6. Aufl., Stuttgart (Kohlhammer) 2010</li><li>• Kotler, P., Burton, S., Deans, K., Brown, L., &amp; Armstrong, G. (2015). Marketing. Pearson Higher Education AU.</li><li>• Berinato, S. (2016). Good charts: The HBR guide to making smarter, more persuasive data visualizations. Harvard Business Review Press.</li></ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Written exam 45 min (40%)</li><li>• Poster preparation, 10 min (25%)</li><li>• Poster presentation, 5 min discussion (15%)</li><li>• Critical essay, approx. 5-6 pages (20 %)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• International Marketing (Lecture)</li></ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Social Change and Continuity</b> Sozialer Wandel und Kontinuität
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. Puder, Janina
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<ul style="list-style-type: none"> <li>• Introduction into main topics of the sociological debate on social change</li> <li>• Overview of core theories on social change and continuity</li> <li>• Improve students competence to apply key-concepts for the analysis on social change to specific dimensions, theoretical and empirical problems or ongoing economic and social challenges</li> </ul>
<b>Contents</b>	<p>In the wake of increasing globalization of the economy and transformations in the relationship between states and markets, many scholars have become increasingly aware of the need for systematic analysis of the social dimensions of economic institutions and practices. This seminar provides an introduction into main topics of the sociological debate on social change and economic phenomena and gives an overview of core theories in this field.</p> <p>Topics: The (changed) economic and social role of flexible labour markets, processes of rationalization, production regimes and management concepts, finance markets and (informal) networks; comparative analysis of industrial organisations in different countries; capitalism in (non)-western societies; transformation in Eastern Germany and Europe; migration flows and social cohesion.</p>
<b>Recommended Prerequisites</b>	<p>Knowledge:</p> <ul style="list-style-type: none"> <li>• Fundamentals of sociology</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester

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

**Teaching Materials and Literature**

- Boltanski, Luc/Chiapello, Eve, 2005: "The New Spirit of Capitalism", International Journal of Politics, Culture, and Society, vol. 18, n° 3-4, pp. 161-188.
- Granovetter, Mark: Economic Institutions as Social Constructions: A Framework for Analysis. In: Acta Sociologica, 1992, Vol. 35, p. 3-11
- Polanyi, Karl, The great Transformation. Dt. 1978 (1944)
- Giddens, Anthony, 1990: The consequences of modernity. Stanford, Calif: Stanford University Press.
- Jackson, Stevi/Scott, Sue, 2001: Gender. A sociological reader. New York: Routledge

**Module Examination**

Continuous Assessment (MCA)

**Assessment Mode for Module Examination**

1. Oral presentation, 10 minutes (worth 30%)
2. Essay, 4 pages (worth 30%)
3. Written examination, 60 minutes (worth 40%)

**Evaluation of Module Examination**

Performance Verification – graded

**Limited Number of Participants**

none

**Remarks**

none

**Module Components**

- Social Change and Continuity (seminar) - It is a lecture/seminar with a seminaristic character.

**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

<b>Modul Title</b>	<b>Culture and Globalisation</b> Kultur und Globalisierung
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. habil. Havlin, Tetiana
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	After completion of this module, students are able to identify and differentiate central areas, approaches, concepts and methods within the interdisciplinary field of World Heritage Studies. They have critical reading skills, know a number of key concepts to Heritage Studies and how to link conceptual ideas to current phenomena in the field of World Heritage. In addition, the students are able to apply knowledge about standards in scientific techniques and presentation skills.
<b>Contents</b>	The first part of the module gives an overview over the key areas and disciplines of the World Heritage Studies Program. The second part provides basic knowledge about key interdisciplinary approaches, concepts and skills within the field of World Heritage Studies.
<b>Recommended Prerequisites</b>	None
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	Students will be provided with weekly meetings and lectures, reading materials, and bibliographical references. All materials and literature will be provided in a moodle course.
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• presentation of a concept, 10 min., + handout (30 % of the grade)</li> <li>• final essay, 5000 words + references (70 % of the grade)</li> </ul>

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	Participation and active involvement are expected. 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., homepage or Moodle) shall apply.
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar Culture and Globalisation I - 2 Hours per Week per Semester</li><li>• Seminar Culture and Globalisation II - 2 Hours per Week per Semester</li></ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Communication of Science and Technology</b>
	Wissenschafts- und Technikkommunikation
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. pol. habil. Lee, Roh Pin
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>Students will know about different techniques, tools and formats for communication of science &amp; technology. They will develop skills to break down complex issues at the nexus of science, technology and society to communicate science/technical information in a clear, understandable and engaging way to different stakeholders.</p> <p>On completion of the module, students will be able to:</p> <ul style="list-style-type: none"> <li>• Articulate the key issues and challenges in communicating about science &amp; technology;</li> <li>• Understand the nature of different audiences for better stakeholder engagement;</li> <li>• Demonstrate awareness of and ability to use a variety of different techniques and media for targeted audience;</li> <li>• Improve their skills in communication of scientific/technical information in both written and oral forms;</li> <li>• work as part of a team to develop effective measures for communication of science &amp; technology;</li> <li>• Provide constructive feedback to other students on their communication skills.</li> </ul>
<b>Contents</b>	<p>Course coverage:</p> <ul style="list-style-type: none"> <li>• Key issues in communication of science &amp; technology;</li> <li>• Identify and knowing your audiences (mental models, risk perception, heuristics and biases, ...);</li> <li>• Getting your audience's attention (Types of framing);</li> <li>• Communicating risk and uncertainty;</li> <li>• Formats for communication of science &amp; technology.</li> </ul>

Students will also be given opportunities to receive feedback and improve their own written and oral skills. They will also work in small teams on team projects to further their skills for communicating about sustainability issues. These projects will focus on communicating about a given scientific topic to a particular audience using spoken, visual, written or web-based communication.

<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Lecture - 2 hours per week per semester Seminar - 2 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Center for Research on Environmental Decisions (CRED). 2009. <i>The Psychology of Climate Change Communication: A guide for Scientists, Journalists, Educators, Political Aides, and the Interested Public</i>. New York.</li> <li>• Nisbet, M.C., Scheufele, D.A. 2009. What's next for science communication? Promising directions and lingering distractions. <i>American Journal of Botany</i>, 96(10): 1767-1778.</li> <li>• Bubela, T., Nisbet, M., Borchelt, R. <i>et al.</i> 2009. Science communication reconsidered. <i>Nature Biotechnology</i>, 27, 514–518.</li> <li>• Nelkin, D. 1989. Communicating technological risk: The social construction of risk perception. <i>Annual Review Public Health</i>, 10, 95-113.</li> <li>• Tversky, A., Kahneman, D. 1974. Judgment under Uncertainty: Heuristics and Biases. <i>Science, New Series</i>, 185(4157), 1124-1131.</li> </ul> <p>Further material (including lecture slides and additional materials including videos, readings etc.) might be announced during the first class meeting.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Individual E-Assessment – 60 min (40%)</li> <li>• Group project - Part 1: Science Communication Material e.g., poster, video, etc. (30%)</li> <li>• Group project - Part 2: Group presentation– 15min oral presentation (30%)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"> <li>• Lecture / Seminar</li> </ul>
<b>Components to be offered in the Current Semester</b>	<b>510601</b> Lecture/Seminar Communication of Science & Technology - 4 Hours per Term

## 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

<b>Modultitel</b>	<b>B-TU for Future - Transdisziplinäres Modul für Klimaschutz und nachhaltige Entwicklung</b> B-TU for Future - Transdisciplinary Module for Climate Protection and Sustainable Development
<b>Einrichtung</b>	Fakultät 5 - Wirtschaft, Recht und Gesellschaft
<b>Verantwortlich</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Lehr- und Prüfungssprache</b>	Deutsch
<b>Dauer</b>	1 Semester
<b>Angebotsturnus</b>	jedes Sommersemester
<b>Leistungspunkte</b>	6
<b>Lernziele</b>	Nach Beendigung des Moduls haben Studierende einen Überblick zu verschiedenen disziplinären Perspektiven, Konzepten und empirischen Ergebnissen im Kontext von Klimaschutz und nachhaltiger Entwicklung. Sie kennen aktuelle Forschungsarbeiten und Forscher*innen an der B-TU Cottbus – Senftenberg. Studierende erlangen transformatives und praktisches Wissen bei der Umsetzung eigener Klimaschutz- und Nachhaltigkeitsprojekte oder arbeiten an einem angewandten Forschungsprojekt, z.B. einem Reallabor, mit. Sie üben sich in Gruppen- und Projektarbeit und erlangen Kenntnisse inter- und transdisziplinärer Methoden und Ansätze der Klima- und Nachhaltigkeitsforschung.
<b>Inhalte</b>	Klimaschutz und nachhaltige Entwicklung gehören zu den zentralen Herausforderungen gegenwärtiger Gesellschaften. Politik, Wirtschaft und Zivilgesellschaft sind gleichermaßen aufgefordert, den Ursachen und Folgen des Klimawandels zu begegnen und sich mit dem politischen Projekt der nachhaltigen Entwicklung auseinanderzusetzen. Das Modul gibt einen Überblick zu aktuellen Forschungsarbeiten an der B-TU Cottbus – Senftenberg zum Klimawandel und Transformation. Dabei wird insbesondere ein regionaler Blick auf Klimaschutz in der Lausitz eingenommen, inklusive der Herausforderungen bestehender Transformationsprozesse und -konflikte. Der jeweilige Themenschwerpunkt des Moduls variiert je Semester. Dazu können gehören u.a.: Nachhaltige Mobilität, die Rolle von Wasserstoff für die Energiewende, nachhaltige Ernährung und Nachhaltige Bildung. In inter- und transdisziplinären Gruppen entwickeln

	Studierende einige Ideen und Umsetzungsformate für Klimaschutz und Nachhaltigkeit und erproben diese in Projektarbeiten, Reallaboren oder Forschungsprojekten.
<b>Empfohlene Voraussetzungen</b>	keine - Das Modul ist offen für alle Studiengänge und Studienjahre
<b>Zwingende Voraussetzungen</b>	keine
<b>Lehrformen und Arbeitsumfang</b>	Übung - 2 SWS Seminar - 2 SWS Selbststudium - 120 Stunden
<b>Unterrichtsmaterialien und Literaturhinweise</b>	<p>Wird im Laufe der Vorlesung bekannt gegeben. Empfehlungen zum Ein- und Nachlesen</p> <ul style="list-style-type: none"> <li>• Dürbeck, G., &amp; Hüpkes, P. (Eds.). (2020). The Anthropocenic Turn: The Interplay Between Disciplinary and Interdisciplinary Responses to a New Age. Routledge.</li> <li>• Meadows, D., &amp; Randers, J. (2012). The limits to growth: the 30-year update. Routledge.</li> <li>• Lever-Tracy, C. (Ed.). (2010). Routledge handbook of climate change and society. Routledge.</li> <li>• Dörre, K., Rosa, H., Becker, K., Bose, S., &amp; Seyd, B. (Eds.). (2019). Große Transformation? Zur Zukunft moderner Gesellschaften (p. 3). Springer VS.</li> </ul> <p>Weitere Literaturhinweise werden in den Vorlesungen gegeben.</p>
<b>Modulprüfung</b>	Modulabschlussprüfung (MAP)
<b>Prüfungsleistung/en für Modulprüfung</b>	<ul style="list-style-type: none"> <li>• Schriftlicher Projektbericht, 30 Seiten</li> </ul>
<b>Bewertung der Modulprüfung</b>	Prüfungsleistung - benotet
<b>Teilnehmerbeschränkung</b>	keine
<b>Bemerkungen</b>	
<b>Veranstaltungen zum Modul</b>	<ul style="list-style-type: none"> <li>• Vorlesung: B-TU for Future – Ringvorlesung Klimaschutz und nachhaltige Entwicklung - 2 SWS</li> <li>• Seminar/Übung: B-TU for Future: Klimaschutz partizipativ – Studienprojekte zur nachhaltigen Entwicklung - 2 SWS</li> </ul>
<b>Veranstaltungen im aktuellen Semester</b>	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

<b>Modul Title</b>	<b>Colloquium Transdisciplinary Sustainability Research</b>
	Kolloquium Transdisziplinäre Nachhaltigkeitsforschung
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Jaeger-Erben, Melanie
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<ul style="list-style-type: none"> <li>• Knowledge of research in transformation and sustainability research.</li> <li>• Application and reflection of scientific methods</li> <li>• Knowledge of transdisciplinary methods and formats</li> <li>• Skills in developing research designs, designing research processes and evaluating empirical material</li> <li>• Practice of collegial supervision</li> <li>• Co-design of a research workshop</li> </ul>
<b>Contents</b>	<p>The module "Transdisciplinary Sustainability Research" offers insights into the content and methodology of transdisciplinary sustainability and transformation research. On the one hand, students get to know various research projects in the module's thematic field within the framework of a series of lectures and discuss approaches and findings. In a series of research workshops, students also learn to plan different steps of a research project and to evaluate empirical data.</p> <p>For students writing study projects, bachelor or master theses at the Department of Sociology of Technology and the Environment, attendance of this module is mandatory.</p>
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	<p>Exercise - 2 hours per week per semester</p> <p>Seminar - 2 hours per week per semester</p> <p>Self organised studies - 120 hours</p>
<b>Teaching Materials and Literature</b>	Will be announced in first class meeting.

Module Examination	Continuous Assessment (MCA)
Assessment Mode for Module Examination	<ul style="list-style-type: none"> <li>• <b>Summary and reflection</b> of at least <b>three</b> of the presentations in the colloquium following the template provided on moodle; <u>800 words; 30%</u></li> <li>• <b>Theoretical memo</b> of at least <b>two</b> the materials handed out for the workshop (e.g. one interview, one series of pictures) following the template provided on moodle; <u>1000 words; 40%</u></li> <li>• <b>One review</b> of a paper on transdisciplinary research (selection of papers will be provided on moodle), following the template provided on moodle; <u>1500 words; 30%</u></li> </ul>
Evaluation of Module Examination	Study Performance – ungraded
Limited Number of Participants	none
Remarks	Open to students from each disciplines working on or interested in transdisciplinary sustainability issues
Module Components	<ul style="list-style-type: none"> <li>• Exercise: Research workshops for Transdisciplinary Sustainability Research - 2 Hours per Week per Semester</li> <li>• Seminar: Colloquium for Transdisciplinary Sustainability Research - 2 Hours per Week per Semester</li> </ul>
Components to be offered in the Current Semester	<p><b>510537</b> Exercise Research workshops for Transdisciplinary Sustainability Research - 2 Hours per Term</p> <p><b>510536</b> Seminar Colloquium for Transdisciplinary Research - 2 Hours per Term</p>

## 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

<b>Modul Title</b>	<b>Research Methods in Business Administration and Economics</b> Forschungsmethoden der Betriebswirtschaftslehre
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. Urbig, Diemo
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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
<b>Contents</b>	<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"> <li>1. Overview of theoretical as well as qualitative and quantitative, inductive and deductive empirical research</li> <li>2. Descriptive statistics, inductive statistics, and fundamental statistical tests (e.g. z, t, F, Chi-Squared)</li> </ol>

	<ol style="list-style-type: none"> <li>Basics of linear regression and non-linear effects, including critical evaluation of assumptions</li> <li>Multicollinearity and outlier analyses</li> <li>Endogeneity problems, including omitted variables, measurement errors, reverse causality, and endogenous selection, and solution, such as instrumental variables and different kinds of experiments</li> <li>Quantitative surveys: Measurement, measurement errors and confirmatory and exploratory factor analysis</li> </ol>
<b>Recommended Prerequisites</b>	<p>Knowledge of the content of modules</p> <ul style="list-style-type: none"> <li>11962 Angewandte Mathematik und Ökonometrie</li> <li>11917 Mathematik W-3 (Statistik)</li> </ul>
<b>Mandatory Prerequisites</b>	No successful completion of module 38427 "Forschungsmethoden der Betriebswirtschaftslehre"
<b>Forms of Teaching and Proportion</b>	<p>Lecture - 2 hours per week per semester</p> <p>Exercise - 2 hours per week per semester</p> <p>Self organised studies - 120 hours</p>
<b>Teaching Materials and Literature</b>	Materials are provided via Moodle and include the lecture slides, and additional material including videos.
<b>Module Examination</b>	Prerequisite + Final Module Examination (MAP)
<b>Assessment Mode for Module Examination</b>	<p><b>Prerequisite for Final Module Examination:</b></p> <ul style="list-style-type: none"> <li>Participation in and assessment of an interview.</li> <li>Passing two tests during the lecture period.</li> </ul> <p><b>Final Module Examination:</b></p> <ul style="list-style-type: none"> <li>Written examination, 120 min.</li> </ul> <p>In presence or as online-take-home-examination (depending on regulations then in force at the BTU).</p>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	<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><b>No offer in summersemester 2025!</b></p>
<b>Module Components</b>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Exercises</li> </ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Interdisciplinary Thinking and Practice</b> Interdisziplinär Denken und Handeln
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. rer. nat. phil. habil. Schwarz, Astrid
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	12
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.

<b>Recommended Prerequisites</b>	<ul style="list-style-type: none"><li>• Knowledge of the content of module</li><li>• 13655 Un/Disciplining Knowledge</li></ul> <p><b>or</b></p> <ul style="list-style-type: none"><li>• 13656 What material culture?</li></ul> <ul style="list-style-type: none"><li>• Interest in media technology and creativity techniques</li></ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Excursion - 30 hours Self organised studies - 270 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"><li>• Mahnaz Moallem, Woei Hung, Nada Dabbagh (2019). The Wiley Handbook of Problem-Based Learning. John Wiley &amp; Sons, Inc</li></ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Project outline (2-3 pages) (10%)</li><li>• Written documentation project (3000 words) (30%)</li><li>• 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.</li><li>• End presentation 20 min. (20%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	Students organize a final presentation event of their study projects (public presentation, student workshop or summer school).
<b>Module Components</b>	none
<b>Components to be offered in the Current Semester</b>	No assignment

## 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

<b>Modul Title</b>	<b>Media of Transformation - Film Course</b>
	Medien der Transformation - Filmseminar
<b>Department</b>	Faculty 1 - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology
<b>Responsible Staff Member</b>	Prof. Dr. phil. Petersen, Christer
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	After successfully completing the module, students will have in-depth knowledge of methods for analysing text-based, visual and audio-visual formats. They will be able to apply these in the context of media theory issues on the one hand and implement them in a practical film project on the other. Students are able to deal with media and cultural communication from a methodologically well-founded analytical-interpretative perspective and to elaborate on the basis of the practical film knowledge they have acquired (camera, sound, editing).
<b>Contents</b>	Film, text and sound analysis, methodology of film, text and sound analysis, narrative analysis, media and cultural theory and, above all, their practical application and elaboration in an AV project or a short film.
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>Joachim Friedmann: Storytelling for Media: Introduction to the Theory and Practice of Narrative Design. München, Tübingen: UVK 2021.</li> <li>Niklas Luhmann: Reality of the Mass Media. Hoboken, N.J.: Blackwell Publishers 2000.</li> <li>Material is available for download on the Internet. More information at the beginning of course.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)

<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Successful completion of a project work or an essay of 10-20 pages (60%)</li><li>• Presentation of an research topic and of the project work, approx. 20 minutes per participant and presentation (40%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	16
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar: Media of Transformation - Film Course</li></ul>
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Media in Transformation - Media Theory and Analysis</b> Medien im Wandel - Medientheorie und -analyse
<b>Department</b>	Faculty 1 - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology
<b>Responsible Staff Member</b>	Prof. Dr. phil. Petersen, Christer
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	On special announcement
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	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.
<b>Recommended Prerequisites</b>	none
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>Joachim Friedmann: Storytelling for Media: Introduction to the Theory and Practice of Narrative Design. München, Tübingen: UVK 2021.</li> <li>Niklas Luhmann: Reality of the Mass Media. Hoboken, N.J.: Blackwell Publishers 2000.</li> <li>Material is available for download on the Internet. More information at the beginning of course.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)

<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Successful completion of an essay of 10-20 pages or practical/project work of corresponding scope (60%)</li><li>• Presentation of a research topic or a project work, approx. 20 minutes (40%)</li></ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar: Media in Transformation - Media Theory and Analysis Current Description</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>110306 Seminar/Exercise</b> Methods and Analysis from the perspective of media psychology - 4 Hours per Term

## Module 14440 Causal Data Science

assign to: Method Modules

### Study programme Transformation Studies

Degree	Module Number	Module Form
Master of Arts	14440	Compulsory elective

<b>Modul Title</b>	<b>Causal Data Science</b>
	Kausale Datenanalyse
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. Urbig, Diemo
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>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.</p>
<b>Contents</b>	<ol style="list-style-type: none"> <li>1. <i>Counterfactuals, Potential Outcomes, Causal Graphs, and typical problems (i.e., omitted relevant variables, measurement error, reverse causality, endogenous selection, endogenous treatment)</i></li> <li>2. <i>Data analytic solutions: control variables, matching, weighting</i></li> <li>3. <i>Data analytic solutions: instrumental variables, selection instruments</i></li> <li>4. <i>Data collection solutions: real experiments</i></li> <li>5. <i>Assumed experiments as mixed solutions: natural experiments, quasi-experiments, regression discontinuity</i></li> <li>6. <i>Times series data as a mixed solution: diff-in-diff and related methods</i></li> <li>7. <i>Reflections on moderation and mediation analyses, respectively, structural equation modeling</i></li> </ol> <p><i>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</i></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.*

<b>Recommended Prerequisites</b>	<ul style="list-style-type: none"> <li>Basics of statistics, especially estimation and testing and simple regression analysis</li> </ul>
<b>Mandatory Prerequisites</b>	None
<b>Forms of Teaching and Proportion</b>	<p>Lecture - 2 hours per week per semester  Exercise - 2 hours per week per semester  Self organised studies - 120 hours</p>
<b>Teaching Materials and Literature</b>	<p>The lecture is based on selected chapters mostly from Morgan &amp; 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 &amp; 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 &amp; Pischke (2014). More details on experiments can be found in Gerber &amp; Green (2012).</p> <ul style="list-style-type: none"> <li>Pearl, J. (2009). Causality. Cambridge University Press</li> <li>Morgan, S. L., &amp; Winship, C. (2015). Counterfactuals and causal inference. Methods and Principles for Social Research. Cambridge University Press.</li> <li>Angrist, J. D., &amp; Pischke, J. S. (2014). Mastering'metrics: The path from cause to effect. Princeton university press.</li> <li>Gerber, A. S., &amp; Green, D. P. (2012). Field experiments: Design, analysis, and interpretation. WW Norton.</li> </ul> <p>A few additional shorter articles or chapters might be provided during the course of the module.</p>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>3 written partial examinations, 30 min each (each weighted 1/3)</li> </ul>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	Tutorials are open to questions in English and German.
<b>Module Components</b>	<ul style="list-style-type: none"> <li>Lecture Causal Data Science – 2 Hours per Week per Semester</li> <li>Exercise Causal Data Science – 2 Hours per Week per Semester</li> </ul>
<b>Components to be offered in the Current Semester</b>	No assignment



## 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

<b>Modul Title</b>	<b>AI-Assisted Statistics: Exploring Data with ChatGPT &amp; Co</b> KI-unterstützte Statistik: Datenanalyse mit ChatGPT & Co
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. Urbig, Diemo
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	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.
<b>Contents</b>	The course <i>Statistics with ChatGPT &amp; 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.

<b>Recommended Prerequisites</b>	Basics in statistics, in particular simple regression analyses
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 2 hours per week per semester Self organised studies - 150 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>Han, J., Qiu, W., &amp; 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</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>Two-weekly progress and reflection reports of at most 1 page, group-based (20%)</li> <li>Final presentation, 15 min, group-based (10%)</li> <li>Term paper, 15 pages, individual submission and grading (70%)</li> </ul> <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>
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	30
<b>Remarks</b>	none
<b>Module Components</b>	Seminar
<b>Components to be offered in the Current Semester</b>	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

<b>Modul Title</b>	<b>Design Science in Entrepreneurship and Management</b> Designwissenschaft in Unternehmertum und Management
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Prof. Dr. phil. Scheidgen, Katharina
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every winter semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<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>
<b>Contents</b>	<p>The course <i>Design Science in 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.

<b>Recommended Prerequisites</b>	<ul style="list-style-type: none"> <li>• Experience in reading and engaging with academic literature as well as</li> <li>• an interest in problem-solving are advantageous.</li> <li>• Basic knowledge of qualitative approaches such as case studies are helpful.</li> </ul>
<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	<ul style="list-style-type: none"> <li>• Denyer, D., Tranfield, D., &amp; Van Aken, J. E. (2008). Developing design propositions through research synthesis. <i>Organization studies</i>, 29(3), 393-413.</li> <li>• Gregor, S., Chandra Kruse, L., &amp; Seidel, S. (2020). Research perspectives: the anatomy of a design principle. <i>Journal of the Association for Information Systems</i>, 21(6), 2.</li> <li>• Opdenakker, R., &amp; Cuijpers, C. (2025). <i>Design Science Methodology for the Management Sciences</i>. Springer Texts in Business and Economics.</li> <li>• Seckler, C., Mauer, R., &amp; vom Brocke, J. (2021). Design science in entrepreneurship: Conceptual foundations and guiding principles. <i>Journal of Business Venturing Design</i>, 1(1-2), 100004.</li> <li>• Thuan, N. H., Drechsler, A., &amp; Antunes, P. (2019). Construction of design science research questions. <i>Communications of the Association for Information Systems</i>, 44(1), 20.</li> <li>• Romme, A. G. L., &amp; Holmström, J. (2023). From theories to tools: calling for research on technological innovation informed by design science. <i>Technovation</i>, 121, 102692.</li> <li>• Romme, A. G. L., &amp; 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.</li> <li>• Venable, J., Pries-Heje, J., &amp; Baskerville, R. (2016). FEDS: a framework for evaluation in design science research. <i>European Journal of Information Systems</i>, 25(1), 77-89.</li> </ul>
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"> <li>• Presentation including discussion, max. 10 minutes, group-based (50 %)</li> <li>• Term paper, 15 pages, group-based (50 %)</li> </ul>

<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar 530505</li></ul>
<b>Components to be offered in the Current Semester</b>	<b>530505 Seminar</b> 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

<b>Modul Title</b>	<b>Intercultural Competence</b>
	Interkulturelle Kompetenz
<b>Department</b>	Faculty 5 - Business, Law and Social Sciences
<b>Responsible Staff Member</b>	Dr. phil. habil. Havlin, Tetiana
<b>Language of Teaching / Examination</b>	English
<b>Duration</b>	1 semester
<b>Frequency of Offer</b>	Every summer semester
<b>Credits</b>	6
<b>Learning Outcome</b>	<p>Approaching 'the social' as an outcome of interdependencies of classifications, narratives and discourses on the one hand and social practices and institutional contexts on the other, essentialist and holistic views on 'culture' are to be critically reviewed.</p> <p>Within a transcultural lens, culture is the product of hybridization, entanglements and exchanges. Thus, cultures can no longer be understood as homogeneous or separated, but are complex and inner differentiated. Cultures go beyond national borders, their central meaning is permanently fought out by different actors within unequal and transnationally linked power structures.</p> <p>Students will acquire competencies in:</p> <ul style="list-style-type: none"> <li>• Understanding and applying theories and methods of cultural sociology and interdisciplinary theories of culture and society</li> <li>• Understanding dynamics between culture, belonging and power with respect to social phenomena</li> <li>• Analyzing and comparing texts and approaches, applying approaches to the scientific study of social phenomena</li> </ul>
<b>Contents</b>	The module will focus on (and differentiate between) various concepts of subject, culture and power. It aims at critically reflecting different fields of application of theories of culture and society. What is more, it deals with different methodologies for analyzing and understanding cultural entanglements from a critical/constructivist perspective and apply them exemplarily.
<b>Recommended Prerequisites</b>	none

<b>Mandatory Prerequisites</b>	none
<b>Forms of Teaching and Proportion</b>	Seminar - 4 hours per week per semester Self organised studies - 120 hours
<b>Teaching Materials and Literature</b>	to be announced in class
<b>Module Examination</b>	Continuous Assessment (MCA)
<b>Assessment Mode for Module Examination</b>	<ul style="list-style-type: none"><li>• Active participation / performance I as group + ~500 words of documentation (25%)</li><li>• Active participation / performance II as group + ~500 words of documentation (25%)</li><li>• learning journal based on the readings ~ 2500 words (50%)</li></ul> detailed explanation in class
<b>Evaluation of Module Examination</b>	Performance Verification – graded
<b>Limited Number of Participants</b>	none
<b>Remarks</b>	none
<b>Module Components</b>	<ul style="list-style-type: none"><li>• Seminar Introduction to Critical Intercultural Communication Studies</li></ul>
<b>Components to be offered in the Current Semester</b>	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 10. November 2025 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 10. November 2025. 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 10 November 2025, 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 10 November 2025. 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.