

Master Landscape Architecture

Modulhandbuch

Stand: April 2019

Index

Compulsory Courses	Instructor	Page
R1 Atelier Urban Design I	Prof. Dr. Nicole Uhrig, Meinhard Kuntz, M.A. Daeyong Kim	
R2 Atelier Urban Design II	Prof. Dr. Nicole Uhrig, Meinhard Kuntz, M.A. Daeyong Kim	
R3 Atelier Landscape Design I	Prof. Dr. Nicole Uhrig, Meinhard Kuntz, M.A. Daeyong Kim	
R4 Atelier Landscape Design II	Prof. Dr. Nicole Uhrig, Meinhard Kuntz, M.A. Daeyong Kim	
R5 Basics of LA	Prof. Dr. Wolfram Kircher Prof. Dr. Nicole Uhrig	
R6 Environment	Prof. Dr. Adrian Hoppenstedt Prof. Kai Tobias	
R7 Computer Sciences	Prof. Einar Kretzler, Dr. Matthias Pietsch, Martin Weidel	
R8 Technology	Prof. Dr. Nicole Uhrig, Dipl.Ing. Rüdiger Amend	
R9 Sustainable Development	Dr. Torsten Lipp Prof. Dr. Alexander Schmidt	
R10 Urban Site Design	Prof. Dr. Wolfram Kircher Prof. Dr. Nicole Uhrig	
Elective Courses		
E1 Architecture and Design	Alexander Kader, Dottore Architekt	
E2 Project Management	Prof. Dr. Nicole Uhrig, René Knipprath	
E3 New Media in LA	Prof. Kretzler, Martin Weidel, Matthias Pietsch	
E4 Philosophy/ Sociology	Prof. Dr. Bartlett Warren-Kretzschmar, Mireia Tort Nasarre	
Further Courses		
Z1 English	Robert Leppin	
Z2 German	Katharina Hertel	
Courses for Conversion Students		
C1 History and Theory of Landscape Design	Prof. Dr. Nicole Uhrig	
C2 Theory of Landscape Architecture	Prof. Dr. Nicole Uhrig	
C3 Basics of Landscape Design	Prof. Dr. Nicole Uhrig	
C4 Basics of Landscape Analysis	Prof. Dr. Bartlett Warren-Kretzschmar	
C5 Basics Design	Prof. Dr. Nicole Uhrig	
C6 Communication Skills	Robert Leppin	
C7 Basics of Planting Design	Prof. Dr. Wolfram Kircher	
C8 Basics Landscape Ecology	Prof. Einar Kretzler	
C9 Basics GIS for Landscape Architecture	Dr. Matthias Pietsch	

Internship semester

Thesis Seminar

Prof. Dr. Nicole Uhrig

Master's thesis

Atelier Urban Design 1					
Ref Number	Workload	Credits	Semester	Frequency	Length
R1	180 hrs (a´60 min)	6	1	winter	one semester
1	Methods a) Seminar b) Project work	Time 75 SWS / 56,25 hrs	Self Study 123,75 hrs	Group Size 25 students	
2	Learning Outcomes Students are coached in the presentation of their project results and receive feedback from professionals. They learn how to plan projects in line with valid regulations for planting use and international environmental law.				
3	Syllabus The atelier prepares students for proper site analysis work in the planning stage of landscaping projects. The discussions of the design process refer to the approach of conceptual proposals and train a consistent implementation of design ideas.				
4	Teaching Method Lectures, Project work, Teamwork, Self-studying				
5	Course Requirements Qualifications/Certificates: no Prior knowlegde:				
6	Examination Project work				
7	Credits Successful project work and presentation				
8	Credit Transfer Policy no				
9	Grade weight 100%				
10	Teacher / course coordinator M. Kuntz, Prof. Dr. N. Uhrig/Prof. Dr. N. Uhrig/M.A. Daeyong Kim				
11	Bibliography: Study Materials: - Handout informing about the project area - a detailed description of the tasks - Various documents concerning the planning area (aerial photographs, soil maps, etc.) - Reader on the various soft skills under discussion				

Atelier Urban Design 2					
Ref number	Workload	Credits	Semester	Frequency	Length
R2	180 hrs	6	1	winter	one semester
1	Methods a) Seminar b) Project work	Time 75 SWS / 56,25 hrs	Homework 123,75 hrs	Group Size 25 students	
2	Learning Outcomes Students learn how to run a project through all phases as individuals and in form of a well-documented student project. Participants will be working in interdisciplinary teams and improve their personal project management as part of a team and under profession-like conditions. Students will experience all typical phases of a design project and exercise the cooperation with clients through consultations and team presentations in a realistic working environment.				
3	Syllabus The atelier is concentrated on the development of skills needed in deadline projects and professional planning. Presentations are held in front of professors and professionals, possibly on a construction site. The course also intends to hone students' team-working skills and leadership traits.				
4	Method Lectures, Project work, Teamwork, Self-studying				
5	Course Requirements Qualifications/Certificates: no Prior knowlegde:				
6	Examination Project work				
7	Credits Successful project work and presentation				
8	Credit transfer policy				
9	Grade weight 100%				
10	Teacher / course coordinator M. Kuntz, Prof. Dr. N. Uhrig/Prof. Dr. N. Uhrig/ M.A. Daeyong Kim				
11	Bibliography: Study Materials: <ul style="list-style-type: none"> - Handout about the project area - A detailed description of the tasks - Various documents concerning the planning area (aerial photographs, soil maps, etc.) - Reader on the various soft skills under discussion 				

Atelier Landscape Design 1					
Ref number	Workload	Credits	Semester	Frequency	Length
R3	180 hrs	6	2	summer	one semester
1	Methods b) Seminar b) Project work	Time 75 SWS / 56,25 hrs	Homework 123,75 hrs	Group size 25 students	
2	Learning outcomes By the end of the course students should be able to: <ol style="list-style-type: none"> 1. understand the cultural, visual and ecological components of the landscape as well as the issues that shape the landscape. 2. apply methods of landscape assessment, e.g. suitability analysis, visual assessment, and cultural landscape character assessment. 3. Demonstrate leadership and team work skills. 				
3	Syllabus <ol style="list-style-type: none"> 1. Examination of the landscape environment through problem-solving techniques that acknowledge holistic approaches to the environment. 2. Computer-aided spatial analysis techniques to solve landscape resource-based problems. 3. Project management and team building skills. 4. Effective communication and presentation of planning and design concepts and solutions. 				
4	Methods Seminar, project work, group projects				
5	Course Requirements Qualifications/Certificates: no Prior knowlegde: Knowledge of ecological processes, basic GIS skills				
6	Examination Project				
7	Credits Successfully project work and presentation				
8	Credit transfer policy				
9	Grade weight 100%				
10	Teacher / course coordinator M. Kuntz, Prof. Dr. N. Uhrig/Prof. Dr. N. Uhrig/ M.A. Daeyong Kim				
11	Bibliography: Landscape Ecology Principles in landscape Architecture and Land-use Planning by Dramstad, Olson, Forman A Framework for Geodesign by Steinitz Landscape planning : environmental applications by Marsh Ecology and Design by Johnson and Hill Course reader and additional literature available on Moodle platform				

Atelier Landscape Design 2					
Ref number	Workload	Credits	Semester	Frequency	Length
R4	180 hrs	6	2	summer	one Semester
1	Methods c) Seminar b) Project work	Time 75 SWS / 56,25 hrs	Homework 123,75 hrs	Group size 25 students	
2	Learning outcomes By the end of the course students should be able to: 1. develop concepts and design solutions based on critical analysis of the landscape condition, 2. communicate and present a critical and reflective view of problems and solutions, for both their own and others work. 3. demonstrate leadership and team work skills.				
3	Syllabus 1. Project design that reflects the requirements of natural systems and strives to achieve ecological sustainability. 2. Computer-aided spatial analysis techniques to develop planning and design solutions. 3. Project management and team building skills. 4. Effective communication and presentation of planning and design concepts and solutions.				
4	Methods Seminar, group work, project work				
5	Course requirements Qualifications/Certificates: Prior knowledge: Knowledge of ecological processes, basic GIS skills				
6	Examination project				
7	Credits Successfully passed project work and presentation				
8	Credit transfer policy				
9	Credit weight 100%				
10	Teacher / course coordinator M. Kuntz, Prof. Dr. N. Uhrig/Prof. Dr. N. Uhrig/ M.A. Daeyong Kim				
11	Bibliography Landscape Ecology Principles in landscape Architecture and Land-use Planning by Dramstad, Olson, Forman Landscape planning : environmental applications by Marsh A Framework for Geodesign by Steinitz Ecology and Design by Johnson and Hill Course reader and additional literature available on Moodle platform				

Basics of Landscape Architecture					
Ref number	Workload	Credits	Semester	Frequency	Length
R5	180 h	6	1	Winter/summer	one semester
1	Methods a) seminar b) project work c) excursion	Time 75 SWS / 56,25 h	Homework 105 h	Group size 25 students	
2	Learning outcomes History and Theory: Students have the knowledge of the essential historical manifestations of open spaces and open space systems and are capable of tracing their origin and development. They are also able to reflect the balance of social, economic, cultural, aesthetic, environmental and functional aspects and of design and planning issues in garden history and can deal with cultural heritage and current development processes and theories in contemporary landscape architecture. Plant Design: <ul style="list-style-type: none"> - The students do know examples of ornamental plants from oceanic nemoral, continental influenced nemoral, subtropical and tropical climate. - The students are able to derive plant ranges and maintenance demands from their knowledge about site conditions, habitats and population biological strategies. - The students are able to interpret regional traits of planting design in dependence of social, cultural, historical and ecological background. They are competent to investigate important aspects of planting design in a certain region and to present the results in a lecture. 				
3	Syllabus History and Theory: <ul style="list-style-type: none"> - Beginnings of garden culture - Medieval, Renaissance, Baroque gardens - English Landscape Garden - Garden History of the 20th Century (modern gardens, public park, natural garden movement) - Current theories and typologies in landscape architecture (hybrid, economic, dynamic, industrial, energy landscapes) Plant Design: <ul style="list-style-type: none"> - A holistic approach is taught so that the overall context can be detected. Plant examples for trees, shrubs, perennials and annuals (in botanical sense as well as according to horticultural definition) - Site conditions with emphasis on the lime-iron problem - Habitats for perennials - Grimes strategies in population biology and their impact in planning and maintaining plantings - Planting design in diverse countries (student's presentations); problem of neophytes 				

4	Methods <ul style="list-style-type: none"> - Students are taught in lectures and tutorials, including field trips to introduce plant examples. Tutorials, project work, group work, lecture , excursions
5	Course requirements Qualifications/Certificates: no Prior knowledge: basics of Botany/Phytology (plant systematic, plant identification)
6	Examination Written exam, student's presentation
7	Credits Successfully passed exam participation in individual exercises
8	Credit transfer policy -
9	Grade weight 100%
10	Teacher / course coordinator Prof. Dr. W. Kircher, Prof. Dr. N. Uhrig
11	Bibliography Aben, Rob und Saskia de Wit, <i>The Enclosed Garden</i> , Rotterdam (010 Publishers) 1999. (full version on google/books.de) Carroll Maureen: <i>Earthy Paradises. Ancient Gardens in History and Archaeology</i> , London (British Museum Press) 2004. Clark, Emma: <i>The Art of the Islamic Garden</i> , (Crowood) 2010. Hill, Penelope, <i>Contemporary History of Garden Design. European Gardens between Art and Nature</i> , Basel/Berlin/Boston (Birkhäuser) 2004. Shepherd, Peter, <i>Modern Gardens</i> , London (The Archit. Press) 1953. Vercelloni, Virgilio + Matteo: <i>Inventing the Garden</i> , (Getty Trust) 2011. Nick Robinson: "Planting Design Handbook"; in the Bernburg University library: http://lhanh.gbv.de/DB=1.2/CMD?ACT=SRCHA&IKT=1016&SRT=YOP&TRM=nick+robinson for a deeper insight into naturalistic planting design (only for advanced "plantsmen"!) you can choose "The Dynamic Landscape": http://lhanh.gbv.de/DB=1.2/SET=2/TTL=2/CMD?ACT=SRCHA&IKT=1016&SRT=YOP&TRM=du nnett+dynamic Catalogue Bruns-Nursery: http://www.brunns.de/en/catalog/

Environment					
Ref number	Workload	Credits	Semester	Frequency	Length
R6	150 h	5	1	winter	one semester
1	Methods a) lectures b) workshops	Time 60 SWS / 45 hrs	Homework 105 hrs	Group size 25 students	
2	Learning outcomes <p>This course provides an introduction to the principles and theory that underlay the visual assessment of landscapes. It develops the students' ability to critically evaluate the appropriate use of different assessment approaches in the decision making and design process. Subjects include landscape perception, introduction to methods of visual landscape inventory and evaluation, visibility determination, visual impact assessment, and visual resource management strategies.</p> <p>Students should understand the basics of different planning and assessment approaches, and they should reflect on their personal ethical responsibility as landscape planners and designer.</p> <p>The students should be familiar with different planning methods and be able to apply them in concrete situations.</p> <p>Students should be able to develop criteria for the evaluation of complex environmental problems.</p> <p>Students should be able to derive planning objectives and measures</p>				
3	Syllabus <p>To introduce students to the concepts and skills involved with:</p> <ul style="list-style-type: none"> - Landscape perception - Cultural landscapes - Inventorying landscape character - Determining visibility in the landscape - Professional appraisal of visual impacts - Public assessment of visual impacts - Strategies for visual mitigation - European Landscape Convention - Landscape planning methods, - Components of the environment- water, soil, flora and fauna, air/climate - Ecology of the landscape, landscape ecology - Legal background, international conventions - Environmental ethics 				
4	Methods <p>Group work, project work, lectures, small groups</p>				
5	Course requirements <p>no</p>				

6	Examination written test
7	Credit Successfully passed written test
8	Credit transfer policy
9	Grade weight 100%
10	Teacher / course coordinator Prof. A. Hoppenstedt, Prof. K. Tobias
11	Bibliography Text PDFs are available online at: http://www.esf.edu/es/ Smardon, R.C., J.F. Palmer, A. Knopf, K. Grinde, J.E. Henderson and L.D. Peyman–Dove. 1988. Visual Resources Assessment Procedure for US Army Corps of Engineers. Instruction Report EL–88–1. Vicksburg, Mississippi: US Army Engineer Waterways Experiment Station. 71 pp. plus appendices. Smardon, R.C., J.F. Palmer and J.P. Felleman (eds.). 1986. Foundations for Visual Project Analysis. New York: John Wiley & Sons. 374 pp. Swanwick, C. 2002. Landscape Character Assessment. The countryside Agency and Scottish Natural Heritage. Pdf. 84 pp Dramstad, W.E., J.D. Olson, R.T.T. Forman. 1996. Landscape Ecology principles in landscape Architecture and Land-Use Planning. Washington DC. Island Press. 80 pp Steinitz, C. 2012. A Framework for Geodesign. Redlands. ESRI Press 208 pp.

Computer Sciences					
Ref number	Workload	Credits	Semester	Frequency	Length
R7	150 h	5	1	winter	one semester
1	Methods a) seminars b) exercises	Time 60 SWS / 45 hrs	Homework 105 hrs	Groupe size 25 students	
2	<p>Learning outcomes</p> <p>Students acquire the skills needed for the design and creation of digital 3D sketches of landscape design.</p> <p>Based on the ability to compile virtual open spaces, student will exercise several spatial analyses.</p> <p>Students learn how to work with a database, conduct basic GIS analyses and handle data capturings of different sensors and technologies.</p> <p>Passing students will be capable of using GIS data during whole planning processes and develop a basic understanding of existing standards and standardization initiatives (e.g. OGC, INSPIRE). Students are supposed to collect sets of data and metadata from European and worldwide resources (e.g. CORINE, GMES, NATURA 2000 sites).</p>				
3	<p>Syllabus</p> <ul style="list-style-type: none"> - Students learn about computer aided generating of virtual models based on analog and digital data sources. They practice the drafting of different exterior furnishings in 3D and their integration into a countryside. They learn how to prepare a photorealistic calculation and handle light and shadows in models. They are taught the correct usage of textures and adjustments of physical properties. Students will be introduced to vegetation elements for efficient digital terrain modeling. Further topics include the editing and visualization of different data formats (e.g. raster, vector, digital elevation models, networks). Students will also develop their own workflow and approach to data management in GIS projects (data management, data quality, data storage) with the help of GIS tools and methods (e.g. multi-criteria evaluation, overlay functions). 				
4	<p>Methods</p> <p>seminars, exercises (individually and in groups)</p>				
5	<p>Course requirements</p> <p>no</p>				
6	<p>Examination</p> <p>assignment</p>				
7	<p>Credits</p> <p>passed assignment</p>				
8	<p>Credit transfer policy</p> <p>no</p>				
9	<p>Grade weight</p> <p>100%</p>				

10	<p>Teacher / course coordinator</p> <p>M. Weidel, Dr. M. Pietsch/Dr. M. Pietsch</p>
11	<p>Bibliography</p> <p>Daniel Tal: Google SketchUp for Site Design: A Guide to Modeling Site Plans, Terrain and Architecture</p> <p>Smith, M., Goodchild, M., Longley, P. (2013): Geospatial Analysis - A comprehensive guide to principles, techniques and software tools, 4 rd edition (online www.spatialanalysisonline.com/output)</p> <p>Reader "GIS Application in Landscape Architecture: Introduction to the GIS-Workflow"</p> <p>different data sources, material- and object libraries, practical examples computer model vs. reality, lasermeasuring tools, PDA, android based devices</p>

Technology					
Ref number	Workload	Credits	Semester	Frequency	Length
R8	150 h	5	2	summer	one semester
1	Methods a) lectures b) project work	Time 60 SWS / 45 hrs	Homework 105 hrs	Group size 25 students	
2	Learning outcomes <p>The students acquire knowledge, which construction materials are used in landscape architecture and how to use them according to various situations and design intentions adequately. They will also learn about construction, material-specific properties, surface qualities and machining options.</p> <p>Furthermore they are able to turn their design ideas into constructive details. In a sustainable, aesthetic and functional manner according to the standards, as well as appropriate to planning and site context and the demands of users. They master technical principles such as statics, connecting carrying elements or foundation of components.</p>				
3	Syllabus <p>Use and properties of materials: soil, plants, wood, natural stone, brick and clinker, concrete, metals and other building materials.</p> <p>Components and construction methods: ground modeling and earthworks, roads and squares, stairs, railings and fences, walls, small buildings and pergolas, small bridges, walkways and decks, planting technology, surface drainage, water features, vertical green roof, green roofs, and special elements.</p>				
4	Methods lectures, project work, group work				
5	Requirements Qualifications/Certifications: no Prior knowledge: no				
6	Examination project work				
7	Credits passed project work				
8	Credit transfer policy				
9	Grade weight 100%				
10	Teacher / course coordinator Dipl.Ing. Rüdiger Amend, Prof. Dr. N. Uhrig/ Prof. Dr. N. Uhrig				

11	<p>Bibliography: Charles Ward Harris, Nicholas T. Dines, Kyle D. Brown: Time-Saver - Standards for Landscape Architecture, 1997</p> <p>Zimmermann, Astrid: Constructing Landscape: Materials, Techniques, Structural Components, Birkhäuser Publisher, Berlin/Basel/Boston, 2009</p> <p>Mader, Gunter; Zimmerman, Elke: Walls - Elements of Garden and Landscape Architecture, München, 2008</p> <p>Holden, Robert/Liversedge, Jamie: Construction for Landscape Architecture, London, 2011</p> <p>Thompson, I./Sorvig, K.: Sustainable Landscape Construction- A Guide to Green Building Outdoors. 2. Ed., Washington, 2011</p> <p>Landscape Architectural Graphic Standards, Leonard J. Hopper, 2007</p> <p>Websites for company products/materials</p>
----	--

Sustainable Development					
Ref number	Workload	Credits	Semester	Frequency	Length
R9	150 h	5	2	summer	1 Semester
1	Methods seminar	Time 60 SWS / 45 hrs	Homework 105 hrs	Group size 25 students	
2	<p>Learning outcomes</p> <p>Students should understand the ecological, social and economic factors that influence sustainable development, planning and design. They should be familiar with different sustainability criteria and they should be able to evaluate the sustainability of existing projects using sustainability criteria. Students should also be able to apply sustainability principles to plans and designs at different scales – from global, regional, local and residential.</p> <p>Moreover, students should understand the legal framework for sustainable development in the Union European and its implementation in EU-environmental law, especially the main objectives and requirements of EU-Directives concerning environmental assessments and nature protection and it's influence on sustainable land-use planning.</p>				
3	<p>Syllabus</p> <p>An introduction to the concepts of sustainability and sustainable site design are presented in lectures. The DPSIR model of sustainable development and the concept of ecosystem services are presented in order to understand the interconnection between ecological, social and economic factors and pressures that influence sustainability. The guiding principles for sustainable sites and how sustainability can be ensured in the planning and design process are also presented in lectures. Both qualitative and quantitative criteria and different frameworks for the evaluation of sustainability are discussed with students. The difference between conventional and sustainable sites in terms of: aesthetics, energy, soils, vegetation, water, materials, maintenance are discussed based on existing best case projects. Finally, students apply sustainability criteria to their own studio projects.</p> <p>Moreover, an introduction to the policies and institutions of the European Union and the European Community will be given and the sources of EU-Law will be explained. The UNCED Rio-Declaration and the Convention on Biological Diversity will be presented as basic documents for "sustainable development" in international law. Then, the implementation in the EU-Treaties and EC-Directives relating to environmental protection and nature conservation will be discussed. The application of this EC-Directives is an important field for landscape architects and the presentations will include some examples. Another topic will be the EU-Initiatives and guidelines for a sustainable land-use and the German legislation on land-use planning.</p>				
4	<p>Methods</p> <p>Seminar, group work</p>				
5	<p>Course requirements</p> <p>Qualification/Certificates: no</p> <p>Prior knowlegde: no</p>				
6	<p>Examination</p> <p>Written exam and presentations</p>				

7	Credits Successfully passed written test
8	Credit transfer policy no
9	Grade weight 100%
10	Teacher / course coordinator Dr. T. Lipp, Prof. Dr. A. Schmidt/ Prof. Dr. A. Schmidt
11	Bibliography Lecture material: Treaty on European Union/ Treaty on the Functioning of the European Union Rio Declaration on Environment and Development Agenda 21 (Preamble, Chapter 7: Part c) Convention on Biological Diversity Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment Directive 2001/42/EC of the Parliament and the Council on the assessment of the effects of certain plans and programmes on the environment Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Article 1-11) Federal Regional Planning Act (Section 1-3) Federal Building Code (Section 1-13) Report on Elements of a Sustainable Urban Development in the EU Jans/Vedder (2008): European Environmental Law Knopp (2008): International and European Environmental Law Reading material: Sustainable Landscape Planning – The Reconnection Agenda, by Paul Selman Sustainable Site Design by Claudia Dinop and Kristin Schwab, Designing the Sustainable Site by Heather Venhaus The Sustainable Sites Handbook by Meg Calkins Calkins (2011): The Sustainable Sites Handbook Dinop/Schwab (2010): Sustainable Site Design Jans/Vedder (2011): European Environmental Law, 4. Ed. Schmidt et al (2008): Standards and Thresholds for Impact Assessment Selman (2012): Sustainable Landscape Planning – The Reconnection Agenda Venhaus (2012): Designing the Sustainable Site Wagner/Pree (2011): European Environmental Law

Urban Site Design					
Ref number	Workload	Credits	Semester	Frequency	Length
R10	150 h	5	2	winter / summer	one semester
1	Methods a) seminar b) group work	Time 60 SWS / 45 h	Homework 105 h	Group size 25 students	
2	Lernergebnisse (learning outcomes) / Kompetenzen (competencies) <p>In this module competencies for various design tasks in urban spaces at different scales will be developed. The historical development of the correlation between built space and open space as well as various open space typologies and their sociological components are considered. Students will acquire design methodological skills and the ability to handle complex urban and metropolitan spatial structures in concept, content and design.</p> <p>Insights into the use of urban spaces in different cultures as well as in political, economic, social and cultural conditions of urban processes are achieved at an international and national level. The students are able to conduct independent research to knowledge about the history and current trends of urban design.</p> <p>Students will have the sensitivity to quality characteristics and for the development of sustainable strategies in urban open space planning and find an own position on the development of urban areas with particular emphasis on usability and sustainability. For this purpose they rely on their acquired knowledge of the main approaches to planning and design and to principles for planting and plant use.</p> <p>Students have the ability to prepare and present a planting plan for a specific topic.</p>				
3	Syllabus <ul style="list-style-type: none"> -Functionality of urban open spaces -Urban space and free space analysis and evaluation in relation to its own cultural particularities and in comparison to other countries / cultures -Quality standards, sustainability and usability in urban open space planning -Design principles for space forming plantations and plantation areas -Methods of planting design, planning strategies (mono planting, groups, drifts, core groups, socializing planting, mixed planting, combinations) -Development of a planting plan (individual) 				
4	Methods <ul style="list-style-type: none"> -tutorial -group work 				
5	Course requirements Qualifications/Certificates: no Prior knowledge: Knowledge of plants and basics of plant use (R5 Basics of Planting Design), General planning basics				
6	Examination Oral examination, project work				
7	Credits passed oral examination and project work				

8	Credit transfer policy -
9	Grade weight 100%
10	Teacher / course coordinator Prof. Dr. W. Kircher, Prof. Dr. N. Uhrig
11	Bibliography: Bernard/Loidl: Opening Spaces, Basel (Birkhäuser) 2003 Cullen, G.: Townscape , Architectural Press London 1961 Dreiseitl, Herbert: Waterscapes , Basel (Birkhauser) 2009 Gehl,Jan: Life between buildings: using public space, Kopenhagen 1971/2001 Jones, J.C.: Design Methods , John Wiley & Sons London 1980 Lynch, Kevin: The Image of the City, Cambridge, MA, MIT Press 1960 Prominski/Stokman/Stimberg: River.Space.Design. Basel (Birkhäuser) 2012 Urban Task Force: Towards an Urban Renaissance, London, E&FN 1999 Waldheim, C.: The landscape urbanism reader 1997 Whyte, William H.: Social Life of Small Urban Spaces (The Conservation Foundation, Wash. DC, 1980) Larice, Michael/MacDonald, Elizabeth (Ed.): The Urban Design Reader, Routledge, New York London 2007 Nick Robinson: The Planting Design Handbook; Catalogue Bruns-Nursery; Riedel et al., Perennemix-Lively Perennial Compositions. Bernburg, 2007 Lecture Notes (pdfs of lectures)

Architecture and Design					
Ref number	Workload	Credits	Semester	Frequency	Length
E1	150 hrs	5	1	winter	one semester
1	Methods a) lectures b) workshops	Time 60 SWS / 45 hrs	Homework 105 hrs	Group size 25 students	
2	Learning outcome After the successful completion of this course, students will be capable of applying skills, tools and proven strategies in sustainable as well as energy-efficient master planning. Participants will furthermore acquire knowledge about the current state of architecture and design in regard to aesthetic, functional, energy-based, and climatic aspects.				
3	Syllabus This module is set to cover two major topics: "Site and Master Planning" and "Theories of Architecture". In the former, students will hear lectures about the tools and strategies needed for a sustainable urban design; new knowledge which is to be later applied in a practical exercise. The discourse about "Theories of Architecture" is supposed to introduce students to a range of theoretical aspects emphasising about sustainable and climate-adapted design concepts.				
4	Methods Students are taught in lectures, tutorials, and single-person or group projects.				
5	Course requirements Qualifications/Certificates: no Prior knowledge: no				
6	Examination oral test, research paper, and presentation of project work				
7	Credits Successfully passed oral test, presentation and term paper evaluation.				
8	Credit transfer policy no				
9	Grade weight 100%				
10	Teacher / course coordinator Prof. A. Kader, Dottore Architekt				
11	Bibliography <ul style="list-style-type: none"> - Benevolo, Leonardo: "The European City", Wiley-Blackwell Verlag, Oxford 1995 - Burdett, Richard (Hrsg.): "Cities. Architecture and Society" Venice 10th International Architecture Exhibition, Marsilio Verlag, Venice 2006 - Lim, Cj; Liu, Ed: „Smartcities and Eco-Warriors“, Routledge Chapman & Hall Verlag, London 2010 - Hegger Manfred; Fuchs, Matthias; Stark, Thomas; Zeumer, Martin: „Energy Manual – Sustainable Architecture“, Edition Detail, Birkhäuser Verlag, Basel 2008 				

- Jellicoe, Geoffrey: "The Landscape of Man: Shaping the Environment from Prehistory to the Present Day", Thames & Hudson Verlag, London 1995
- Kobayashi, Hikaru; Onishi, Takashi: "Low Carbon Cities; The Future of Urban Planning", Master's Program in Sustainable Urban Regeneration Series University of Tokio, Gakugei Shuppan-Sha Verlag, Tokio 2011
- Luebke, Chris: „Drivers of change - Energy, Waste, Climate Change, Water, Demographics, Urbanisation, Poverty" Box with 175 cards, Prestel Verlag, München 2006
- Mostafavi, Mohsen; Doherty, Gareth (Hrsg.): „Ecological Urbanism", Lars Müller Verlag, CH-Baden 2010
- Olgyay, Victor, „Design With Climate: Bioclimatic Approach to Architectural Regionalism", Princeton U.P., 1963
- Rossi, Aldo: "The Architecture of the City", MIT Press Verlag, Cambridge Massachusetts 1984
- Smith, Peter: „Architecture in a Climate of Change", Architectural Press Verlag, 2. Auflage, Oxford 2005
- Yeang, Ken: „EcoMasterplanning: The Work of Ken Yeang", John Wiley & Sons Verlag, Hoboken New Jersey USA 2009

More references:

- Daniels, Klaus: „Energy Design for Tomorrow", Axel Menges Verlag, Fellbach 2009
- Giedeon, Siegfried: "Space, Time & Architecture: the growth of a new tradition", Harvard University Press Verlag, Cambridge Massachusetts 1954
- Hart, Sara: „EcoArchitecture: The Work of Ken Yeang", John Wiley & Sons Verlag, Hoboken New Jersey USA 2011
- Santamouris, Mat (Hrsg.): „Advances in Building Energy Research, Vol. 4", Earthscan Verlag, London 2010
- Stern, Nicholas: „The Global Deal: Climate Change and the Creation of a New Era of Progress and Prosperity", Public Affairs Verlag, New York 2009
- Valeur, Henrik (Hrsg.): „CO-EVOLUTION – Danish / Chinese Collaboration on Sustainable Urban Development in China", Danish Architecture Center, Kopenhagen 2006

Project Management					
Ref number	Workload	Credits	Semester	Frequency	Length
E2	150 h	5	1	winter	one semester
1	Methods a) lectures b) workshops	Time 60 SWS / 45 hrs	Homework 105 hrs	Group size 25 students	
2	Learning outcomes Passing students will have acquired skills needed for the preparation, structuring and evaluation of projects in landscape architecture. They have been familiarized with software tools (MS Project), and they are able to function as Project Managers of teams drawing from newly developed personal skills (e.g. teamwork, presentation skills, negotiation, communication, moderation)				
3	Syllabus The module gives an introduction to different methods and techniques for a profitable construction and administration of complex projects. Besides the discussion of key concepts in Project Management, the module is focused on methods and instruments for landscape architecture projects. With the help of exercises and role plays, the students' transfer thinking will be trained and they are free to apply their new expertise on various issues. The module involves an in-depth instruction on the preparation, structuring and evaluation of projects in landscape architecture without and with the help of computer software (MS Project). Essential management strategies for project teams (e.g. group dynamics) as well as soft skills for the presentation, communication, leadership, moderation, mediation, participation and negotiation during project work will be taught in the course.				
4	Methods - tutorials - project work - group work - lectures				
5	Course requirements Qualifications/Certifications: no Prior knowledge: no				
6	Examination project work				
7	Credits passed project work				
8	Credit transfer policy no				
9	Grade weight 100%				

10	Teacher / course coordinator R. Knipprath, Prof. Dr. N. Uhrig/Prof. Dr. N. Uhrig
11	Bibliography: Crowe, Andy: The PMP Exam, Newtown Square 2005 Farga, Barbara/Garvin, Alexander: Designing Public Consensus, New Jersey 2006 Kerzner, Harold: Project Management - A Systems Approach to Planning, Scheduling, and Controlling, New Jersey 2003 Mantel, Samuel J. et al.: Project Management in Practice, New York 2001 Rogers, Walter: The Professional Practice of Landscape Architecture, New York 1997

New Media in Landscape Architecture					
Ref number	Workload	Credits	Semester	Frequency	Length
E3	150 h	5	2	summer	one semester
1	Methods a) seminar b) exercise	Time 60 SWS / 45 hrs	Homework 105 hrs	Group size 25 students	
2	Learning outcomes <p>Students will have acquired knowledge about 3D modelling, the analysis of urban spaces and the investigation of visual links for appropriate landscape architecture that gives designs and concepts an authentic audiovisual expression. Students are introduced to the implementation of a diversity of modern technologies (e.g. WebGIS, MobilGIS, visualization) as utilized in participation processes and GIS projects. The course additionally informs about advanced GIS tools and methods as well as the capabilities needed in a GeoDesign process.</p>				
3	Syllabus <p>The teaching content includes a coaching in the drafting, editing and analysis of surfaces and 3D objects using such as globes GoogleEarth. Student can hone their skills needed for animations, images and video streams. The course also teaches the appropriate implementation of hardware components in calculating, rendering and developing 3D models. Further topics include visualization techniques that are applied in communication and participation processes as well as the control of advanced GIS tools and methods (raster and vector) in GeoDesign projects.</p>				
4	Methods seminar, exercise (individual and in groups)				
5	Course requirements Qualifications/Certifications: Modul R7 Computer Sciences Prior knowledge: knowledge of Modul R7 Computer Sciences				
6	Examination assignment				
7	Credits assignment				
8	Credit transfer policy no				
9	Grade weight 100%				
10	Teacher / course coordinator M. Weidel, Dr. M. Pietsch				

11	<p>Bibliography</p> <p>Bradley Cantrell, Natalie Yates: Modeling the Environment: Techniques and Tools for the 3D Illustration of Dynamic Landscapes</p> <p>Buhmann et al. (2010-2013): Peer Reviewed Proceedings of Digital Landscape Architecture, Wichmann Verlag, VDE Verlag GmbH, Berlin and Offenbach (online www.landschaftinformatik.de)</p> <p>Ervin, S., Hasbrouck, H. (2001): Landscape Modeling: Digital Techniques for Landscape Visualization, McGraw-Hill</p> <p>Reader "GIS Application in Landscape Architecture: GIS Analysis and Visualization"</p> <p>Flacke, W., Kraus, B. (2005): Working with Projections and Datum Transformations in ArcGIS, Points Verlag Norden</p>
----	--

Philosophy/Sociology					
Ref number	Workload	Credits	Semester	Frequency	Length
E4	150 hrs	5	2	summer	One semester
1	Methods Seminar	Time 60 SWS / 45 hrs	Homework 105 hrs	Group size 25 students	
2	<p>Learning outcomes</p> <p>The students should be able to understand the theory and concepts of planning sociology, both in urban and rural environments, and be able to apply the theory to planning issues and situations. Students should be familiar with methods of empirical social research that are useful for gathering information about user groups, i.e. questionnaires, interviews, observation methods. Students should be able to gather, analyze and present both quantitative and qualitative data about users. Students should understand how the use of open space differs depending on cultural and social composition of groups. Finally, students should be apply the concept of Placemaking to a specific site.</p> <p>Participants refine their visual communication and planning competencies through observation and sketching exercises, which is basic to an appropriate and convincing poster design with the help of modern laying software.</p>				
3	<p>Syllabus</p> <ul style="list-style-type: none"> – Sociological issues in planning and design – The social pressures and effects of urban and rural development – Use of urban space - cultural and social issues – Population changes in urban and rural landscapes and the sociological effects of shrinking populations – Methods of empirical social research – Placemaking - The power of 10 – Revitalizing urban areas. – Drawing exercises and sketching from nature. Focus on forms, structures, plants, landscape and architecture, light and shadow, perspective und figures in space. – Aspects of different aesthetic styles in drafts and their effect on the target group. Graphical and color exercises in different techniques. – Teamwork Design of presentation posters of their own project. – Designing aspects of presentation posters. Technical information about color systems, typographical design, font sizes, layout, images, picture resolution, printing and the programs Photoshop and InDesign. 				
4	<p>Methods</p> <p>seminar, small group projects, presentations</p>				
5	<p>Course requirements</p> <p>Qualifications/Certificates: no</p> <p>Prior knowlegde: Ability to understand and analyse written texts</p>				
6	<p>Examination</p> <p>Project report and presentation</p>				
7	<p>Credits</p> <p>Completion of report and presentation</p>				

8	Credit transfer policy
9	Grade weight 100%
10	Teacher / course coordinator M. T. Nasarre, Dr. W. Kretzschmar
11	<p>Bibliography: Literature & Resources:</p> <p>Urban Health and Society: Interdisciplinary Approaches to Research and Practice by Nicholas Freudenberg, Susan Klitzman and Susan Saegert (Aug 3, 2009)</p> <p>City Lights: Urban-Suburban Life in the Global Society by E. Barbara Phillips (Nov 13, 2009)</p> <p>Annual Editions: Urban Society by Myron Levine (Mar 11, 2011)</p> <p>Perspectives on Urban Society: Preindustrial to Postindustrial by Efren N. Padilla (Nov 13, 2005)</p> <p>Urban Social Capital: Civil Society and City Life by Joseph D. Lewandowski and Gregory W. Streich (Apr 2012)</p>

Course Title: English					
Ref number	Workload	Credits	Semester	Frequency	Length
Z1	2x150	certificate	1, 2	winter, summer	2 semester
1	Methods a) instruction b) exercises	Time 2x60 SWS / 2x45 hrs	Homework 2x105 hrs	Group size 25	
2	Learning outcome After the successful completion of this course, students will be knowledgeable of a wide range of technical vocabulary and useful phrases for academic writing and convincing presentations in front of the academic as well as professional community.				
3	Syllabus This weekly online language course will look into English grammar and other aspects of communication. Besides listening comprehension tasks and writing in online exercises, all participants have to prepare video presentations and refine their soft skills that are taught and practiced on short talks and negotiations.				
4	Methods English classes feature exercises for active and passive language learning as individuals or in small groups.				
5	Course requirements Qualifications/Certificates: no Prior knowledge: Advanced English				
6	Examination Written exam and evaluation of speaking competences during the class				
7	Credits certificate				
8	Credit transfer policy				
9	Grade weight				
10	Teacher / course coordinator R. Leppin, M.A.				
11	Bibliography Bailey, Stephen (2011). <i>Academic Writing - A Handbook for International Students</i> . Oxen/New York: Routledge. Heidenreich, Sharon (2008). <i>English for Architects and Civil Engineers</i> . Wiesbaden: Vieweg+Teubner. Murphy, Raymond (2004). <i>English Grammar in Use (3rd Edition)</i> . Cambridge: CUP.				

German					
Ref number	Workload	Credits	Semester	Frequency	Length
Z2	2x150 h	X	1+2 Sem.	winter, summer	two semester
1	Methods a) seminar	Time 2x60 SWS / 2x45 h	Homework 2x105 h	Group size 25 students	
2	Learning outcomes Acquisition of all competences (listening, reading, speaking, writing) according to the CEFR level A1.				
3	Syllabus This course trains basics in every competences of the German language with focus on listening comprehension and speaking. Topics are introduction, daily communication, shopping, date and time etc. In second semester topics are work & profession, country & its people, life & living in Germany to prepare for internship.				
4	Methods tutorial, teamwork practices, simulation				
5	Course requirements no prerequisites				
6	Examination Written exam and evaluation of speaking competences during the class				
7	Credits no				
8	Credit transfer policy no				
9	Grade weight -				
10	Teacher/Course coordinator K. Hertel				
11	Information "Schritte international 1"; Kurs- und Arbeitsbuch Niveau A1/1; Hueber Verlag "Schritte international 2"; Kurs- und Arbeitsbuch Niveau A1/2; Hueber Verlag				

Courses only for Conversion Students

History of Landscape Architecture for Conversion Students			
Ref number	Workload	Credits	
C1	150 hrs	5	
1	Methods Online teaching		
2	Learning outcome The students have a basic knowledge of the main historical manifestations of gardens, open spaces and open space systems. They are able to recognize the relationship of social, economic, cultural, artistic, ecological and functional aspects of garden art history and are able to create a reference to current development processes and theories in contemporary landscape architecture.		
3	Syllabus - Beginnings of landscape culture + horticulture - Basic historical manifestations of gardens, open spaces and open space systems		
4	Methods literature work, online tutorial, individual exercises via online material		
5	Course requirements Qualifications/Certificates: no Prior knowledge: no		
6	Examination essay, final assignment		
7	Teacher / course coordinator Dipl.-Ing. M. Kuntz, Prof. Dr. N. Uhrig		
8	Bibliography Aben, Rob und Saskia de Wit: <i>The Enclosed Garden</i> , Rotterdam (010 Publishers) 1999. (out of print. full version on google/books.de) Carroll Maureen: <i>Earthy Paradises. Ancient Gardens in History and Archaeology</i> , London (British Museum Press) 2004. Clark, Emma: <i>The Art of the Islamic Garden</i> , (Crowood) 2010. see amazon look inside!!! Hill, Penelope: <i>Contemporary History of Garden Design. European Gardens between Art and Nature</i> , Basel/Berlin/Boston (Birkhäuser) 2004. Jellicoe, Geoffrey: <i>The landscape of man</i> , 1975. Newton, N.T.: <i>Design on the Land</i> (Belknap Press Harvard) 1971. Pregill, Philip; Volkman, Nancy: <i>Landscapes in History. Design and planning in the Eastern and Western traditions</i> , New York (Wiley) 1999 Shepherd, Peter: <i>Modern Gardens</i> , London (The Archit. Press) 1953. Vercelloni, Virgilio + Matteo: <i>Inventing the Garden</i> , (Getty Trust) 2011. Weilacher, Udo: <i>Between Landscape Architecture and Land Art</i> , Basel etc.. (Birkhäuser) 1999.		

Theory of Landscape Architecture for Conversion Students			
Ref number	Workload	Credits	
C2	150 hrs	5	
1	Methods Online teaching		
2	Learning outcome After the successful completion of this module, students will have a basic knowledge of the profession of landscape architect and environmental planner. They have acquired knowledge about career possibilities and professional framework conditions in a national and international context. They have skills for efficient self-management of their studies.		
3	Syllabus -The profession of landscape architect and environmental planner and its professional opportunities -Requirements of environmental planning as a planning tool of nature conservation and landscape management -Professional organizations -Bernburger approach of studying Landscape Architecture and Environmental Planning		
4	Methods literature work, online tutorial, individual exercises via online material		
5	Course requirements Qualifications/Certificates: no Prior knowledge: no		
6	Examination essay, final assignment		
7	Teacher / course coordinator Dipl.-Ing. M. Kuntz, Prof. Dr. N. Uhrig		
8	Bibliography Corner, James: <i>Recovering Landscape: Essays in Contemporary Landscape Theory</i> Appleton, Jay: <i>The experience of Landscape</i> (Revised Ed.) 1996 Groat, L. and Wang, D. <i>Architectural Research Methods</i> : John Wiley & Sons 2002 Jackson J. B.: <i>Discovering the Vernacular Landscape</i> (Yale University Press, New Haven, CT) 1984 Swaffield, S. ed.: <i>Theory in Landscape Architecture: a Reader</i> : University of Pennsylvania Press 2002 Weilacher, Udo: <i>Syntax of Landscape</i> , (Birkhäuser) 2007 Yencken, D. 'The View from Within and the View from Without: Australian Landscape Research', <i>Landscape Review 1</i> , pp. 40–53: 1995 Laurie, Michael: <i>Introductory Landscape Architecture</i>		

Basics Landscape Design for Conversion Students			
Ref number	Workload	Credits	
C3	150 h	5	
1	Methods Online teaching		
2	Learning outcomes Basic competencies for design tasks for landscape design and design of open spaces will be developed. The difference between various design disciplines (Architecture, Industrial Design, Landscape Design, etc.) will be discussed, so that students get familiar with the specifics of landscape design and landscape perception. They will get to know the Landscape components and elements and its interdependencies will be introduced. Furthermore the module develops the students' ability to evaluate the appropriate use of analysis and assessment approaches for decision making and concepting. Different approaches in design and planning methods for a creative and responsible landscape design will be discussed and applied by design exercises.		
3	Syllabus <ul style="list-style-type: none"> - Landscape components (vegetation, geology, soil, climate, water, topography) - Basics of Landscape and space analysis - Social, ecological, economic, cultural, artistic, and functional aspects of design - Basics of creative design and planning methods - Developing first concepts - Design Exercises and work on a sample project - Sustainability and usability - presentation of concepts and design ideas 		
4	Methods literature work, online tutorial, individual exercises via online material		
5	Course requirements no		
6	Examination essay, final assignment		
7	Teacher / course coordinator Dipl.-Ing. M. Kuntz, Prof. Dr. N. Uhrig		
8	Bibliography Waterman, Tim: Fundamentals of Landscape Architecture, Lausanne 2009 Dines N.T., Brown K.D. (2001): <i>Landscape Architect's Portable Handbook</i> , (McGraw-Hill Professional) 2001 Appleton, Jay: <i>The experience of Landscape</i> (Revised Ed.) 1996 Jellicoe, Geoffrey: <i>The landscape of man</i> (Revised Ed.), London 1987 Internet: http://www.gardenvisit.com/landscape_architecture		

Basics Landscape Analysis for Conversion Students			
Ref number	Workload	Credits	
C4	150 hrs	5	
1	Methods Online teaching		
2	Learning outcome After this course, students know how to design different versions of landscaping and planting plans.		
3	Syllabus Students learn about official documents and how they are implemented in land-use policies in the framework of the German "Lokale Agenda 21". Participants are introduced to running mandatory environmental tests and understand legal texts in landscape planning and for conservation measures, such as "Ökokonto".		
4	Methods online tutorial, individual exercises via online material		
5	Course requirements Qualifications/Certificates: no Prior knowledge: no		
6	Examination essay, final assignment		
7	Teacher / course coordinator Prof. Dr. B. Kretzschmar		
8	Bibliography Course reader and additional literature available on Moodle platform Text PDFs are available online at: http://www.esf.edu/es/ Swanwick, C. 2002. <i>Landscape Character Assessment</i> . The countryside Agency and Scottish Natural Heritage. Pdf Dramstad, W.E., J.D. Olson, R.T.T. Forman. 1996. <i>Landscape Ecology principles in landscape Architecture and Land-Use Planning</i> . Washington DC. Island Press. Steinitz, C. 2012. <i>A Framework for Geodesign</i> . Redlands. ESRI Press		

Basics Design for Conversion Students			
Ref number	Workload	Credits	
C5	150 hrs	5	
1	Methods Online teaching		
2	Learning outcome Students will be familiar with creative processes, concepting, drawing and sketching for landscape architecture. They know how to deal with proportion and different measurements or contours when drafting plots in 1:50, 1:100 and 1:20 sizes and in colored creative forms.		
3	Syllabus Basic competencies for design tasks and the basics of cognitive and intuitive creativity will be developed. Different approaches in creative work between various design disciplines will be discussed, so that students get familiar with the specifics of creative design processes. Different approaches in design and planning methods for a creative design like various materials, structures, concepting methods and ways of expressing ideas will be discussed and applied by design exercises. Students learn to draw manually and with pen and paper various forms of A3/A4 sketches and detailed drafts of 3D objects, for example walls, steps, constructions. Participants are introduced to the proper layout of master plans featuring color and shadows as well as on different materials such as transparencies.		
4	Methods online tutorial, individual exercises via online material		
5	Course requirements Qualifications/Certificates: no Prior knowledge: no		
6	Examination essay, final assignment		
7	Teacher / course coordinator Dipl.-Ing. M. Kuntz, Prof. Dr. N. Uhrig		
8	Bibliography Trudi Entwistle, Edwin Knighton: Visual Communication for Landscape Architecture Jack Hamm: Drawing Scenery: Seascapes and Landscapes		

Course Title: Communication Skills for Conversion Students			
Ref number	Workload	Credits	
C6	150 hrs	5	
1	Methods Online teaching		
2	Learning outcome After this course, students will know more words to speak and write about landscape architecture for professors as well as professionals.		
3	Syllabus This weekly language class will look into English grammar and other parts of language. Besides reading and writing, all participants have to prepare classroom presentations and are given listening exercises for self-study. That for soft skills in oral and written communication will be taught and exercised and certain aspects of presentation and negotiation will be worked out. In the January/February weeks of term, students can have their publications proofread and corrected during studio sessions.		
4	Methods online tutorial, individual exercises via online material		
5	Course requirements Qualifications/Certificates: no Prior knowledge: Advanced English		
6	Examination oral exam		
7	Teacher / course coordinator R. Leppin		
8	Bibliography -Bailey, Stephen (2011). <i>Academic Writing - A Handbook for International Students</i> . Oxen/New York: Routledge. -Hargie, Owen (Ed.) (1986): <i>A Handbook of Communication Skills</i> , London -Heidenreich, Sharon (2008). <i>English for Architects and Civil Engineers</i> . Wiesbaden: Vieweg+Teubner. -Murphy, Raymond (2004). <i>English Grammar in Use (3rd Edition)</i> . Cambridge: CUP.		

Basics of Planting Design for Conversion Students			
Ref number	Workload	Credits	
C7	150 hrs	5	
1	Methods Online teaching		
2	Learning outcome After completion of this course, students will be knowledgeable about life spans, life forms, site conditions (especially climate zones) and strategies in population biology, which provides the groundwork for habitat conforming plant selection as well as for optimized maintenance techniques to be applied in later professional practice.		
3	Syllabus Students learn about life forms and life spans, taxonomy and nomenclature models, breeding methods, and the selection of cultivars. Participants hear lectures on climate zones (arctic, boreal, nemoral, subtropical, tropical) and their impact on planting design. They have to study plant examples for trees, shrubs, perennials and annuals (in botanical sense as well as according to horticultural definition). The course discusses site conditions with emphasis on the lime-iron problem, looks into habitats for perennials, and examines Grimes' strategies in population biology and their impact in planning and maintaining plantings.		
4	Methods online tutorial, individual exercises via online material		
5	Course requirements Qualifications/Certificates: no Prior knowledge: no		
6	Examination essay, final assignment		
7	Teacher / course coordinator Prof. Dr. W. Kircher		
8	Bibliography Nick Robinson: "Planting Design Handbook"; in the Bernburg University library: http://lhanh.qbv.de/DB=1.2/CMD?ACT=SRCHA&IKT=1016&SRT=YOP&TRM=nick+robinson for a deeper insight into naturalistic planting design (only for advanced "plantsmen!") "The Dynamic Landscape": <a href="http://lhanh.qbv.de/DB=1.2/SET=2/TTL=2/CMD?ACT=SRCHA&IKT=1016&SRT=YOP&TRM=du
nnett+dynamic">http://lhanh.qbv.de/DB=1.2/SET=2/TTL=2/CMD?ACT=SRCHA&IKT=1016&SRT=YOP&TRM=du nnett+dynamic		

Basics Landscape Ecology for conversion students			
Ref number	Workload	Credits	
C8	150 hrs	5	
1	Methods Online teaching		
2	Learning outcome The students know the main analytical, diagnostic and prognostic methods as well as the complex interdependencies of landscape ecology. In this context the students discuss the main environmental risks and pressures (e.g. soil erosion, soil contamination, flood, etc.). In the recent past the so called ecosystem services became more and more important.		
3	Syllabus <ul style="list-style-type: none"> - main principles and methods of landscape ecology - stability, impact, regulations - environmental risks, pressures - landscape analysis: landscape components (geology, relief, soil, climate, water, bios) - landuse, landscape structure, landscape metrics - landscape change, cultural heritage - landscape diagnosis: Assessment and functions, presentation of recent processes and future development of landscape - foresight research - results of pedogenetic processes, soil types in Central Europe - description and assessment of methods of landscape ecology especially in the context of soils - ecosystem services 		
4	Methods online tutorial, individual exercises via online material		
5	Course requirements Qualifications/Certificates: no Prior knowledge: no		
6	Examination essay, final assignment		
7	Teacher / course coordinator Prof. E. Kretzler		
8	Bibliography <p>Bastian, O. & U. Steinhardt (2009): Development and Perspectives of Landscape Ecology</p> <p>Constanza, R. et al. (1997): The value of the world's ecosystem services and natural capital. Nature 387:253-260</p> <p>Cash DW, Clark WC, Alcock F, Dickson MN, Eckly N, Guston DH, Jäger J, Mitchel RB (2003) Knowledge systems for sustainable development. PNAS 100:8086-8091</p> <p>Fry G, Tress B, Tress G (2007) Integrative landscape research: facts and challenges. In: Wu J, Hobbs R (eds) Key topics in landscape ecology. Cambridge University Press, Cambridge UK, pp 246-268</p> <p>Funtowicz SO, Ravetz JR (1993) Science for the post-normal age. Futures 25:739-755</p> <p>Gardner RH, Jopp F, Cary GJ, Verburg PH (2008) World congress highlights need for action. Landscape Ecology 23:1-2</p> <p>Grunewald, K. & O. Bastian (Hrsg.) (2013). Ökosystemdienstleistungen. Konzept, Methoden und</p>		

Fallbeispiele. Springer Spektrum (Translation into the English appears soon in print).

Mussachio L (2009) The scientific basis for the design of landscape sustainability: a conceptual framework for translational landscape research and practice for designed landscapes and the six Es of landscape sustainability. *Landscape Ecology* 24:993-1013

Nassauer J, Opdam P (2008) Design in science: extending the landscape ecology paradigm. *Landscape ecology* 23:633-644

Turner, M.G. & R. H. Gardner (2007): *Quantitative Methods in Landscape Ecology: The Analysis and Interpretation of Landscape Heterogeneity (Ecological Studies)*

Zonneveld, I.S. (1995): *Land Ecology: An Introduction to Landscape Ecology as a Base for Land Evaluation, Land Management and Conservation*. Kugler Publications

Wu JG (2006) Landscape ecology, cross-disciplinarity, and sustainability science. *Landscape Ecology* 21:1-4

Wu J (2010) Urban sustainability: an inevitable goal of landscape research. *Landscape Ecology* 25:1-4

International Association for Landscape Ecology (IALE) <http://www.landscape-ecology.org>

Basics GIS for Landscape Architects for Conversion Students			
Ref number	Workload	Credits	
C9	150 h	5	
1	Methods Online teaching		
2	Learning outcomes Students acquire basic understanding of EVAP-concept and an introduction of data acquiring techniques (e.g. GNNS, Remote Sensing). They are able to assess the potential of spatial analysis in the context of landscape architecture and landscape planning. Fundamental concepts of GIS and the major functionality will be learned in this course.		
3	Syllabus - fundamental concepts of GIS - Introduction to GIS tools and methods - differences between GIS and CAD tools - basic data management - examples for GIS for landscape architects		
4	Methods online tutorial, individual exercises via online material		
5	Course requirements no		
6	Examination essay, final assignment		
7	Teacher / course coordinator Dr. M. Pietsch		
8	Bibliography Craighead, F., Convis, C. (Eds.) (2013): Conservation Planning, ESRI Press, Redlands Reader "GIS for Landscape Architects" different data sources, material- and object libraries, practical examples computer model vs. reality, lasermeasuring tools, PDA, android based devices		

Internship					
Ref number	Workload	Credits	Semester	Frequency	Length
/	750 hrs/	25	3	winter	20 weeks
1	Methods Practical training	Time /	Homework /	Group size /	
2	Learning outcomes <p>It is the objective of the internship to familiarize students with future fields of activity, to gain practical experience supplementing theoretical knowledge obtained during the course, to acquire practical skills for applying theoretical knowledge in practice, and further motivation and orientation towards the subsequent semesters. The internship shall complement the study course by performing an activity similar to the future occupation. The knowledge, skills and abilities acquired in the study course shall be applied in practice.</p>				
3	Syllabus <p>The internship shall be evidenced for a period of 20 weeks. It shall be carried out in private landscape architectural offices, multi-disciplinary design and planning offices or regarding public or private institutions, hereinafter referred to as "companies". 25 credits are awarded for an acknowledged internship period of 20 weeks.</p> <p>The internship is a supervised internship. Each student will be assigned a lecturer (mentor) of Anhalt University of Applied Sciences. The student is given the opportunity to select a mentor. Prior to the start of the internship, the academic mentor will acknowledge by signature that</p> <ol style="list-style-type: none"> 1) he/she will act as the mentor, 2) the designated company is deemed suitable for the internship, 3) the student will be given an internship task in written form, 4) the student will principally be obliged to submit an intermediate draft of the internship report. 				
4	Methods Practical training and working				
5	Course requirements Qualifications/Certificate: successfully passed first and second semester Prior knowledge: no				
6	Examination no				
7	Credits internship task in written form, presentation				
8	Credit transfer policy no				
9	Grade weight /				

10	Course coordinator Prof. E. Kretzler
11	Information Support "Application for Internship" during the second semester Information about potential internship companies (Prof. Kretzler) Internship regulation and other information http://mla.loel.hs-anhalt.de/index.php/academic-program/regulations http://mla.loel.hs-anhalt.de/index.php/academic-program/internship Presentation internship report during the 4 th semester

Thesis preparation					
Ref number	Workload	Credits	Semester	Frequency	Length
	60 hrs	no	3, 4 sem.	winter, summer	one semester
1	Methods a) Seminar		Time 15 SWS / 22,5 hrs	Homework 37,5 hrs	Group size 25 students
2	<p>Learning outcomes</p> <p>The seminar should enable students to develop a thesis topic, proceed with a literature review of the topic in order to refine the research/design topic. Students should be able to structure the thesis, and understand what content is contained in each section of the thesis.</p> <p>Students should be aware of how to write in a formal or academic style and how to avoid plagiarism by correctly citing literature. Students should be familiar with the writing process and different ways to structure texts. Furthermore, students should be able to edit both the work of other students and their own.</p>				
3	<p>Syllabus</p> <p>To introduce students to the concepts and skill involved with:</p> <ul style="list-style-type: none"> - Research strategies - Literature review - Progressing from idea to text - Methods to structure ideas - Different sections of a thesis: Abstract, introduction, methodology, results/design, discussion, conclusions - Plagiarism - How to cite literature and sources - Writing styles - Writing process, writer's block - How to write an expose/ thesis proposal - How to edit written work 				
4	<p>Methods</p> <p>Input lectures, discussions and small groups</p>				
5	<p>Course requirements</p> <p>Qualifications/Certificates: succesfully passed first and second semester</p> <p>Prior knowlegde: no</p>				
6	<p>Examination</p> <p>Presentation of thesis proposal</p>				
7	<p>Credits</p> <p>no</p>				
8	<p>Credit transfer policy</p> <p>no</p>				
9	<p>Grade weight</p>				

10	<p>Teacher/course coordinator</p> <p>Prof. Dr. N. Uhrig</p>
11	<p>Bibliography</p> <p>Grammar and style:</p> <ul style="list-style-type: none"> ▶▶ „The Elements of Style“, by W. Strunk & E. B. White ▶▶ „The Little Red Writing Book“, by B. Royal ▶▶ „A writer’s guide to transitional words and expressions“, by V. Pellegrino <p>Writing a thesis</p> <ul style="list-style-type: none"> ▶▶ „A Manual for Writers of Research Papers, Theses, and Dissertations“, by K. Turabian ▶▶ „The Craft of Research“, by W. Booth, G. Colomb, & J. Williams <p>Writing and editing</p> <ul style="list-style-type: none"> ▶▶ „Abstracts and the Writing of Abstracts“, by J. Swales & C. Feak ▶▶ „The Craft of Scientific Writing“, M. Alley ▶▶ „The Craft of Editing“, M. Alley ▶▶ „English for Writing Research Papers“, A. Wallwork

Master Thesis					
Kennummer	Workload	Credits	Semester	Frequency	Length
	900 h/ 20 weeks	30	4. Sem.	summer	1 Semester
1	Methods		Time	Homework	Group Size
	-		-	-	-
2	<p>Learning outcome</p> <p>The students are able to work independently on a complex problem within a specified time frame using their background of experience. With the help of an appropriate methodology they are able to apply scientific knowledge, to overview complex coherences and to establish application and research references.</p> <p>With the Colloquium as a completion of the master thesis students demonstrate that they are capable to present scientific knowledge and own results supported with modern tools. They acquired skills how to present content and method within a scientific dispute in a convincing manner.</p>				
3	<p>Contents</p> <p>The issue shows professional relevance, epistemological interest and is application-oriented. Besides the selected focus also ecological, environmental, social, economic, cultural, aesthetic, and functional aspects are reflected and current development processes in contemporary landscape architecture are considered.</p> <p>Possible subjects and problems regarding landscape design, Landscape planning or urban design are inter alia:</p> <ul style="list-style-type: none"> – to analyze ecological interdependencies in the built environment or in the open landscape and to make it part of a planning strategy – developing strategies for sustainable forms of use considering the changing conditions in the international context – tasks in landscape design, landscape planning or urban design regarding specific cultural contexts in different countries – developing concepts for current landscape architectural issues (e.g. renewable energy landscapes, process based planning, infrastructural landscapes, industrial landscapes, etc.) 				
4	Methods -				
5	<p>Course requirements</p> <p>Qualifications/Certificates: succesfully passed first and second semester</p> <p>Prior knowlegde: no</p>				
6	<p>Examination</p> <p>Writing, oral</p>				
7	<p>Credits</p> <p>Acceptance for Master Thesis, Successful accomplishment and Colloquium</p>				

8	Credit transfer policy none
9	Grade weight 100%
10	Teacher / course coordinator Teachers of HSA
11	<p>information</p> <p>It is possible to use the Thesis Seminar for preparation to write the Master Thesis at the end of the 3th semester.</p> <p>The seminar should enable students to develop a thesis topic, proceed with a literature review of the topic in order to refine the research/design topic. Students should be able to structure the thesis, and understand what content is contained in each section of the thesis.</p> <p>Students should be aware of how to write in a formal or academic style and how to avoid plagiarism by correctly citing literature. Students should be familiar with the writing process and different ways to structure texts. Furthermore, students should be able to edit both the work of other students and their own.</p> <p>Teacher</p> <p>Prof. Dr. N. Uhrig</p> <p>Bibliography</p> <p>Grammar and style:</p> <ul style="list-style-type: none"> ▶▶ „The Elements of Style“, by W. Strunk & E. B. White ▶▶ „The Little Red Writing Book“, by B. Royal ▶▶ „A writer’s guide to transitional words and expressions“, by V. Pellegrino <p>Writing a thesis</p> <ul style="list-style-type: none"> ▶▶ „A Manual for Writers of Research Papers, Theses, and Dissertations“, by K. Turabian ▶▶ „The Craft of Research“, by W. Booth, G. Colomb, & J. Williams <p>Writing and editing</p> <ul style="list-style-type: none"> ▶▶ „Abstracts and the Writing of Abstracts“, by J. Swales & C. Feak ▶▶ „The Craft of Scientific Writing“, M. Alley ▶▶ „The Craft of Editing“, M. Alley ▶▶ „English for Writing Research Papers“, A. Wallwork