

## **Fundamentals for human-environment research WS18/19**

*IRI THESys seminar for doctoral students and advanced Master's students*

Tentative course outline (subject to minor changes)

**Course responsible:** Cecilie Friis

**Teachers:** Jörg Niewöhner, Tobias Krüger, Jonas Nielsen, Marcel Twele, Bettina König, Carl-Friedrich Schlußner, Cecilie Friis

**Seminar time:** Friday 19.10.18 to Friday 15.02.19, from 10-12 (2 SWS), Room 4088, IRI THESys

### **Course description**

This course aims at giving doctoral students and advanced Master's students (final year) an introduction to the fundamentals for engaging in interdisciplinary human-environment research. Taught by professors at the IRI THESys, the course introduces students to the range of scientific practices for building explanations and constructing knowledge in human-environment research. The themes covered include brief introductions to the history of western scientific thought, contemporary philosophy of natural and social science, normative theory, numerical modelling and statistical inference, socio-cultural anthropology and human geography, as well as inter- and transdisciplinarity. A common empirical theme will be used to exemplify the different thought-styles and practices throughout the course. This year the theme is land-use change in a globalised world. The course is a reading- and discussion-based seminar with each session starting with a short input from the teachers and moving on to discussions based on key texts provided prior to the class. In group work and homework assignments the students will reflect on the different perspectives against their own disciplinary training, as well as discuss how these can be engaged in the development of interdisciplinary research questions.

By active participation in the class, the students will receive 2 credit points (doctoral students) or 5 Leistungspunkte (Master's students).

## Course plan

Date	No.	Session (tentative session plan)	Teacher
19.10.18	1	Fundamentals for human-environment research: Introduction to the course	<b>Cecilie Friis</b> All
<b>The history and development of western scientific thought and contemporary philosophy of natural &amp; social science</b>			
26.10.18	2	From the Vienna circle to constructionism (The analytical project; The root of western scientific knowledge production)	<b>Jörg Niewöhner</b> Cecilie
02.11.18	3	The contingency of scientific knowledge	<b>Jörg Niewöhner</b> Cecilie Friis
<b>Normative Theory and Political Philosophy</b>			
09.11.18	4	Objectivity and truth in ethics and political philosophy	<b>Marcel Twele</b> Cecilie Friis
16.11.18	5	Justification and argument in ethics and political philosophy	<b>Marcel Twele</b> Cecilie Friis
<b>Explanations in the natural sciences – perspectives from Numerical Modelling and Statistical Analysis</b>			
23.11.18	6	Explanations in the natural sciences: causal explanations, hypothesis testing, theory building	<b>Carl-Friedrich Schleußner</b> Cecilie Friis
30.11.18	7	Statistical inference	<b>Tobias Krüger</b> Cecilie Friis

07.12.18	8	Uncertainty considerations in the natural sciences	<b>Tobias Krüger</b> Cecilie Friis
<b>Explanations in the social sciences – perspectives from Socio-cultural Anthropology &amp; Human Geography</b>			
14.12.18	9	Explanations in the social sciences: from rational over functional and structural explanations to social science as interpretation	<b>Jonas Nielsen</b> Cecilie Friis
11.01.19	10	Key concepts: Culture, power/knowledge, apparatus	<b>Jörg Niewöhner</b> Cecilie Friis
18.01.19	11	Qualitative analysis: Objectivism, positionality and knowledge production in social sciences	<b>Jonas Nielsen</b> Cecilie Friis
25.01.19	12	Critique and reflexivity	<b>Jörg Niewöhner</b> Cecilie Friis
<b>Inter- and transdisciplinarity in human-environment research</b>			
01.02.19	13	Interdisciplinary exchange: Different modes and logics	<b>Cecilie Friis</b>
08.02.18	14	Co-producing knowledge: Transdisciplinary perspectives on human-environment research	<b>Bettina König/Tobias Krüger/Jörg Niewöhner</b> Cecilie Friis
15.02.18	15	Constructing interdisciplinary research questions and building explanations in interdisciplinary human-environment research	<b>Cecilie Friis</b> Group work All