Hessen:ISU
International Summer University
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HESSEN

UNIKASSEL
VERSITÄT

Hessen: ISU Course Outline

ADAPTION STRATEGIES TO CLIMATE CHANGE

CLASS HOURS: 20+tutorial

Lectures	**14 hours (credited)**
Tutorial	**2 hours (not credited)**
Field Trip / field test	**6 hours (credited)**

PROFESSOR (Academic Director)

Prof. Dr. Stephan Theobald

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Lecturers:

Apl. Prof. Dr. Rüdiger Schaldach, Director of the Global and Regional Dynamics research group at CESR (Center for Environmental Systems Research), U Kassel

Dr.-Ing. Swen Klauß, Department of Building Physics at U Kassel, FB (Faculty) 06 – Urban Planning – Landscape Planning

Dr. Dietrich Schmidt, Fraunhofer Institute for Energy Economics and Energy System Technology (IEE), Kassel

Prof. Dr. David Laner, Head of the Research Center for Resource Management and solid Waste at the University of Kassel
Prof. Dr. Kai Füldner, Director of the Städtische Museen Kassel (City Museum and Museum of Natural History), lecturer at the University of Kassel (Biology) and University of Göttingen (Forest Zoology)

1)INFORMATION ON THE COURSE CONTENT

COURSE DESCRIPTION

Adaptation to the consequences of climate change, such as extreme weather conditions and changing rainfall distribution is one of the major challenges facing science and technology. Climate projections indicate a number of challenges we have to confront. This course is intended to provide an overview of adaptation requirements, especially in areas of importance for business and society which stand to be affected by climate change. In particular, the commercial sectors of tourism and health, transport and energy technologies, not to mention agriculture, forestry, and water management, are of major significance.
Problems posed by climate change, with specific reference to the region of North Hesse, will be examined in order to develop and implement possible strategies of adaptation.

LEARNING OBJECTIVES

The interdisciplinary seminar is built around a series of lectures concerned with climate change adaptation strategies, delivered by professors from diverse disciplines. Students learn from and are inspired by leading academics working at the forefront of their fields. All lectures are additionally attended by tutors who supervise the students throughout the series. They also accompany the students on field trips and help them prepare for the final exam.

COURSE MATERIALS

Introductory recommendation before the course starts*: The Global Status Report REN21- Renewable Energy Policy Network for the 21st century: http://www.ren21.net/ren21activities/globalstatusreport.aspx*

- All further material will be given during the course.

TENTATIVE CLASS SCHEDULE

Day	Topic	Structure and Assignment given	Lectures
1	**Climate Projections and Scenarios**	Presentation Discussion Recommendations for post-course work to reinforce understanding	n.n.
2	**Land Use and Climate Change**	Presentation Discussion Post-course work recommendations	Prof. Dr. Rüdiger Schaldach
3	**Urban Climate**	Fraunhofer IEE (Institute for Energy Economics and Energy System Technology) Visit and lecture/presentation Discussion Post-course work recommendations	Dr. Dietrich Schmidt and experts on site
5	**Landfill mining and Climate impac**	Presentation Discussion Post-course work recommendations	Prof. Dr. David Laner
6	**Field Trip: Wolfhagen – factory and energy concept**	Field trip with factory visit, presentation Discussion	Experts on site
3	**Excursion to Autarcon, Kassel**	Field trip - Company providing solutions for decentralized, energetically self sufficient drinking water treatment Presentation Discussion	Experts on site
7	**Thermal Comfort in Buildings**	Presentation Discussion Post-course work recommendations	Prof. Dr. Klauß
8	**Forestry and Climate Change**	Presentation Discussion Post-course work recommendations	Prof. Dr. Kai Füldner

2)INFORMATION ON CLASS PARTICIPATION, ASSIGNMENTS AND EXAMS

ASSIGNMENTS

- Active participation in discussions and presentations, independent study

EXAMS

- Written exam

PROFESSIONALISM & CLASS PARTICIPATION

- Regular attendance in lectures and field trips

MISSED CLASSES

No more than 10% of the contact hours can be missed for successful completion of the class.

3)INFORMATION ON GRADING AND ECTS

ACADEMIC STANDARDS

Upon successful completion, 3 ECTS will be awarded for the class.

According to the rules of ECTS, one credit is equivalent to 25-30 hours student workload.

GRADING SCALE:

Grade		*Description*
15 points	*1.0*	*very good: an outstanding achievement*
14 points		
13 points	*1.3*	
12 points	*1.7*	*good: an achievement substantially above average requirements*
11 points	*2.0*	
10 points	*2.3*	
9 points	*2.7*	*satisfactory: an achievement which corresponds to average requirements*
8 points	*3.0*	
7 points	*3.3*	
6 points	*3.7*	*sufficient: an achievement which barely meets the requirements*
5 points	*4.0*	
4 points	*5.0*	*not sufficient / failed: an achievement which does not meet the requirements*
3 points		
2 points		
1 point		
0 points		