# Bauhaus-Universität Weimar

# Vorlesungsverzeichnis

M.Sc. Advanced Urbanism PO 2013/ PO 2014

Winter 2017/18

Stand 07.05.2018

| M.Sc. Advanced Urbanism PO 2013/ PO 2014 | 3  |
|--|----|
| Studienprojekt                           | 3  |
| Pflichtmodule                            | 3  |
| Wahlpflichtmodule                        | 10 |

Stand 07.05.2018 Seite 2 von 13

# M.Sc. Advanced Urbanism PO 2013/ PO 2014

# Studienprojekt

#### **Pflichtmodule**

## 117221203 Theories of Urban Design: Reading Robert Venturi

S. Rudder Veranst, SWS: 2

Seminar

Mi, wöch., 09:15 - 10:45, Belvederer Allee 5 - Seminarraum 007, 11.10.2017 - 02.02.2018

#### Beschreibung

The architectural historian Vincent Scully called the book 'probably the most important writing on the making of architecture since Le Corbusier's 'Vers Une Architecture'. Although that may be overstated, it can be said that Robert Venturi's 'Complexity and Contradiction' from 1966 is one of the most-read publications on theory of design. The equally successful 'Learning from Las Vegas', published in 1972, is a groundbreaking and sometimes even funny study on the visual representation of urban space, seen through the windshield of a car.

Venturi is well known for catchy phrases like 'less is a bore' or 'decorated shed' – but there is much more: He had a keen interest in the ordinary city and the reality of everyday places. The seemingly ugly, the distasteful, bland and trivial raised his interest and stimulated his curiosity.

In the seminar we will read and discuss Venturi's writings, try to understand his way of thinking and find out if we can learn from his non-dogmatic perspective on the city.

The seminar's second subject is reading itself. You will learn about different reading techniques and how to extract meaning from text and theory. The seminar is supposed to promote a knowledge-based, critical understanding and encourage taking up a personal position to become an autonomous reader.

#### Bemerkung

https://www.uni-weimar.de/index.php?id=39368

#### 117222801 "Planet of Slums"? Housing the Urban Poor world-wide

B. Zamzow Veranst. SWS: 2

Seminar

Mo, wöch., 11:00 - 12:30, Belvederer Allee 5 - Seminarraum 007, 16.10.2017 - 02.02.2018

#### **Beschreibung**

Cities in the world are growing, and they are growing faster in the Global South than they did in the firstly industrializing countries in Europe and North America at the turn of the 20th century. Today, informal housing shapes cities' structures across the world. Also, informal settlements grow faster than any other formal structures and with no interference by the state or other means of city planning. Their conditions are mostly desolate.

In this seminar, concrete housing policies or theories will not so much be the focus, as the main goal is to understand the overarching structural connections of development in a globalized world and how this plays out on a local level. Mike Davis' "Planet of Slums' will therefore be the main research body to draw from. Especially post-colonial studies as a critical approach shall raise the students' awareness of constantly challenging the status quo and their own perception of what makes "a good city". Inequality and Poverty will be concepts to get acquainted with through different definitions and articles. As a more practical approach, Community Development as one way to understand, plan and lift slums out of their structural deficiencies will be discussed, always on the background of critically viewing what some theorists might call a neo-liberal turn to "Uneven Development".

Stand 07.05.2018 Seite 3 von 13

Discussing the students' own experiences with the help of provided text material and presentations, the questions raised will be: What is a slum? How did it come into being? Are there world-wide similarities and therefore solutions? In what way are slums located in the city? Which processes build up informal settlements, and most difficult of all, are slums the other side of the coin of globalization or are they an opportunity to learn about cities in the future? While the questions will not be easy to answer, they will draw on a systemic understanding that can be used for each student's own seminar paper that is to be handed in by the end of the semester:

Richtet sich an: Advanced Urbanism, European Urban Studies.

Termine: montags, 11:00 bis 12:30 Uhr, 1. Termin 16.10.2017

Ort: Dozentin: Brigitte Zamzow M.A.

Einschreibung erfolgt online via BISON. / In order to get registered please use the online platform BISON.

#### Bemerkung

Richtet sich an: Advanced Urbanism, European Urban Studies.

Termine: montags, 11:00 bis 12:30 Uhr, 1. Termin 16.10.2017

Einschreibung erfolgt online via BISON. / In order to get registered please use the online platform BISON.

# 117222802 Neighborhood Life and Urban Space

**F. Eckardt** Veranst. SWS: 2

Seminar

Mi, wöch., 11:00 - 12:30, Belvederer Allee 5 - Seminarraum 007, 18.10.2017 - 02.02.2018

#### Beschreibung

A general question in urban studies is how to understand the relationship between society and space and how to define urban space empirically. To answer that, there is a need for a better and deeper understanding of the phenomenon of urban space and its effects on people's lives. This seminar aims to observe the physical and spatial environment in relation to social outcomes in the city.

In historical and sociological studies of everyday life, the spatial dimension is generally missing or at best is taken for granted and what is found is often an indirect description of the city (Franzén 2009). Jane Jacobs was one of the first to acknowledge that the urban layout plays an important role in generating urban life, heterogeneity, and urban qualities.

To study the relationship between society and space, the city needs to be recognized as both a physical and a social entity and urban theory and practice need to connect these (Hiller and Vaughan 2007). Space has an active and structured engagement with social life, and without understanding this it is impossible to fully realize the theoretical promise of the social study of space (Hillier 2008).

In several publications, it has been emphasized the need to link social theories to design level theories; Hillier believes that the problematic linking between social goals and urban design is partly caused by the absence of any meeting of minds or sharing of interests by social theorists and built environment professionals. What we find in practice are a number of conventional, theory-like propositions that link spatial forms to social outcomes. Hiller argues that many of these ideas are not based on evidence and the experience suggests that they are probably wrong.

This seminar looks through a number of social and spatial theories at how specifically the built environment is taken into account and what influences on social life are ascribed to it. It is an attempt to realize the concept of social life in the scale of neighborhoods and to investigate its significance and effects in relation to urban space. The discussion would be more related to urban sociology debates linked to urban design.

1st. Sess. Introduction to the City

2nd. Sess. Perspectives on Urban Space

3rd. Sess. Understanding Urban Process, Space, Form

4th. Sess. Society and Space

5th. Sess. Social Theories: Simmel

6th. Sess. Social Theories: Park

Stand 07.05.2018 Seite 4 von 13

7th. Sess. Social Theories: Jacobs

8th. Sess. Presentations: How do you describe social life in your hometown? 9th. Sess. Presentations: How do you describe social life in your hometown?

10th. Sess. Neighborhood: a Place for Social Life 11th. Sess. Neighborhood and Accessibility 12th. Sess. What is Spatial in Social life?

13th. Sess. What do we know of Neighborhood Effects: Glaster

14th. Sess. Presentations: How do you connect locations and social relations in your hometown?

15th. Sess. Presentations: How do you connect locations and social relations in your hometown? Final Discussion and Remarks

This seminar delves into theories of urban sociology and the aim is to shed light on broader urban dynamics in order to rethink radical social change and the city itself in more relevant enabling ways. This is a reading and speaking intensive seminar that will help students to get well prepared for discussion.

In the first part of the double lessons session, I will start with a short contextualization and then there will be a discussion of the key readings assigned for the week, seeking the idea of students about the subject and posing a set of key questions. This would encourage students to improve their skill in reading and understanding scientific texts. In the second part, I will lead the discussion in order to flag important themes to which we should pay attention, framing the book/articles and posing a set of key ideas.

In two sessions, the students are responsible for presentation and chairing the discussion in groups of two or three, trying as much as possible to provide some direction to the subject. They begin with a short 10-15 minutes presentation of the key themes or problems to make linkages to theoretical and conceptual issues addressed in previous sessions. Each student will be expected to perform a task to strengthen arguments and improve group working skill.

## 117222901 European urban planning applied outside Europe

N.N. Veranst. SWS: 2

Seminar

Do, Einzel, 15:15 - 18:30, Belvederer Allee 5 - Seminarraum 005, 12.10.2017 - 12.10.2017 Do, unger. Wo, 15:15 - 18:30, Belvederer Allee 5 - Seminarraum 005, 09.11.2017 - 21.12.2017 Do, gerade Wo, 15:15 - 18:30, Belvederer Allee 5 - Seminarraum 005, 11.01.2018 - 25.01.2018

# Beschreibung

#### The Latin-American Case

Theory, history and critic.

"The discovery of America" introduced the "new world" to a series of transformations, particularly in the field of urban planning. With colonizers started a tradition where "the new continent" became an open laboratory of urban proposals. The vast territory was interpreted as a blank canvas where european theories and models could be materialized, erasing almost all traces of the native peoples. These newly-founded settlements started to develop in the 16th century and consolidated after the countries gained their independence. To this day they account for the vast majority of the current urban-regional configuration. However, during the second half of the 20th century the colonial layout underwent significant changes.

The curricular content of the Seminar seeks to critically address the analysis of the urban planning development in different Ibero-American contexts, from its founding moment until present, as a result of the application of European urban planning. Even though each country experienced its own history, at a larger scale, they share certain development phases, which allow for comparison. Thus, the program of the Seminar is divided into five thematic units: Native People period or Prehispanic period; Colonial period; 19th century or Liberal State; 20th century and 21th century or Neoliberal State; studied in chronological order.

The theoretical framework that supports the analysis is a critical approach based on de-/post-colonial theory and the application of instrumental concepts: Region; Identity; Heritage; Processes of Transculturation; Globalization; and dialectical pairs of words such as: Universal-Particular; Center-Periphery; Ideal-Real; Local-Global. From the instrumental concept of Transculturation and its different modalities, it is intended to identify variants and invariants between the European model and theory –in tension with a different social, economic and geographical context,

Stand 07.05.2018 Seite 5 von 13

much more diverse and extensive— and the American examples, comparing urban elements and local inputs. The examples will be deconstruct to identify historical layers by reading texts, contexts, and re-drawing the urban form as a tool to understand them.

To ensure a rich exchange between tutors and students, the interaction among those attending the seminar with it is crucial to bring together the experience of the 'local specialist' (the tutor) with the point of view of the 'outsider' (the students). To develop a deeper understanding of European urbanism that influenced Latin American urbanism, paradigmatic case studies of the regional contexts will be chosen. Another key factor will be the graphical assessment of the case studies' layout, which requires students to draw a synthetic representation of the urban structure in order to communicate it easier to the group. The critical approach promotes the permanent updating of knowledge and content, regarding urban development and warning about urban processes in Latin America.

Educational objectives of the course;

- To present a de-/post-colonial approach in order to encourage a critical view of the implementation of European urban planning applied outside Europe, in Latin America.
- Deconstruct Latin American Urban form to identify the relationship between significant historical events, geographical and cultural regions, European urban models and theories, instrumental concepts and urban planning.

#### **Bemerkung**

Seminar schedule Thursday 12.10.2017 Presentation of Seminars schedule and conformations of groups. Virtual survey to get to know the origin of the students and measure their background knowledge. Introduction of the critical approach: de-/post-colonial theory and instrumental concepts. Brief explanation of Prehispanic urbanism in Latin-America -Mesoamerica and South America- as background for the incoming debates.Case studies: Mesoamerica: Tenochtitlan and Chichén Itzá – Tikal (Mexico) -South America: Cuzco (Peru). Other cities may be considered upon discussion Introduction to Colonial urbanism in Latin America.Thursday 2.11.2017 Presentation of European urban models and theories.li>Ideal Renascences cities; Romans militaries camps; Santa Fe de Granada, Spain; the Laws of Indies and medieval Portuguese's towns. Graphic and conceptual assessment of Colonial urbanism: Spanish and Portuguese crown.Case studies: - Spanish Colonial America: Cities of Hispanic foundation (types: regular, irregular, fortified, overlapping, Mediterranean, port): Mexico City (Mexico), Córdoba City, Buenos Aires City (Argentina) and Potosí (Bolivia). - Portuguese Colonial America: Cities of Portuguese foundation: Ouro Preto and Salvador de Bahía (Brasil). Other cities may be considered upon discussion Inferences and critique of the analyzed case of studiesa- Student presentation of the critical analysis. b- Debate about the case studies, similarities and differences between them, and references to other world-wide-known European examples of the same period. Thursday 16.11.2017 Introduction to urbanism of the 19th century in Latin America – Republican Period.Presentation of European urban models and theories./ol>Hygienic, Romanticism, Positivism, Academicism, Paris of Baron Haussmann, Cerdá's Plan for Barcelona, Lineal City of Sotia y Mata, the Industrial City of Tony Garnier and Rome of Pio V. Graphic and conceptual assessment of the Liberal urbanism.c)>Case studies: < Transformations in colonial cities: Buenos Aires City and Córdoba City (Argentina), <p>- Cities of new layout: Belo Horizonte (Brazil) and La Plata (Argentina). Other cities may be considered upon discussion Thursday 30.11.2017 Inferences and critique of the analyzed case studiesa- Graphic and conceptual assessment of the case studies b- Student presentation of the critical analysis. c- Debate about the case studies, similarities and differences between them and references to other world-wide-known European examples of the same period. Thursday 14.12.2017 Introduction to urbanism of the 20th century until nowadays in Latin America.Presentation of European urban models and theories.Garden City of Ebenezer Howard, Athens Charter (1933 - 4th International Congress of Modern Architecture) // Team X Latin America critical approaches to urban planning. Graphic and conceptual assessment of the 20th century first part urbanism: The Moderm Movement in Latin America. /ol>Case studies: - Planned cities: Brasilia (Brazil). - University cities: UNAM Campus (México) and Caracas Campus (Venezuela). Other cities may be considered upon discussion Semester breaks/Holidays Thursday 11.01.2018 Inferences and critique of the analyzed case of studiesa- Graphic and conceptual assessment of the case studies b- Student presentation of the critical analysis. c- Debate about the case studies, similarities and differences between them and references to other world-wide-known European examples of the same period. Thursday 25.01.2018 Graphic and conceptual assessment of the 20th century second part and 21th century: Capitalism in Latin America.Case studies: - Buenos Aires: Puerto Madero, Villa 31 (slum number 31), Nordelta. - Córdoba (Argentina):<a href="http://www.linguee.es/ingles-espanol/traduccion/" decentralization.html"> decentralization</a> process, Barrios-Ciudad, Gated Community. - 'Successful' cases: Curitiba (Brazil) and Medellín (Colombia). Other cities may be considered upon discussion a- Graphic and

Stand 07.05.2018 Seite 6 von 13

conceptual assessment of the case studies b- Student presentation of the critical analysis. c- Debate about the case studies, similarities and differences between them and references to other world-wide-known European examples of the same period. Thursday 25.01.2018 Feedback Could be also the 19.10.2017

## 117222902 The Public Space

U. Merkle Veranst. SWS: 2

Seminar

Do, wöch., 13:30 - 15:00, Belvederer Allee 5 - Seminarraum 007, 12.10.2017 - 02.02.2018

#### **Beschreibung**

Public urban spaces are most commonly understood to be generally accessible spaces that are to be equally used by everyone. They are said to facilitate democratic functions and the mutual encounter of people from different social backgrounds and of the multitude of varied life-styles, views and perspectives within cities.

For some decades, urban public spaces have increasingly gained significance for public and private actors and their strategies and policies to strengthen the competitiveness of cities and to create attractive, central urban places. An ongoing (neo-liberal) privatization of production and management of public space has led to a new surge in debates on the rights of participation in urban public space and on indications of exclusive developments. At the same time, strategies to reclaim (public) urban space by civic actors and a perceived rise in awareness on the prospects of urban spatial commons have also gained momentum.

In this seminar, we will discuss theories and academic debates on public space as well as international examples of strategies, projects and policies of different actors involved in the production, management and appropriation of urban public space. We will question ascribed purports and ideals connected to as well as various forms of public space in different national and regional settings. Thus, we identify specifics within different planning cultures to gain a deeper understanding of aims, strategies and potentials in the transformation of public spaces.

## Bemerkung

N. N. | 2 SWS, 3 ECTS | Do. 13:30 - 16:45 | Start: 12.10.2017 | Room: TBA

#### Voraussetzungen

The introductory phase (session 1-3) of this seminar will be followed by blocks of presentation sessions on the topics of the production and management as well as strategies of appropriation of public space. Within these, each student will give a presentation on a chosen topic with an example from their home country or another context they know well. At the end of the semester, a paper on this example reflecting on the theoretical themes and the other examples has to be submitted. Additionally, students are required to read all obligatory texts (underlined), to submit two short text reviews and to actively participate in the discussions.

## 1724198 Urbanism in China

N.N. Veranst. SWS: 2

Seminar

Fr, gerade Wo, 14:45 - 18:00, Belvederer Allee 5 - Seminarraum 005, 20.10.2017 - 02.02.2018

# 1724415 Urban Sociology (Introduction)

F. Eckardt Veranst. SWS: 2

Vorlesung

Mo, wöch., 13:30 - 15:00, Marienstraße 13 C - Hörsaal D, 16.10.2017 - 02.02.2018

## Beschreibung

Stand 07.05.2018 Seite 7 von 13

Life in German cities has undergone substantial changes in the last decade. Not only the East German cities had to address new challenges after the reunification of the German nation in 1990, but also the West German cities had to reformulate their place in the complex urban networks. Cities are mirroring wider changes in German society where new social and political developments can be observed. Economic and cultural globalization has had a major impact on many aspects of urban life. This lecture will give an overview about major developments in German cities since the German reunification in 1990. It will provide both a sound source of information on the most important issues of German society and reflect important discussion of the international debate on urban studies. After delivering a historical overview of German cities, basic concepts of urban sociology will developed by discussing subjects like gentrification, segregation, migration, life style diversity and others. The lecture provides an insight view into classical theories of urban sociology as deriving from Max Weber, Georg Simmel and the Chicago School.

Richtet sich an: Advanced Urbanism, Europäische Urbanistik, IPP/Urban, Heritage, MediaArchitecture, MA NHRE (Fak. B)

Termine: montags, 13:30 bis 15:00 Uhr, 1. Termin 16.10.2017

#### Bemerkung

Richtet sich an: Advanced Urbanism, Europäische Urbanistik, IPP/Urban Heritage, MediaArchitecture, MA NHRE

(Fak. B)

Termine: montags, 13:30 bis 15:00 Uhr, 1. Termin 16.10.2017 Ort:

#### 1724420 Academic Skills AdUrb

L. Vollmer Veranst. SWS: 2

Übung

Mo, wöch., 17:00 - 18:30, Belvederer Allee 5 - Seminarraum 005, 16.10.2017 - 02.02.2018

#### **Beschreibung**

At the beginning we will deal with the process of production of scientific knowledge as such considering basic 'rules' of scientific work. As learning by doing is usually a successful way which makes us experiencing the specific demands of a research process you will work in the course in small teams defining and planning your own research project. Starting the practical work we will first deal with different sources of information, how to decode and evaluate them as wells as how to quote and organize them properly in scientific working and writing. Now having an idea how and where to gather information you will define your own research question and develop a research concept step by step going from a proper wording of the research question to the selection of fitting research methods, time planning and documentation.

#### engl. Beschreibung

At the beginning we will deal with the process of production of scientific knowledge as such considering basic 'rules' of scientific work. As learning by doing is usually a successful way which makes us experiencing the specific demands of a research process you will work in the course in small teams defining and planning your own research project. Starting the practical work we will first deal with different sources of information, how to decode and evaluate them as wells as how to quote and organize them properly in scientific working and writing. Now having an idea how and where to gather information you will define your own research question and develop a research concept step by step going from a proper wording of the research question to the selection of fitting research methods, time planning and documentation.

registration: Belvederer Allee 5, room 003, 04.10.2016 - 14.10.2016

1744236 Perspectives on Urban Planning and Design in Germany – an introduction and discussion of understanding, tasks and strategies

Stand 07.05.2018 Seite 8 von 13

## B. Schönig, S. Rudder

Vorlesung

Mo, wöch., 15:15 - 16:45, Marienstraße 13 C - Hörsaal C, 16.10.2017 - 02.02.2018

#### **Beschreibung**

Coming to Weimar to many international students from cities and megacities around the world feels like a trip to Disneyland. Weimar seems to be the showcase example of a European City. But what are the assumptions and strategies that lie behind the idea of planning and containing a so-called "European City"? To what extent do German cities, as cities in Europe differ from other parts of the world and the challenges they are facing? How can urban development in Germany, how can planning and design strategies applied be interpreted in the context of urban developments in other parts of the world? And – last but not least – to what extent could these strategies help or be applied in international contexts?

Veranst. SWS:

2

The objective of this lecture is twofold: on the one hand it will give an insight and introduction into the German planning system, current tasks and challenges of urban development at stake in Germany and discuss planning and design strategies used to face those. Therefore, it provides an introduction into an understanding of planning and urban design in Germany especially to international students. On the other hand it will try to challenge the German view and position by confronting it with discourses and positions from the international students 'countries. Doing so, the lecture will enable teaching staff and students to integrate their differing view on planning and learn from the others' different national experiences and background. The lecture thus also can be understood international comparative studies in praxis in the field of urban design and planning.

The lecture can be combined with a research seminar but can also be attended exclusively. To receive credits for the integrated course in "Urban Planning/Urban Design" (MA AdUrb and EU) one of the seminars offered by the Chairs for Urban Planning or Urban Design I and the lecture series must be attended.

#### Bemerkung

Barbara Schönig, N. N. (Urban Planning), Steffen de Rudder (Urban Design I) | 2 SWS, 3 ECTS | Mo. 15:15 - 16:45 | Start: 16.10.2017 | Room: M13, Hörsaal

## 1744281 Basics and Methods of Real Estate Development

#### B. Nentwig, A. Herten

Integrierte Vorlesung

Veranst. SWS: 4

1-Gruppe Do, wöch., 09:15 - 10:45, Bauhausstraße 7b - Seminarraumraum 004, Group AdUrb, 12.10.2017 - 02.02.2018 2-Gruppe Do, wöch., 11:00 - 12:30, Bauhausstraße 7b - Seminarraumraum 004, Group EU, 12.10.2017 - 02.02.2018 Di, wöch., 15:15 - 16:45, Coudraystraße 13 A - Hörsaal 2, 10.10.2017 - 02.02.2018

#### Beschreibung

## 1744285 Introduction to Moderation - Group AU

T. Dobberstein Veranst. SWS: 2

Übung

Di, Einzel, 09:15 - 15:00, Belvederer Allee 5 - Seminarraum 007, 10.10.2017 - 10.10.2017 Mi, Einzel, 09:15 - 16:00, Belvederer Allee 5 - Seminarraum 007, 25.10.2017 - 25.10.2017 Do, Einzel, 09:15 - 16:00, Belvederer Allee 5 - Seminarraum 007, 26.10.2017 - 26.10.2017 Fr, Einzel, 09:15 - 16:00, Belvederer Allee 5 - Seminarraum 007, 24.11.2017 - 24.11.2017

#### **Beschreibung**

Stand 07.05.2018 Seite 9 von 13

Meetings with representatives of different interest groups are important milestones in today's planning processes. The different expectations regarding the outcome of the meeting and the different backgrounds of the participants challenge the diplomatic skills of the planners who lead the discussion.

The lecture teaches fundamental tools to guide group meetings and planning workshops towards a productive output. Practical exercise sessions address techniques to visualize and to moderate planning related issues. A consensus on multi-interest decisions in the urban context depends on the accurate detection of all different interests of the stakeholders involved and the right analysis of potentially conflicting positions. The implementation of informal planning strategies and dialogue based communication are discussed in the course.

#### **Bemerkung**

Start: 12.10.2015

weitere Termine: 09.11.2015, 07.12.2015, 18.01.2016

## **Master-Colloquium**

## L. Vollmer

Kolloquium wöch.

#### **Beschreibung**

The course is the platform for presentation and discussion of the Masters theses. The candidates will present the intermediate results of their work on their individual topics. Suggestions for further action will be made by fellow students and academics attending the colloquium. Admission for the Master examination is required for participation. Performance record (attestation) will be achieved by giving an oral presentation.

#### engl. Beschreibung

The course is the platform for presentation and discussion of the Masters theses. The candidates will present the intermediate results of their work on their individual topics. Suggestions for further action will be made by fellow students and academics attending the colloquium. Admission for the Master examination is required for participation. Performance record (attestation) will be achieved by giving an oral presentation.

# Bemerkung

Time:Block course, see notice-board

Location:Belvederer Allee 5 Start: See notice-board

Registration: Not necessary, all students accepted for the Master examination have to participate

### Voraussetzungen

Admission for the Master examination is required for participation.

#### Leistungsnachweis

Performance record (attestation) will be achieved by giving an oral presentation.

# Wahlpflichtmodule

#### 117222402 Algorithmic Architecture – Generative Urban Typologies I

# A. Abdulmawla, S. Schneider

Veranst. SWS: 2

Seminar

Mo, wöch., 09:15 - 10:45, Belvederer Allee 1a - Allg. Medienpool 003, 16.10.2017 - 02.02.2018

Stand 07.05.2018 Seite 10 von 13

#### **Beschreibung**

The potential of parametric modelling lies not only in facilitating the creation of complex shapes but rather in generating and validating a large number of variations of a certain design concept. Thus, it supports an essential part in the design process: the exploration of possibilities. In order to gain most benefit of this potential, it is necessary to understand how to construct shapes using simple and abstract rules, and to learn how to transform a design idea into a logical sequence of steps.

In this course, you will learn these skills in different practical exercises. These exercises are based on the idea of parametrizing urban types. Types can be described as solution concepts for a certain problem and are widely used in urban design (e.g. optimal organization of buildings for maximum built-up area or spatial relationships for fulfilling certain building usages). By creating parametric models of certain types, we will explore the variations that these types allow for. Thereby we will gain deeper insights into the topic of typology in urban design as well as into the design process itself.

The course does not require any previous knowledge of scripting or programming and will focus on two stages. First stage on the gaining knowledge about general parametric modelling techniques using Grasshopper and Rhino3D (Bachelor and Master Students). Second stage on applying the knowledge gained by generating and optimizing small urban neighborhood design (Master Students). All students will participate in a series of lectures, online tutorials, in-class sessions.

#### Voraussetzungen

Studiengänge: M.Sc. Architektur, M.Sc. MediaArchitecture, M.Sc. Urbanistik, M.Sc. EU, M.Sc. AU

## 117222403 Algorithmic Architecture - Generative Urban Typologies II

#### S. Schneider, A. Abdulmawla

Veranst. SWS:

2

Semina

Mo, wöch., 11:00 - 12:30, Belvederer Allee 1a - Allg. Medienpool 003, 16.10.2017 - 02.02.2018

#### **Beschreibung**

The potential of parametric modelling lies not only in facilitating the creation of complex shapes but rather in generating and validating a large number of variations of a certain design concept. Thus, it supports an essential part in the design process: the exploration of possibilities. In order to gain most benefit of this potential, it is necessary to understand how to construct shapes using simple and abstract rules, and to learn how to transform a design idea into a logical sequence of steps.

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#### Bemerkung

Termin: Di, 13:30 - 16:45 Uhr

Stand 07.05.2018 Seite 11 von 13

Ort: Computerpool, Belvederer Allee 1a

Beginn: 17.10.2017

## Voraussetzungen

Studiengänge: M.Sc. Architektur, M.Sc. MediaArchitecture, M.Sc. Urbanistik, M.Sc. EU, M.Sc. AU

#### 117223302 Advanced Computational Methods

R. König Veranst. SWS: 2

Seminar

Mi, wöch., 11:00 - 12:30, Belvederer Allee 1a - Allg. Medienpool 003, 11.10.2017 - 02.02.2018

#### **Beschreibung**

Dieses Seminar baut auf dem Kurs "Introduction to Generative Urban Models" auf.

Voraussetzung für die Belegung dieses Kurses ist die parallelel oder vergangene Teilnahme am Kurs "Introduction to Generative Urban Models", oder gute Programmierkenntnisse. In diesem Seminar werden vor allem die Programmier-Fähigkeiten und deren Anwendung vertieft.

Inhaltlich befassen wir uns mit der Kombination verschiedener räumlicher Analysemethoden mit evolutionären Algorithmen zur Optimierung bestimmter Aspekte urbaner Planungen, städtebaulicher oder architektonischer Entwürfe. Die Semesterleistung besteht in der Definition und Implementierung einer selbst definierten Aufgabe, weche die im Rahmen des Seminars erlernten Fähigkeiten anhand eines praktischen Beispiels anwendet.

## engl. Beschreibung

Requirement for choosing this seminar is the parallel of past participation at the course Introduction to Generative Urban Models, or good programming skills. In this seminar the programming skills and their application are enhanced.

Conentwise we deal with the combination of various spatial analysis methods with evolutionary algorithms for thie optimization of certain urban planning aspects. The semester performance it the definition and implementation of a self-defined task, which exemplifies the skills that are learned during the seminar.

## 117223303 Introduction to System Dynamics for Modeling Urban Metabolism

R. König Veranst. SWS: 2

Seminar

Mi, wöch., 13:30 - 15:00, Belvederer Allee 1a - Allg. Medienpool 003, 11.10.2017 - 02.02.2018

### Beschreibung

Im Rahmen des Seminars werden die Teilnehmer in Methoden zu "Generative Urban Models" eingeführt. Wir werden uns mit der Implementierung von Verfahren zur Generierung und Analyse verschiedener räumlicher Konfigurationen befassen. Die erlernten Fähigkeiten werden anhand mehrere Übungsaufgaben belegt.

Das Seminar findet begleitend zum Entwurfsprojekt der Professur Informatik in der Architektur statt. In diesem Zusammenhang können die Übungsaufgaben anhand von Teilaufgaben für die Erzeugung urbaner Strukturen für Kleinstädte in Äthiopien abgehandelt werden.

Es werden grundlegende Kenntnisse mit Grasshopper für Rhino3D (die im gleichen Semester im Seminar "Algorithmic Architecture" erworben werden können) oder erste Programmierkenntnise erwartet.

## engl. Beschreibung

Stand 07.05.2018 Seite 12 von 13

The participants of this seminar are introduced to Generative Urban Models. We deal with the implementation of methods for generating and analyzing various spatial configurations. The learned skills are shown by several exercises.

The seminar is offered also in addition to design studio of the chair of computer science in architecutre (InfAr). In this context the exercises can be done as part of the tasks for creating urban configurations for small towns in Ethiopia.

Basic knowledge programming as well as in Grasshopper for Rhino3D is of advantage for this course. The latter one you can get them in a corresponding parallel course at InfAR.

# 1724308 Urban Australia: Resilience, Sustainability and Headways

B. Stratmann Veranst. SWS: 2

Seminar

Di, wöch., 09:15 - 10:45, Geschwister-Scholl-Str.8A - Seminarraum 105, 17.10.2017 - 02.02.2018

#### Beschreibung

The seminar will explore major aspects of urban development in Australia, also looking at the historical formation of Australian cities and the links between urban and societal development. Issues to be discussed will include: housing and housing styles; suburbanization and urban renewal; gentrification; segregation; multiculturalism, diversity and urbanity; the compact city model, urban form and sustainable development; transport and infrastructure; economic restructuring and globalisation; cities and regions; place marketing, hallmark events, cities in competition; urban resilience. The concepts employed in the course can be applied to the analysis of urban development in other Western countries, including Germany. In general, the seminar provides students of architecture and of urban studies with an understanding of urban issues as examined by urban sociologists. Being taught overseas the course will commence with an introduction to Australian society, including Aboriginal life and culture.

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## Voraussetzungen

gute Englischkenntnisse - sound knowledge of English

#### Leistungsnachweis

Die Prüfung erfolgt in Form eines Referates mit schriftlicher Ausarbeitung, die gegen Ende des Seminars eingereicht wird. Auf Wunsch kann die Ausarbeitung auch in deutscher Sprache erfolgen (außer bei EU/AdUrb-Studierenden).

Stand 07.05.2018 Seite 13 von 13