

ASL Course Catalogue

of Seminars, Lectures and Excursions
in English

Less:On Climatology

Lecture

Prof. Dr. Jänicke; M.Sc. Ahmed

Bilingual

FG Umweltmeteorologie

In this seminar you will get an overview on the fundamental physical processes, that are responsible for weather and climate on the local scale and larger. Matters such as concepts and scalas of climatology, processes of air temperature, air pressure, water and clouds, climate classification and air pollutant among other things will be discussed.

The seminar is built up, so that there's first an input from the teachers in English and German, followed by a presentation by a student on the application in ASL of the concepts learned with a discussion. There will be a written exam in this seminar

Registration and further Information on: <https://moodle.uni-kassel.de/course/view.php?id=5181>

Credits: 3 in A or D

Link: <https://portal-sso.uni-kassel.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=215867&module-Call=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Infrastructures, Geoengineering and Imaginaries of Space

Seminar

Prof. Dr. Alla Vronskaya; Prof. Dr. Mi You

English

FG Geschichte und Theorie der Architektur

The seminar, offered as a collaboration between FB05, FB06, and the Kunsthochschule, will explore how geographic and urban space is organized, structured, and constructed by art, architecture, infrastructure, and technology. In the course of the semester, we will read texts and discuss projects that deal with several selected topics related to geographic imaginaries and their architecturalizations. Together, we will think about such questions as: How is space invented and constructed? What is the difference between social, physical, geographic, and environmental space? What is the role of infrastructure in the construction of space? What is the environmental role of geoengineering, and how is one to live in its aftermath? What role do art and architecture play in shaping different spatial programs?

All students will be required to complete weekly readings and participate in discussion. There are no final papers or projects and no final examination.

It is possible to write a Studienarbeit in connection to this seminar.

Credits: 3 in A

Link: https://ecampus.uni-kassel.de/qisserver/pages/cs/sys/portal/hisinoneIframePage.faces?id=qismenu_e_course_overview&navigationPosition=link_qismenu_courses%2Clink_qismenu_course_overview&recordRequest=true

Computational modelling for climate-resilient planning and design

Lecture/Seminar

M.Sc. Nisha Patel

English

FG Umweltmeteorologie

Computational models are an essential tool to understand, analyse and predict the local and regional climate and to facilitate climate change adaptation and climate-resilient planning and design. This seminar provides an overview of a variety of different models that are used to analyse the past, current and future state of the near-surface atmospheric conditions. The seminar will consider regional climate (RCM), urban canopy (UCM), building energy models (BEM), and cover approaches such as multi-scale and integrated models and tools, but focus on outdoor thermal comfort (OTC) modelling. One or two selected user-friendly models will be studied more intensively and will be applied for a test case.

The combined lecture and seminar usually consists of basic input, student presentations and/or group discussions followed by a hands-on exercise. Study achievements include solving exercise tasks in the seminar and short presentations in the lecture. Exams achievement comprising a presentation (50%) and a seminar assignment (50%).

Registration and further Information on: <https://moodle.uni-kassel.de/course/view.php?id=5191>

Credits: 6 in C

Link: https://ecampus.uni-kassel.de/qisserver/pages/cs/sys/portal/hisinonelframePage.faces?id=qismenu_course_overview&navigationPosition=link_qismenu_courses%2Clink_qismenu_course_overview&recordRequest=true

Place and Space: Theories and Methods for Architectural History

Seminar

M.A. Sarah Wheat

English

FG Geschichte und Theorie der Architektur

What connects us to a place (such as our hometown or the country we come from)? How might our experiences of spatial organization shape our notions of self, how we interact with others, and our sense of community? This seminar foregrounds the constructs of "place" and "space" in order to approach histories of architecture and the built environment through a critical and socially engaged lens. The goals of this interactive and discussion-based seminar are to 1) explore the history of philosophical thinking related to how humans experience designed spaces and the power of place in social, cultural, and political organization 2) provide students with tools to critically engage with the everyday places in which we live, work, and socialize.

Each class meeting will consider a type of space, spatial relationship, and/or a specific place (such as the home, the shopping mall, the nation, the UNESCO heritage site) paired with weekly readings by authors that utilize concepts of space and place to consider issues including authorship, agency, class, race, and gender struggles.

Requirements for the seminar are to complete weekly readings, come to class ready to actively participate in discussion, and work on an independent final project. There is no final examination.

Credits: 3 in A

Link: https://ecampus.uni-kassel.de/qisserver/pages/cs/sys/portal/hisinonelframePage.faces?id=qismenu_course_overview&navigationPosition=link_qismenu_courses%2Clink_qismenu_course_overview&recordRequest=true

Digitale Bauprozesse - Robotic Fabrication

Seminar

Prof. Philipp Eversmann; M.Sc. Julian Ochs

Bilingual

FG EDEK

AIM

This seminar provides basic knowledge for architectural design and fabrication with industrial robots. How can we use our digital drawing for a subsequent digital assembly? What is needed to instruct a robot arm to perform task involving movement and actions like picking and placing objects? What information needs to be put in the drawing and how does it need to be translated to be understood by a robot controller?

TOPIC

The topic of this seminar is building your own parametric design by using an industrial robot arm. In order to achieve that, you will learn basic acknowledgement of Grasshopper and Rhinoceros, use our software's robot components and ABB RobotStudio to simulate the robot arm, and finally build a structure in small scale with the ABB industrial robot arm. There are often many unexpected problems in the process from theory to practice, such as accuracy issues, singularity problem in robotics, features of different materials. In this seminar students will find and solve those problems, so that they can be considered in advance in future designs.

Credits: 6 in C

Link: <https://portal-ss0.uni-kassel.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=217065&module-Call=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Digitales Entwerfen: Modular Design in Virtual Reality

Seminar

Prof. Philipp Eversmann; M.Arch. Andrea Rossi; M.Sc. Jan Philipp Drude

Bilingual

FG EDEK

The seminar aims at exploring novel collaborative design scenarios for generating modular architecture, using Virtual Reality (VR). Software for intuitive use will be provided by the teaching team. The overall goal of the seminar is twofold: from one side, we will explore computational tools to generate modular assemblies of large numbers of repetitive parts, reflecting on different concepts of modularity in architecture; at the same time, we will discuss scenarios of collaborative design in architecture to create different kinds of public space interventions in different areas of Kassel. Rather than focusing exclusively on the design of modular systems, the seminar will also explore the process of collaboratively assembling structures within an immersive design system, using 3d environment data as background for the development of modular public space infrastructures.

REQUIREMENTS & ENROLMENT

Participants will need a basic understanding of Grasshopper and Rhino. Partaking in the design process with own VR devices is also possible (Oculus Rift and HTC Vive are supported. Other headsets might also work, but we cannot guarantee that).

NB: Participation in both workshop during the semester is required to complete the seminar successfully

Credits: 6 in C

Link: <https://portal-ss0.uni-kassel.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=217067&module-Call=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Digital Basics

Seminar

Prof. Philipp Eversmann; M.Sc. Hannah Hagedorn

Bilingual

FG EDEK

This seminar caters to students without any prior knowledge in Rhino and Grasshopper, who would like to learn about the algorithmic and parametric CAD-Tools.

This seminar will teach the basics of 3D-modelling in Rhino, as well as algorithmic design in Grasshopper. The course is organised through informative lectures about the basics, 3D CAD-techniques and parametric design. Teaching sessions in the software „Grasshopper for Rhino“ and weekly exercises form the practical part of the seminar. During which 3D designs will be developed from points and curves to complex planes and volumes. You will learn to connect these with external influences, such as lighting situations, and to develop spatial answers to those influences. Through a small model and a 3D-print tactics for the execution of digital models into the physical world will be learned.

Examination consists of weekly exercises, which are completed in Rhino and Grasshopper and documented with two physical models, and a final documentaion of the results as a printed reader.

Credits: 6 in C

Link: <https://portal-ss0.uni-kassel.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=213062&module-Call=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Excursion and Workshop Cuba: Havanna, Santa Clara, Caibarién

Excursion/Workshop

Prof. Dr. Uwe Altrock; Dr. Umut Kienast-Duyar

English

FG Stadterneuerung und Planungstheorie

As part of a longstanding partnership of our faculty with the University of Santa Clara there will once again be a excursion this semester. We will have the opportunity to thoroughly get to know Havanna and Santa Clara with our partners. After that we will travel to Caibarién, a formerly important port on the north coast of the country and starting point of foreign traffic of the region and the surrounding isles. Together with our cuban partners we will examine the local urban development and renovation and will develop among other things concepts for the revitalization of urban blocks, the handling of the old port as well as further development of new quarter in the suburban space.

The excursion offers topics for students of A, S and L. Support by DAAD/Promos is planned.

Dates and locations for preparation meeting will be announced on moodle.

Credits: 6 in A, C and D

Link: <https://portal-ss0.uni-kassel.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=217316&module-Call=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Social Modernism: Theory and Practice

Seminar

Dr. Igor Demchenko

Bilingual

FG Architekturtheorie und Entwerfen

The social dimension of modern architecture is too often overshadowed by the originality of its formal language. Yet the innovative impulse of modernist architectural forms was to a considerable degree predicated upon its avant-garde social program. Under the demographic pressure that resulted in constant and continuous surplus of unskilled workforce, modernist architects and urban planners of the first half of the 20th century propagated the economic and creative use of materials, the rational arrangement of space and the recreational use of color. By focusing on the modernist settlements (Siedlungen), including Siedlung Rothenberg in Kassel, that aimed at solving the urgent housing problem while supplying the working-class population with modern services, leisure and education facilities, the course will explore the social theory behind the modern design experiments and provide students with in-depth historic knowledge of their practical outcome.

The languages of instruction are English and German.

Credits: 3 in A

Link: https://ecampus.uni-kassel.de/qisserver/pages/cs/sys/portal/hisinoneframePage.faces?id=qismenu_course_overview&navigationPosition=link_qismenu_courses%2Clink_qismenu_course_overview&recordRequest=true&chco=y&chco=y

Tex Arch (Master)

Seminar

Prof. Dr. Julian Lienhard; M.Sc. Dongyuan Liu; M.Sc. Gregor Grünkorn

Bilingual

FG Tragwerksentwurf

Advanced seminar for membrane structures, textile architecture and formfinding.

Student research in C is possible.

Credits: 6 in C

Link: https://ecampus.uni-kassel.de/qisserver/pages/cs/sys/portal/hisinonelframePage.faces?id=qismenu_e_course_overview&navigationPosition=link_qismenu_courses%2Clink_qismenu_course_overview&recordRequest=true&chco=y&chco=y

Urban microclimate and mitigation through retractable roofs (Master)

Seminar

Prof. Dr. Julian Lienhard; M.Sc. Gregor Grünkorn

Bilingual

FG Tragwerksentwurf

The design research aims to establish the knowledge base about urban microclimate with focus on formation of urban heat islands, and how retractable roof structures could contribute to mitigation of such effects. Computational methods will be introduced in this context to facilitate the research. Case studies and excursion/site visits can be expected.

Credits: 6 in C

Link: https://ecampus.uni-kassel.de/qisserver/pages/cs/sys/portal/hisinonelframePage.faces?id=qismenu_e_course_overview&navigationPosition=link_qismenu_courses%2Clink_qismenu_course_overview&recordRequest=true&chco=y&chco=y

Masterthesis Preparation

Seminar

Prof. Philipp Eversmann; M.Arch. Andrea Rossi; M.Sc. Julian Ochs

Bilingual

FG EDEK

AIM

The master thesis at Uni Kassel is the first-time students have to develop their design work without the framework of a design studio. The development of the precise topic, workplan and exposé is often a difficult task for students

TOPIC

This seminar is required for student who wants to do a master thesis with EDEK in WiSe 2020 or later. During this semester, students will develop preliminary experiments under our tutors' supervision to formulate their research topic for the official thesis project. As the final-outcome, tested research methodologies and a written expose will be expected.

Students will have the opportunity to select one of the general topics within our research agenda that will presented in the first meeting. Each student then should develop a specific project title under the chosen topic with the supervision of the appointed tutor(s). This title will be investigated by doing experiments to find a feasible method that will be used in the official thesis project. Every will be discussed with the whole EDEK teaching team by regular monthly presentation by the students.

Credits: 6 in C

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