

Schedule of Lectures

„Sustainable Urban Technologies (SUT)“

winter term 2013/14

for students of the **first semester**

Kindly note: Please consult LSF-Link for current information and current announcements

Overview

Sustainable Urban Technologies				
No. of Module	Title of the Course	Lecturer	Time Schedule	Type of course
1	Integrative Module I - Introduction to Urban Systems (compulsory)			
1.1	Key Issues in Urban Systems - "Urban Systems and Approaches to Urban Complexity "(en)	Gurr/Schmidt et al.	Wednesdays, between 6 p.m. and 8 p.m.	Lecture
1.2	Introduction: Sustainable Urban Technologies (en)	Krumme	Wednesdays, between 4 p.m. and 6 p.m	Lecture
1.3	Introduction: Urban Culture, Society and Space (en)	Gurr/Wehling	Wednesdays, between 12 a.m. and 2 p.m	Lecture
1.4	Introduction: First Steps into Urban Planning (en)	Schmidt/Tran	Wednesdays, between 10 a.m. and 12 a.m	Lecture
2A	Introductory Module - Sustainable Urban Technologies (students choose two of the following courses)			
2A.1	Statistical Methods and GIS in urban Studies (de/en) (Attendance highly recommended)	Sattler/ Wehling	Block 1 (de): 17.2.14 until 21.2.14 (every day between 9am and 4 pm) Block 2 (en): 24.2.14 until 28.2.14; (every day between 9am and 4 pm)	Blocks (please choose block 1 or 2)
2A.2	Urban Planning and Quality of Life (en)(Attendance highly recommended)	Schmidt/Tran	Tuesday, between 8.30 a.m. and 10.00	Seminar
2A.3	Operations Research (de)	Kimms	Thursdays, between 10 a.m. and 12 a.m. (Duisburg)	Lecture
2A.4	Climate Change and Adaptation Strategies within Urban Areas (en/de)	Melkonyan	Tuesday, between 12 a.m. and 2 p.m.	Lectures
2A.5	Applied Climatology and bioenvironmental urban Studies (en)	Goldbach	Tuesday, between 10 a.m. and 12 a.m.	Lecture
2A.6	Water - Natural Science Fundamentals (en)	Gimbel	Lecture: Tuesday, 10 a.m. to 12 a.m. o'clock; Exercise: Tuesday, 8 a.m. to 10 a.m. o'clock (at fortnightly intervals) (Duisburg)	Lecture

Sustainable Urban Technologies				
No. of Module	Title of the Course	Lecturer	Time Schedule	Type of course
2A.7	Intermodal Transport Chains II (en)	Noche	Tuesday, between 6 p.m. and 8 p.m. o'clock (Duisburg)	Project
2A.8	Siedlungswasserwirtschaft 3 – Einführung in die Siedlungswasserwirtschaft (de)	Denecke	Monday (12 pm until 4 pm)	Lecture
2A.9	Introduction to Urban Economics – Key concepts, trends and current debates (en)	Walloth/ Hartenstein	6.1. (Mo), 7.1. (Tu), 9.1.(Thu), 10.1.(Fr) (between 10 am – 5pm) und 24.1.2014 (Fr) (9 am -1pm; presentation or written examination)	Blocks/ Seminar (please visit all specified appointments)
2A.10	Sustainability Science & Urban Transition Management (en)	Krumme	20.-21. + 24.-28. March 2014 / 9am – 4pm	Blocks (please visit all specified appointments)
3A	Interdisciplinary Complementary Module – Urban Culture, Society and Space I (students choose one of the following courses)			
3A.1	The European City in History (en)(Attendance recommended)	Hassenpflug	Block 1: 5.(Thu) and 6.12.13 (Fr) Block 2: 9. (Thu) and 10.1.14 (Fr) Block 3: 30. (Thu) and 31.1.14 (Fr). Thursday: between 1:00 p.m. and 6:30 a.m.; Friday: between 9:00 a.m. and 13:30 p.m.	Lecture / Blocks (please visit all specified appointments/ all three blocks)
3A.2	Metropolitan areas – structures, problems and management (en)	Wehling	Tuesday (2 pm until 4pm)	Lecture
3A.3	Karteninterpretation und Geographische Fernerkundung: Anwendungen im Bereich urbaner Systeme (de)	Juchelka	Thursday, 10:00 am until 12 am	Seminar
3A.4	Low Carbon Society - Roadmapping for Sustainability Transitions at Local and Regional Level (en)	Schüle	Dates are not yet fixed, please look at LSF; this seminar will be offered in February or March 2014	Blocks (please visit all specified appointments)

de = in German; en = in English

Please note: Based on the experience in previous years, students generally find the first semester far less time-consuming and intensive than the second

semester in the summer. **We therefore recommend that you take an additional course (or two additional courses) in the first semester in order to have more time for the intensive “Healthy City” course in the second semester.**

The Modular Construction of the Masters Programme “Sustainable Urban Technologies”

Sem.	WS/SS	Module	CP	CH	Masters Programme "Sustainable Urban Technologies"		
1.	WS	1	15	8	Module 1: Integrative Module I - Introduction to Urban Systems 1.1: Key issues in Urban Systems (lecture) 1.2: Introduction: Sustainable Urban Technologies (lecture/seminar) 1.3: Introduction: Urban Culture, Society and Space (lecture/seminar) 1.4: Introduction: First Steps into Urban Planning (lecture/seminar) Module 2A: Introductory Module - Sustainable Urban Technologies (students have to choose 2 from various courses on offer)		
			3	2			Module 3A: Interdisciplinary Complementary Module - Urban Culture, Society and Space I
			4	2			
			4	2			
		4	2				
2+3	10+5	4+2					
2.	SS	4	10	4	Module 4: Integrative Module II - "Healthy City" practically oriented seminar (internal) Module 5A: Intermediate Module - Sustainable Urban Technologies (students have to choose 3 from various courses on offer)		
		5+6	15+5	6+2	Module 6A: Interdisciplinary Complementary Module - Urban Culture, Society and Space II		
3.	WS	7	20	Module 7: Internship Project (external, three months) Module 8A: Advanced Module - Sustainable Urban Technologies (students have to choose 2 from various courses on offer)			
		8	10	4			
4.	SS	9	25		Modul 9: Masters Thesis <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> Oral Examination </div>		
			5				
Σ disciplinary (without MA Thesis/Colloq.)			35	14	Annotations (1) Interdisciplinary Complementary Modules: These will be specially offered courses from the "other" masters programme (2) Introductory Modules, Intermediate Modules, Advanced Modules: There will be several classes on offer (5 CP each), individual specialisation		
Σ Integration			25	12			
Σ Complementary			10	4			
Masters Thesis + Oral Examination			30				
Practical Project/Internship (Module 7)			20				
Σ			120	30			

Important: Please inform Mrs. van Wasen (beate.vanwasen@uni-due.de) and Dr. Hochmuth (elke.hochmuth@uni-due.de) about the courses you have chosen via Email. Mrs. van Wasen is responsible for the registration of all your courses in the central examination office at the University of Duisburg-Essen. All selected courses will be listed on your Masters Degree-certificates or on your Transcript of Records. Dr. Hochmuth is the coordinator of the Masters Programme.

Module	Integrative Module I - Introduction in Urban Systems
Title of the course	1.1: Key Issues in Urban Systems - The City as a complex System?
Lecturer	Gurr/Schmidt et al.
Type of Course	Lecture/ compulsory
Day of the week	Wednesday
Time	between 6 p.m. and 8 p.m. o'clock
Campus	Campus Essen
Room	R11 T00 D01
Method of examination:	Written Examination
Credits	3
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	<p>The lecture series gives an overview of key issues in Urban Studies by engaging with various facets of the city as a complex system from a wide variety of disciplines. Topics to be covered include: urban systems analysis, systems and complexity, traffic and logistics, simulation, energy networks, the city in climate change, urban bio-diversity, management of public spaces, urban water management, regional management, cultural representations of urban complexity, etc..</p> <p>Students are familiar with different approaches to the understanding, representation and management of urban complexity in different sectors and have an understanding of their interdependencies.</p>

Link LSF: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=216917&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	Integrative Module I - Introduction in Urban Systems
Title of the course	1.2: Introduction: Sustainable Urban Technologies
Lecturer	Krumme
Type of Course	Lecture/ compulsory
Day of the week	Wednesday
Time	between 4 p.m. and 6 p.m. o'clock
Campus	Campus Essen
Room	R11 T06 D16
Method of examination:	Written Examination
Credits	4
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	<p>The course introduces the core topics of technology-based issues of sustainable urban development.</p> <p>Coming from the background of the <i>Ecosystem Approach</i> (James J. Kay, American Council on Environmental Quality, amongst others) basic understandings of the urban environment as anthropogenic socio-technical ecosystem are explained. Protected assets (<i>water, soil, air, biodiversity etc.</i>) of ecologically oriented urban planning are defined as subjects of technology assisted innovations in urban environments. The mainstream political and scientific concepts of sustainable development (Dennis L. Meadows, Gro H. Brundtland, Klaus Töpfer, Frederic Vester, Robert Costanza, John Elkington, and others) are presented as well as their implications for a green industrial society under transformed socio-economic conditions. Sub-strategies considering the efficiency and sufficiency of innovations are explained. Technology is reflected as part of the nexus of un-sustainability (<i>Syndrome Approach</i>) and the necessary socio-economic change (<i>Integrated Technology Approach</i>). Networked components of future <i>smart cities</i> are discussed, such as <i>infrastructure, ICT, logistics, transportation and energy supply and consumption</i> issues. Some critical reviews of selected examples of future city concepts and mega/ global cities problems close the course.</p>

Link LSF: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung&veranstaltung.veranstid=216912&purge=y&topitem=lectures&subitem=editlecture&asi=qhTOFF.HPENQgGRRMmk4>

Module	Integrative Module I - Introduction in Urban Systems
Title of the course	1.3: Introduction: Urban Culture, Society and Space
Lecturer	Gurr / Wehling
Type of Course	Lecture/ compulsory
Day of the week	Wednesday
Time	between 12 a.m. and 2 p.m. o'clock
Campus	Campus Essen
Room	R11 T06 D16
Method of examination:	Written Examination
Credits	4
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	<p>What does it mean to be "urban" - is it enough to live in a city? What is the "European City"? Is the city losing its role as an economic and cultural centre in the process of globalization? How can we "read" a city? What role does urban culture play in urban systems - indicator or instigator of key developments? Based on selected classic and recent texts as well as visual material such as maps and photographs, the course provides an overview of key issues in urban geography, urban sociology, urban cultural studies and points out their interdisciplinary interfaces with urban economics, urban planning, urban management as well as urban technology.</p> <p>Under the headings of "Form and Urban Space", "Economy, Functions and Urban Space" and "Urban Social Life, Urban Culture and Urban Space", we will introduce key issues in urban studies from a distinctly spatial perspective. These discussions will be complemented by an overview of classic definitions of urbanity and urbanism.</p> <p>The course will equip students with the necessary foundations and frame of reference for further interdisciplinary urban studies.</p> <p>A reader containing most texts to be discussed will be available in the copy-shop Reckhammerweg from early October. Further texts will be provided electronically in the course of the semester.</p> <p>For the first session, participants are expected to have read the first text in the reader.</p>

Link LSF: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung&veranstaltung.veranstid=212350&purge=y&topitem=lectures&subitem=editlecture&asi=qhTOFF.HPENQgGRRMmk4>

Module	Integrative Module I - Introduction in Urban Systems
Title of the course	1.4: Introduction First Steps into Urban Planning
Lecturer	Schmidt / Tran
Type of Course	Lecture/ compulsory
Day of the week Time	Wednesday between 10 a.m. and 12 a.m. o'clock
Campus Room	Campus Essen R11 T06 D16
Method of examination:	Written Examination
Credits	4
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	<p>This lecture examines the evolving structure of cities and the way that cities can be designed and developed for the longterm future. The most important aspect is seen to be the quality of life in our urban spaces especially in these modern times of conflicting priorities and interests.</p> <p>Its scope includes historical forces that have produced cities, today's and future challenges for urban planning and urban design, interdisciplinary perspectives under the general heading of "The City" with different themes such as sustainability, health, energy efficiency, mobility, climate change, urban green spaces and demographic change.</p>

Link LSF: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung&veranstaltung.veranstid=217127&purge=y&topitem=lectures&subitem=editlecture&asi=qhTOFF.HPENQgGRRMmk4>

Module	2A: Introductory Module - Sustainable Urban Technologies
Title of the course	2A.1: Statistical methods and GIS in Urban Studies (en)
Attendance highly recommended	
Lecturer	Sattler
Type of Course	Lecture and Exercise
Day of the week Time	Block 1 (de): 17.2.14 until 21.2.14; every day between 9am and 4 pm Block 2 (en): 24.2.14 until 28.2.14; every day between 9am and 4 pm
Campus Room	Campus Essen, Schützenbahn SR 102
Credits	5
Hours/per week (SWS)	2
Language	English / German
Description/ Kommentar	The lecture will deal with the spatial planning category of the metropolitan area (in Germany, Europe, and overseas) in terms of development, economic change, internal divergencies, regional impact and competition, and others.
Registration	Please send an Email for your registration for that course to birgit.sattler@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=220206&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

and

<https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=220222&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	2A: Introductory Module - Sustainable Urban Technologies
Title of the course	2A.2: Urban Planning and Quality of Life (en)
Attendance highly recommended	
Lecturer	Schmidt/ Tran
Type of Course	Seminar
Day of the week	Tuesday
Time	between 8:30 a.m. and 10 a.m. o'clock
Campus	Campus Essen
Room	V15 R01 H76
Credits	5
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	This course provides students with fundamental knowledge and technical skills used by urban planners to generate, evaluate, and implement ideas, plans, and projects. Seminars encourage students, as members of collaborative teams, to think creatively and apply interdisciplinary, problem-solving methods to planning issues and projects.
Registration	Please send an Email for your registration for that course to minh-chau.tran@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=213079&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	2A: Introductory Module - Sustainable Urban Technologies
Title of the course	2A.3: Operations Research (de)
Lecturer	Kimms
Type of Course	Lecture and Excercise
Day of the week Time	Thursday, between 10 a.m. and 12 a.m. o'clock
Campus Room	Campus Duisburg LB 107
Credits	5
Hours/per week (SWS)	2
Language	Deutsch
Description/ Kommentar	Please consult LSF-Link
Anmeldung	Zur Anmeldung senden Sie bitte eine Email an alf.kimms@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=215943&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	2A: Introductory Module - Sustainable Urban Technologies
Title of the course	2A.4: Climate Change and Adaptation Strategies within Urban Areas (en)
Lecturer	Melkonyan
Type of Course	Lecture and Exercise
Day of the week	Tuesday
Time	between 12 am and 2 pm
Campus Room	Campus Essen, Schützenbahn SR 102
Credits	5
Hours/per week (SWS)	2
Language	English / German
Description/ Kommentar	Please consult LSF-Link
Registration	Please send an Email for your registration for that course to ani.melkonyan@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=212398&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	2A: Introductory Module - Sustainable Urban Technologies
Title of the course	2A.5: Applied Climatology and bioenvironmental Urban Studies (en)
Lecturer	Goldbach
Type of Course	Lecture and Exercise
Day of the week	Tuesday
Time	between 10 am and 12 am
Campus Room	Campus Essen, Schützenbahn SR 102
Credits	5
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	Please consult LSF-Link
Registration	Please send an Email for your registration for that course to anja.goldbach@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=220236&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	2A: Introductory Module - Sustainable Urban Technologies
Title of the course	2A.6: Water - Natural Science Fundamentals (en)
Lecturer	Gimbel
Type of Course	Lecture /Exercise
Day of the week Time	Lecture: Tuesday, 10 a.m. to 12 a.m. o'clock Exercise: Tuesday, 8 a.m. to 10 a.m. o'clock (at fortnightly intervals)
Campus Room	Campus Duisburg BC 103
Method of examination:	Written Examination, Klausur
Credits	5 credits
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	Summary: <ul style="list-style-type: none"> • -general introduction • fundamentals • structure and properties of water • water as solvent • equilibria in aqueous • properties of aqueous • carbonic acid • carbonate - carbonic acid systems • oxidation - reduction processes, • corrosion • biotransformations in aqueous systems • compounds in natural waters • aspects of drinking water quality
Registration	Please send an Email for your registration for that course to rolf.gimbel@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=216168&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

And

Exercise: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=216105&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	2A: Introductory Module - Sustainable Urban Technologies
Title of the course	2A.7: Außerbetrieblicher Transport (Intermodal Transport Chains II) (en)
Lecturer	Noche
Type of Course	Lecture and exercise
Day of the week Time	Lecture/ Exercise : Tuesday between 6 p.m. and 8 p.m. o'clock; please check LSF Link
Campus Room	Campus Duisburg MD 162 (please consult the Link LSF below)
Credits	5
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	<p>This lecture focuses on the structures of transport chains across company boundaries that involve various modes of transport. It also deals with modern concepts of logistic control, ranging from PPC and ERP systems to supply chain management.</p> <p>Aims of the course: The participants learn about the structure of different transport chains. They understand the technical design and organization of supply chains. The students can develop transport chains and calculate key figures. They are able to design IT structures for supply chains and to apply chosen methods and algorithms. They acquire the skills to refine intermodal transport and supply chains in research and to manage them in industrial practice.</p>
Registration	Please send an Email for your registration for that course to bernd.noch@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=216293&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	2A: Introductory Module - Sustainable Urban Technologies
Title of the course	2A.8: Siedlungswasserwirtschaft 3 – Einführung in die Siedlungswasserwirtschaft (de)
Lecturer	Denecke
Type of Course	Lecture and seminar
Day of the week	Monday
Time	between 12 and 4 p.m. o'clock
Campus	Campus Essen
Room	V15 S05 D16
Credits	5
Hours/per week (SWS)	4
Language	German
Description/ Kommentar	<p>Abwasserreinigung</p> <ul style="list-style-type: none"> • Weitergehende Verfahren zur Abwasserreinigung (Stickstoffelimination, Phosphorelimination etc.) • Verfahren zur Nährstoffrückgewinnung <p>Stadtentwässerung</p> <ul style="list-style-type: none"> • Anforderungen einer weitergehenden Regenwasserbehandlung durch ATV-DVWK A117, BWK M3 und EG Wasserrahmenrichtlinie • Techniken für eine weitergehende Regenwasserbehandlung • Nährstoffbelastung von Gewässern durch diffuse Quellen • Einfluss des Klimawandels und der Demographie für die Planung von kanalnetzen und Regenwasserbehandlungsanlagen <p>Trinkwasseraufbereitung und -verteilung</p> <ul style="list-style-type: none"> • Quellen und Wirkung von Spurenstoffen im Trinkwasser • Weitergehende Verfahren zur Trinkwasseraufbereitung • Anforderungen an die Trinkwasserversorgung in Megastädten
Registration	Please send an Email for your registration for that course to martin.denecke@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=215429&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	2A: Introductory Module - Sustainable Urban Technologies
Title of the course	2A.9: Introduction to Urban Economics – Key concepts, trends and current debates (en)
Lecturer	Walloth/ Hartenstein
Type of Course	Seminar /Blocks
Day of the week/Time	6.1.14 (Mo), 7.1.14 (Tu), 9.1.14 (Thu), 10.1.14 (Fr) (between 10 am – 5pm) und 24.1.2014 (Fr) (9 am -1pm; presentation or written examination)
Campus Room	Campus Essen Consult LSF
Credits	5
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	<p>If Tokyo was a country, it would be the 12th largest economy in the world. In 2012 the city produced goods and services worth approximately US\$1,500 billion, roughly the same amount as Australia. In the same year the economic output of the Rhine-Ruhr metropolitan region amounted to US\$465 billion, thereby matching Argentina, the world's 25th largest economy (Brookings Institution, World Bank). Evidently, urban agglomerations have become the economic powerhouses of our times. Behind the impressive numbers of cities' commercial performance lies a remarkable complexity of economic functions and structures, comprising a hugely diverse range of areas such as local labour markets, housing, traffic and public transport, education, crime and the quality of urban life. This block seminar aims to provide an introductory overview of the major lines of discussion within the discipline of Urban Economics, revolving around questions such as: What are the economic functions of a city? Who are the economic actors in the city and how do economic activities influence urban life? How do the private sector, municipality and civil society interact with each other? Which challenges are modern city economies facing in today's globalized world and which possible solutions exist?</p> <p>The array of issues covered during the block seminar embraces the following topics: The significance of cities as economic centers; Agglomerations, clusters and business parks; Local economic development; Formal and informal economies; Corporate urban responsibility; City marketing; Local and bottom-up approaches to urban development; Non-classical approaches to understanding (urban) economies (e.g., evolutionary economics, behavioral economics); The role of urban economies within complex urban systems (spontaneous order, innovation, creative destruction, etc.); City operations and municipal finances.</p>
Registration	Please send an Email for your registration for that course to christian.walloth@stud.uni-duisburg-essen.de

Link LSF: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=226955&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	2A: Introductory Module - Sustainable Urban Technologies
Title of the course	2A.10: Sustainability Science & Urban Transition Management (en)
Lecturer	Krumme
Type of Course	Seminar /Blocks
Day of the week	20.-21. + 24.-28. March 2014
Time	9am – 4pm
Campus	Consult LSF
Room	Consult LSF
Credits	5
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	<p>Motivational Background: With this seminar we want to close gaps between conceptual ideas of sustainable development, trends in the international discussion of green/ alternative urban systems and the actual scientific basis/ the findings of the international research community, particularly from the emerging sustainability science as well as transition research.</p> <p>Learning Goal: <i>We provide a scientifically coherent basis in order to understand, integrate and evaluate current dominant as well as alternative developments in society, economics and technology, particularly for the urban system background and the grand sustainability challenge.</i></p> <p>The seminar will be based on scientific presentations, group works/discussions and the interactive mapping and correlation of results and upcoming questions, in order to provide you with profound knowledge about sustainability science, especially for the urban system background. Based on this knowledge, we will deduce new/ innovative development and planning processes and discuss how enabling factors can be used effectively for the purpose of establishing/developing new ways/examples of urban transition management towards sustainability.</p> <p>In a first step the seminar will thus provide essential insights in the emerging frameworks and findings of sustainability science in a practical and concrete way. Generally the seminar will build its concept upon fundamental principles of and strategies derived from modern ecological science (Ecosystem Services Approach, Ecosystem Approach, as well as Ecological Economics). Doing so, system capacity based (socio-cultural, socio-economic and industrial) developments become more tangible for the background of so called “strong sustainability models”.</p> <p>In a second part the seminar will transfer the lessons learned to sustainable development perspectives of urban systems and give answers how those transitions can be understood, planned and measured. Crucial issues reflected are amongst others:</p> <ul style="list-style-type: none"> • <i>Why are cities critical key players in the field of a global sustainable development?</i>

	<ul style="list-style-type: none"> • <i>How can cities be mobilized on the way towards a transformation of our socioeconomic system, oriented on long term social and ecological capabilities?</i> • <i>How can we extract use of typical “urban advantages” (industry, knowledge, density, accessibility, social and business networks, technological infrastructures and means etc...) to make cities actually the most sustainable form of human living?</i> <p>In a final phase enabling factors for the desired transitions are identified and discussed, that could effectively trigger alternative pathways for worldwide urban systems, understood against the background of an integrative Quality of Life Approach (QoL). The seminar concentrates therefore beside profound theoretical state of the art literature research on concrete case studies from cities and urban systems all over the globe. In the seminar we therefore favour a bilateral strategy both on so called hard and soft skills/ leverages, respectively push and pull factors, for sustainable urban transition management: technological (e.g. smart city strategies) as well as socioeconomic (e.g. sharing economies) and socio-cultural aspects (e.g. transition town movement).</p>
Registration	Please send an email for your registration for that course to: doerte.ringel@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lrf/rds?state=verpublish&status=init&vmfile=no&publishid=227476&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	3A: Interdisciplinary Complementary Module - Urban Culture, Society and Space I
Title of the course	3A.1: The European City in History
Attendance recommended	
Lecturer	Hassenpflug
Faculty/ Department	Main Research Area Urban System
Type of Course	Lecture
Day of the week Time	Block 1: 5.(Thu) and 6.12.13 (Fr) Block 2: 9. (Thu) and 10.1.14 (Fr) Block 3: 30. (Thu) and 31.1.14 (Fr). Thursday: between 1:00 p.m. and 6:30 a.m.; Friday: between 9:00 a.m. and 13:30 p.m.
Campus Room	Campus Essen Thursday SM-311 (Schützenbahn) and Friday R12 S05 H20
Method of examination:	Written Examination
Credits	5
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	This lecture offers an insight into the social and cultural history of the European city from its beginning until today. Emphasis will be layed on basic categories of social history and urban sociology, urban typology of traditional and modern society, the Greek and Roman city, the Medieval city, the big transformation (Renaissance and Absolutism), the capital city, the modern big city (metropolis, mega city, world city), big city enmity, big city alternatives (garden city, machine-city), liberal and modern or rather Fordistic city, the postmodern city and the city in our time. The lecture gives an interdisciplinary approach. It provides a broad understanding for the social and cultural implications of urban, urbanised and even rural space thus contributing to a “dialogical” understanding of urban design and construction. It aims at improving the competence of socio-spatial reflection to all future experts for urban space, to urban designers and planners as well. Certificates are required through passing a written examination. An attendance list will be handed over during the first lecture.
Registration	Please send an Email for your registration for that course to elke.hochmuth@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=221472&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	3A: Interdisciplinary Complementary Module - Urban Culture, Society and Space I
Title of the course	3A.2: Metropolitan areas – structures, problems and management (en)
Lecturer	Wehling
Faculty/ Department	Geography
Type of Course	Lecture
Day of the week	Tuesday
Time	between 2 p.m. and 4 p.m. o'clock
Campus Room	Campus Essen, Schützenbahn SM 102
Credits	5
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	The lecture deals with the spatial category of the metropolitan areas from the national to the global level, comprising on the top of the hierarchy both global cities and megacities. Metropolitan areas will be considered in terms of their development, their (economic) potentials and change, the inner divergencies, their regional impact and competition, and others. The lecture will be concluded by a written test in the last session.
Registration	Please send an Email for your registration for that course to Hans-werner.wehling@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=220201&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	3A: Interdisciplinary Complementary Module - Urban Culture, Society and Space I
Title of the course	3A.3: Karteninterpretation und Geographische Fernerkundung: Anwendungen im Bereich urbaner Systeme (de)
Lecturer	Juchelka
Faculty/ Department	Geography
Type of Course	Seminar
Day of the week	Thursday
Time	10 am until 12 am
Campus	Campus Essen, Schützenbahn
Room	SM 102
Credits	5
Hours/per week (SWS)	2
Language	German
Description/ Kommentar	Please consult LSF Link below
Registration	For registration please send a Mail to rudolf.juchelka@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=220203&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	3A: Interdisciplinary Complementary Module - Urban Culture, Society and Space I
Title of the course	3A.4: Low Carbon Society - Roadmapping for Sustainability Transitions at Local and Regional Level (en)
Lecturer	Ralf Schüle, Wuppertal Institut
Type of Course	Seminar /Blocks
Day of the week Time	Consult LSF
Campus Room	Consult LSF
Credits	5
Hours/per week (SWS)	2
Language	English
Anmeldung	<p>Many European member states have committed to very ambitious emission reduction targets until the year 2050. In this regard, the question occurs what structural technological, political and institutional conditions are required in order to improve climate action in different types of urban settlements. Currently, cities and regions are experiencing far-reaching socio-economic transformations (e.g. economic, structural, demographical as well as social change) that need to be adjusted and managed towards a more sustainable climate action. Against this background, the seminar will address the current challenges and perspectives of modern climate and energy policy at local and/or regional levels. It will convey an overview of opportunities and boundaries of ambitious climate action programmes and will identify interlinkages and potential contradictions to other relevant fields of governance at the local level. Furthermore, it will address functions and interest constellations of different public and private agents in national multilevel governance systems. Starting with a German background and depending on the interest of the seminar participants, the seminar will also analyse local conditions for ambitious climate policies in other OECD and/or non-OECD countries.</p>
	Please send an Email for your registration for that course to elke.hochmuth@uni-due.de

Link LSF: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=227472&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>