

Module Manual

Master Program

Landscape Architecture (MLA)

Content

1. Compulsory Courses	3
R1 - Atelier Urban Design I	4
R2 - Atelier Urban Design II	6
R3 - Atelier Landscape Design I	8
R4 - Atelier Landscape Design II	10
R5 - Site Design, History and Theory of LA	12
R6 - Landscape and Environmental Planning	14
R7 - Computer Sciences	
R8 - Materials and Construction	18
R9 - Sustainable Development	20
R10 - Planting Design	22
Thesis Seminar	24
Internship	26
Master Thesis	28
2. Elective Modules	30
E1 - Architecture and Design	31
E2 - Project Management	
E3 - New Media in Landscape Architecture	35
E4 - Philosophy/ Sociology	
3. Additional Modules	39
Z1 - English for Landscape Architecture	40
Z2 - German	41
4. Conversion Modules	42
C1 – History of Landscape Architecture	43
C2 – Theory of Landscape Architecture	45
C3 – Landscape Design	46
C4 – Landscape Analysis	48
C5 – Basics Design	50
C6 –Communication Skills	52
C7 – Basics of Planting Design	53
C8 –Landscape Ecology	55
C9 – Basics GIS for Landscape Architecture	57
C10 – Basics CAD for Landscape Architects	59

1. Compulsory Courses

Name of Module: R1 - Atelier Urban Design I

Module Coordinator: Prof. Dr. Nicole Uhrig

Teachers: Prof. Dr. Nicole Uhrig

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Compulsory Courses

Semester: 1. Semester (winter)	Duration: one semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: Lectures, Project work, Teamwork, Self-studying

Examination (acc. PSO): project work (Successful project work and presentation)

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: -

Learning outcomes, competences (Qualification goals)

Atelier Urban Design 1+2 are thematically and temporally self-contained study units, each with a different thematic focus. Depending on the project's degree of difficulty, complexity, scope of the project area and sufficient range of various topics, ateliers 1+2 will be combined in a meaningful way and worked on in a holistic approach.

Learning Objectives + Set-Up

On the basis of current questions posed by practical actors and current discussion in the profession of landscape architecture the atelier's task to be worked on by the students is developed from an academic and practice-oriented point of view. Stakeholders, such as non-profit institutions, municipalities, planning offices, etc. act as partners of the university and cooperate for visits to the planning sites and consultations and presentations of interim or/and final results of the student's works.

The annually changing thematic focus with regard to the question or task to be worked on in the studio allows the students to react to current developments and significant trends in landscape architecture. In accordance with the changing thematic focuses of the studio assignment, the students are accompanied by co-teaching, e.g. by other academic mentors as well as by additional specialist or practice-oriented mentors with specific expertise.

Subject Specific Competence Goals and Learning Outcomes

- deepen specific professional and methodological competences for individual profile development,
 e.g. theory & methodology in landscape architecture, urban open space planning, materials and construction, regulations & policies e.g. Tree protection statutes.
- knowledge in HOAI landscape planning phases 1-3 with puntual insights in phases 4-5.
- knowledge about various analysis (factual, evaluative, creative methods), design and planning
 approaches, students are capable to merge cultural, sociological, ecological, aesthetic, economic and
 functional aspects to a coherent and conceptually coherent open space design that refers to
 surrounding structures

Generic Competence Goals and Learning Outcomes

- show capacities to apply their knowledge to new situations generating new ideas.
- understand how to work independently on solving complex planning problems and the work relates to current issues of landscape architecture.
- extended key competences in communication and interpersonal skills (by teamwork in international, multicultural and interdisciplinary teams) and show time management, organizational (by a responsibly coordinated definition of working packages and goal-oriented and timely processing of the studio task), methodological and presentation skills with the aim of presenting their knowledge gained and work in a visually and textually convincing and scientific manner.

Main Topics (annually changing)

- Open Space Design for arious Public or Private Open Space Typologies (Residential, Park, Corporate, etc.)
- School Yard or University Campus Design
- Sustainable & Climate Adaptive Inner City Redesign
- City Square & Boulevard Design
- Waterfront Design
- Etc.

Bibliography // Study Materials:

- Handout informing about the project area
- a detailed description of the tasks
- Various documents concerning the planning area (aerial photographs, topography maps, etc.)
- Material&information on various soft skill topics and appropriate software
- Collection of topic related theory&practice study material
- Roehr, Daniel: Multisensory Landscape Design A Designer's Guide for Seeing, Routledge, London 2022
- Gehl, Jan: Life between buildings: using public space, Kopenhagen 1971/2001
- Corbin, Juliet; Strauss, Anselm:Basics of Qualitative Research Techniques and Procedures for
- Lynch, Kevin, The Image of the City, MIT Press, Cambridge/MA 1960
- Lagro, James A.:Site Analysis: A Contextual Approach to Sustainable Land Planning and Site Design, New Jersey 2008Lassus, Bernard: The Landscape Approach, Philadephia/Pennsylvania 1998
- Prominski et al.: River.Space.Design, Berlin, Basel, 2012
- Additional collection of topic related theory&practice study material

Name of Module: R2 - Atelier Urban Design II

Module Coordinator: Prof. Dr. Nicole Uhrig

Teachers: Prof. Dr. Nicole Uhrig

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Compulsory Courses

Semester: 1. Semester (winter)	Duration: one semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
	Lecture	-
Teaching Forms and corresponding	Seminar/ Practical Course	60 hrs
work load (acc. PSO, Anlage 4):	Internship	-
	Self-Study	90 hrs

Teaching Method: Lectures, Project work, Teamwork, Self-studying

Examination (acc. PSO): project work (Successful project work and presentation

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge:

Learning outcomes, competences (Qualification goals)

Atelier Urban Design 1+2 are thematically and temporally self-contained study units, each with a different thematic focus. Depending on the project's degree of difficulty, complexity, scope of the project area and sufficient range of various topics, ateliers 1+2 will be combined in a meaningful way and worked on in a holistic approach.

Learning Objectives + Set-Up

On the basis of current questions posed by practical actors and current discussion in the profession of landscape architecture the atelier's task to be worked on by the students is developed from an academic and practice-oriented point of view. Stakeholders, such as non-profit institutions, municipalities, planning offices, etc. act as partners of the university and cooperate for visits to the planning sites and consultations and presentations of interim or/and final results of the student's works.

The annually changing thematic focus with regard to the question or task to be worked on in the studio allows the students to react to current developments and significant trends in landscape architecture. In accordance with the changing thematic focuses of the studio assignment, the students are accompanied by co-teaching, e.g. by other academic mentors as well as by additional specialist or practice-oriented mentors with specific expertise.

Subject Specific Competence Goals and Learning Outcomes

- deepen specific professional and methodological competences for individual profile development, e.g. theory & methodology in landscape architecture, urban open space planning, materials and construction, regulations & policies e.g. Tree protection statutes.
- Knowledge in HOAI landscape planning phases 1-3 with puntual insights in phases 4-5.
- knowledge about various analysis (factual, evaluative, creative methods), design and planning
 approaches students are capable to merge cultural, sociological, ecological, aesthetic, economic and
 functional aspects to a coherent and conceptually coherent open space design that refers to
 surrounding structures and

- Through intensive work on a design task from practice or research, students are highly capable of abstraction, three-dimensional/spatial thinking at various scales and conceptual action. In addition, they are able to face the current professional discourse with innovative solutions.
- Through the realistic working environment and typical phases of a design project in cooperation with clients, students improved project management skills, skills for an interdisciplinary working as well as team-working skills and leadership traits.

Generic Competence Goals and Learning Outcomes

- show capacities to apply their knowledge to new situations generating new ideas.
- understand how to work independently on solving complex planning problems and the work relates to current issues of landscape architecture.
- extended key competences in communication and interpersonal skills (by teamwork in international, multicultural and interdisciplinary teams) and show time management, organizational (by a responsibly coordinated definition of working packages and goal-oriented and timely processing of the studio task), methodological and presentation skills with the aim of presenting their knowledge gained and work in a visually and textually convincing and scientific manner.

Main Topics (annually changing)

- Open Space Design for arious Public or Private Open Space Typologies (Residential, Park, Corporate, etc.)
- School Yard or University Campus Design
- Sustainable & Climate Adaptive Inner City Redesign
- City Square & Boulevard Design
- Waterfront Design
- Etc.

Bibliography // Study Materials:

- Handout informing about the project area
- a detailed description of the tasks
- Various documents concerning the planning area (aerial photographs, topography maps, etc.)
- Material&information on various soft skill topics and appropriate software
- Collection of topic related theory&practice study material
- Roehr, Daniel: Multisensory Landscape Design A Designer's Guide for Seeing, Routledge, London 2022
- Gehl, Jan: Life between buildings: using public space, Kopenhagen 1971/2001
- Corbin, Juliet; Strauss, Anselm:Basics of Qualitative Research Techniques and Procedures for
- Lynch, Kevin, The Image of the City, MIT Press, Cambridge/MA 1960
- Lagro, James A.:Site Analysis: A Contextual Approach to Sustainable Land Planning and Site Design, New Jersey 2008
 - Lassus, Bernard: The Landscape Approach, Philadephia/Pennsylvania 1998
- Prominski et al.: River.Space.Design, Berlin, Basel, 2012
- Additional collection of topic related theory&practice study material

Name of Module: R3 - Atelier Landscape Design I

Module Coordinator: Prof. Dr. Nicole Uhrig

Teachers: Prof. Dr. Nicole Uhrig

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Compulsory Courses

Semester: 2. Semester (summer)	Duration: one semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: Seminar, project work, group projects

Examination (acc. PSO): project work (Successfully project work and presentation)

Preliminary performance:
Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: Knowledge of ecological processes, basic GIS skills

Learning outcomes, competences (Qualification goals)

Atelier Landscape Design 1+2 are thematically and temporally self-contained study units, each with a different thematic focus. Depending on the project's degree of difficulty, complexity, scope of the project area and sufficient range of various topics, ateliers 1+2 will be combined in a meaningful way and worked on in a holistic approach.

Learning Objectives + Set-Up

On the basis of current questions posed by practical actors and current discussion in the profession of landscape planning the atelier's task to be worked on by the students is developed from an academic and practice-oriented point of view. Stakeholders, such as non-profit institutions, municipalities, planning offices, etc. act as partners of the university and cooperate for visits to the planning sites and consultations and presentations of interim or/and final results of the student's works.

The annually changing thematic focus with regard to the question or task to be worked on in the studio allows the students to react to current developments and significant trends in landscape architecture. In accordance with the changing thematic focuses of the studio assignment, the students are accompanied by co-teaching, e.g. by other academic mentors as well as by additional specialist or practice-oriented mentors with specific expertise.

Subject Specific Competence goals and learning outcomes

- deepen specific professional and methodological competences for individual profile development, e.g. computer-aided spatial analysis techniques, methods of landscape assessment, suitability analysis, visual assessment, cultural landscape character assessment, planning/design for landscape aspects of infrastructural projects, interpretation and management and/or conservation of cultural landscapes, master planning & green city development strategies, etc.
- know about the principles of analysing, planning, design and development in the thematic area of nature and landscape and are capable to apply their knowledge
- understand the cultural, visual and ecological components of the landscape as well as the factors that shape landscape

- gain theoretical knowledge and the ability to reflect and work on preserving diversity of nature and landscape can be applied on use-related and functional services of landscape as well as on perceiving and experiencing landscape including aesthetic-cultural, touristic and landscape development aspects.
- gain knowledge about various analysis (factual, evaluative, creative methods), design and planning
 approaches students are capable to merge cultural, sociological, ecological, aesthetic, economic and
 functional aspects to a coherent and conceptually coherent landscape design that refers to the
 context

Generic Competence Goals and Learning Outcomes

- show the competence to work independently on solving complex planning problems by problemsolving techniques and capacities to apply their knowledge to new situations and generating new ideas.
- extended key competences in communication, interpersonal and leadership skills (by teamwork in
 international, multicultural and interdisciplinary teams) and show time management, organizational
 (by a responsibly coordinated definition of working packages and goal-oriented and timely processing
 of the studio task), methodological and presentation skills with the aim of presenting their knowledge
 gained and work in a visually and textually convincing and scientific manner.

Main Topics (annually changing)

Socio - Cultural

(e.g.: landscape scenery and beauty, recreational development, sustainable tourism, cultural landscape, monumental heritage, etc.)

Function+Ecology

(e.g. condition of nature+landscape, ecosystem services, natural resources, biodiversity, flood reduction, biotope networks, etc.)

Bibliography // Study Materials:

- Handout informing about the project area
- a detailed description of the tasks
- Various documents concerning the planning area (aerial photographs, topography maps, etc.)
- Collection of topic related theory&practice study material
- 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
- Forschungsgesellschaft Landschaftsentwicklung Landschaftsbau e.V (Hg): Leitfaden Nachhaltige Freianlagen, Bonn, 2018
- Jackson J. B.: Discovering the Vernacular Landscape (Yale University Press, New Haven, CT) 1984
- Further topic related literature&material

Name of Module: R4 - Atelier Landscape Design II

Module Coordinator: Prof. Dr. N. Uhrig

Teachers: Prof. Dr. N. Uhrig

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Compulsory Courses

Semester: 2. Semester (summer)	Duration: one semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
	Lecture	-
Teaching Forms and corresponding	Seminar/ Practical Course	60 hrs
work load (acc. PSO, Anlage 4):	Internship	-
	Self-Study	90 hrs

Teaching Method: Seminar, project work, group projects

Examination (acc. PSO): project work
Preliminary performance:

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: Knowledge of ecological processes, basic GIS skills

Learning outcomes, competences (Qualification goals)

Atelier Landscape Design 1+2 are thematically and temporally self-contained study units, each with a different thematic focus. Depending on the project's degree of difficulty, complexity, scope of the project area and sufficient range of various topics, ateliers 1+2 will be combined in a meaningful way and worked on in a holistic approach.

Learning Objectives + Set-Up

On the basis of current questions posed by practical actors and current discussion in the profession of landscape planning the atelier's task to be worked on by the students is developed from an academic and practice-oriented point of view. Stakeholders, such as non-profit institutions, municipalities, planning offices, etc. act as partners of the university and cooperate for visits to the planning sites and consultations and presentations of interim or/and final results of the student's works.

The annually changing thematic focus with regard to the question or task to be worked on in the studio allows the students to react to current developments and significant trends in landscape architecture. In accordance with the changing thematic focuses of the studio assignment, the students are accompanied by co-teaching, e.g. by other academic mentors as well as by additional specialist or practice-oriented mentors with specific expertise.

Subject Specific Competence goals and learning outcomes

- deepen specific professional and methodological competences for individual profile development, e.g. computer-aided spatial analysis techniques, methods of landscape assessment, suitability analysis, visual assessment, cultural landscape character assessment, planning/design for landscape aspects of infrastructural projects, interpretation and management and/or conservation of cultural landscapes, master planning & green city development strategies, etc.
- knowledge about the principles of analysing, planning, design and development in the thematic area of nature and landscape and are capable to apply their knowledge
- understand the cultural, visual and ecological components of the landscape as well as the factors that shape landscape

- Theoretical knowledge and the ability to reflect and work on preserving diversity of nature and landscape can be applied on use-related and functional services of landscape as well as on perceiving and experiencing landscape including aesthetic-cultural, touristic and landscape development aspects.
- Knowing about various analysis (factual, evaluative, creative methods), design and planning
 approaches students are capable to merge cultural, sociological, ecological, aesthetic, economic and
 functional aspects to a coherent and conceptually coherent landscape design that refers to the
 context

Generic Competence Goals and Learning Outcomes

- show the competence to work independently on solving complex planning problems by problemsolving techniques and capacities to apply their knowledge to new situations and generating new ideas.
- have extended key competences in communication, interpersonal and leadership skills (by teamwork
 in international, multicultural and interdisciplinary teams) and show time management, organizational
 (by a responsibly coordinated definition of working packages and goal-oriented and timely processing
 of the studio task), methodological and presentation skills with the aim of presenting their knowledge
 gained and work in a visually and textually convincing and scientific manner.

Main Topics (annually changing)

Socio – Cultural

(e.g.: landscape scenery and beauty, recreational development, sustainable tourism, cultural landscape, monumental heritage, etc.)

Function+Ecology

(e.g. condition of nature+landscape, ecosystem services, natural resources, biodiversity, flood reduction, biotope networks, etc.)

Bibliography // Study Materials:

- Handout informing about the project area
- a detailed description of the tasks
- Various documents concerning the planning area (aerial photographs, topography maps, etc.)
- Collection of topic related theory&practice study material
- 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
- Forschungsgesellschaft Landschaftsentwicklung Landschaftsbau e.V (Hg): Leitfaden Nachhaltige Freianlagen, Bonn, 2018
- Jackson J. B.: Discovering the Vernacular Landscape (Yale University Press, New Haven, CT) 1984
- Further topic related literature&material

Name of Module: R5 - Site Design, History and Theory of LA

Module Coordinator: Prof. Dr. Nicole Uhrig

Teachers: Prof. Dr. Nicole Uhrig

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Compulsory Courses

Semester: 1. + 2. Semester	Duration: two Semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Language: English

Teaching Method: Tutorials, project work, group work, lecture, excursions

Examination (acc. PSO): written examination (Klausur) (90 min.)

Preliminary performance: Advance examination performance in the form of a

project work

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: -

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

Site Design

- acquire knowledge in analysing, concepting and designing urban open spaces incl. related regulations & policies e.g. barrier free circulation (topics varying annually)
- gain insights and competencies in professional practice of landscape architecture and materials and construction techniques are developed.

History and Theory of LA:

- acquire knowledge in theory of landscape architecture
- are able to conduct independent research, to document, to assess and to present knowledge -incl.
 interrelationships and interdependencies- about the history in garden arts and landscape architecture
 and about contemporary discourse and current trends in. In this context, students have the ability to
 engage in scientific discourse

Generic Competence Goals and Learning Outcomes

Site Design

- developed competencies in site analysis, concepting and urban site design in landscape architecture for various design tasks in urban spaces at medium and small scale
- acquire design methodological skills and the ability to handle complex urban and metropolitan spatial structures in concept, content and design
- will be capable to create a synthesis between contemporary and the historical development open space design and urban scape.
- Various open space typologies and their sociological components can be applied with a background knowledge of the correlation between built space and open space.
- Gain competencies about 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.

• will have the sensitivity to urban space quality and find an own position on the development of urban sites with emphasis on usability and sustainability.

History and Theory of LA:

- knowledge of the essential historical manifestations of open spaces and open space systems and are capable of tracing their origin and development
- 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.

Students have expanded and deepened key competences (acquired in an integrated way), including communication, organizational, methodological and presentation skills.

Main Topics

Urban Site Design: Current issues in the national and international context as well as their interrelation. E.g.:

- Spatial development, functionalities and user-friendliness of urban open space typologies
- Models/strategies of current urban development
- Theory, foundations and design of urban open space typologies
- Climate change / green infrastructure
- Urban Ecology
- Participation etc.

History+Theory of LA

- 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 (e.g. hybrid, economic, dynamic, industrial, energy landscapes) etc.

Bibliography // Study Materials:

- Bernard/Loidl: Opening Spaces, Basel (Birkhäuser) 2003
- Boults, Sullivan: Illustrated History of Landscape design, Wiley, 2010
- Cullen, G.: <u>Townscape</u>, Architectural Press London 1961
- Dreiseitl, Herbert: Waterscapes, Basel (Birkhauser) 2009
- Gehl, Jan: Life between buildings: using public space, Kopenhagen 1971/2001
- Jones, J.C.: <u>Design Methods</u>, John Wiley & Sons London 1980
- Kiefer, Gabriele G.; Neubauer, Anika: Landschaft für Architekten: Landschaft, Park, Haus, Qualitäten, Berlin/Boston, 2020
- Giseke, U.; Löw, M. et al: Urban Design Methods-Integrated Urban Research Tools, Berlin (Jovis)
 2021
- Lynch, Kevin: The Image of the City, Cambridge, MA, MIT Press 1960
- Aben, Rob und Saskia de Wit, The Enclosed Garden, Rotterdam (010 Publishers) 1999. (full version on google/books.de)
- Carroll Maureen: Earthly Paradises. Ancient Gardens in History and Archaeology, London (British Museum Press) 2004.
- Clark, Emma: The Art of the Islamic Garden, (Crowood) 2010.
- Hill, Penelope, Contemporary History of Garden Design. European Gardens between Art and Nature, Basel/Berlin/Boston (Birkhäuser) 2004.
- Shepheard, Peter, Modern Gardens, London (The Archit. Press) 1953.
- Vercelloni, Virgilio + Matteo: Inventing the Garden, (Getty Trust) 2011.

Name of Module: R6 - Landscape and Environmental Planning

Module Coordinator: Dipl.-Ing. Maxim von Gagern

Teachers: Dipl.-Ing. Maxim von Gagern

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Compulsory Courses

Semester: 1. Semester (winter)	Duration: one Semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: Group work, project work, small groups (Interactive Plan Game) small Assignments, excursion

Examination (acc. PSO): written examination (90 min.)
Preliminary performance: -

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

This course introduces students to the basics of landscape and environmental planning.

Subject Specific Competence goals and learning outcomes

Landscape Planning:

- basic understanding about the purpose of spatial planning
- knowledge of philosophy, tasks, methods and working steps of landscape planning on local and regional level and their legal framework
- overview of European/ German instruments/tools for environmental planning understanding of values, sensitivities and impacts of conservation through Interactive Plane Game
- learn fields of application of landscape planning on national and international context through presentation of best practises e.g. landscape planning for climate conservation and soil conservation
- knowledge of forms and methods of public participation in a planning process as well as landscape education
- Learning on site: excursion to transforming landscapes through landscape planning

Environmental Planning:

- Resources and understanding of the scientific foundation of different planning and assessment approaches for describing, analysing and assessing an existing landscape. They deepen their knowledge especially about principles and theory of visual assessment of landscapes and are able apply the knowledge into practice in concrete situations
- the ability to critically evaluate the appropriate use of different assessment approaches in the decision making and design process.
- The ability to develop criteria for the evaluation of complex environmental problems and to derive planning objectives and measures
- capacity for analysis and synthesis by reflecting on their personal ethical responsibility as landscape planner and designer
- Understanding the cultural environment and dealing with complexity and ability to think and act in an integrated and holistic way

Generic Competences and Learning Outcomes

After successful completion of the module students have expanded and deepened key generic competences (acquired in an integrated way) including organizational, methodological, critical and self-critical abilities and teamwork. Moreover, they deepen their communication skills through Interactive plan game and experienced moderating a participation processes. Reflection skills on subject related topics are gained through course discussion and field trips.

Main Topics

Landscape Planning:

- Aim and Basics of Spatial Planning and Landscape Planning considering recent challenges
- Germany's Spatial and Landscape Planning system on different levels
- European/ German instruments/tools for environmental planning
- Aims, forms, methods of public participation in a planning process
- Spotlights on relevant Themes, e.g. Landscape Education, Climate Change, Green Infrastructure Environmental Planning:
 - Landscape perception
 - Cultural landscapes and 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
 - Legal background, international conventions
 - Environmental Ethics

Bibliography // Study Materials:

- Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety. 2018. White Paper: Green Spaces in the City for a liveable future. Berlin. 52 pp.
- Haaren, Christina von; Vollheyde, Anna-Lena (2019): Landscape planning in Germany. In: *IRSPSD International* 7 (4), S. 148–166. DOI: 10.14246/irspsda.7.4 148.
- 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 landsape Architecture and Land-Use Planning. Washington DC. Island Press. 80 pp
- Steinitz, C. 2012. A Framework for Geodesign. Redlands. ESRI Press 208 pp.

Name of Module: R	7 - Compute	r Sciences

Module Coordinator: Prof. Dr. Matthias Pietsch

Teachers: Prof. Dr. Matthias Pietsch, Dipl. Ing. Martin Weidel

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Compulsory Courses

Semester: 1. Semester (winter)	Duration: one Semester	Group Size: 10 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	20 hrs
	Internship	40 hrs
	Self-Study	90 hrs

Teaching Method: seminars, exercises (individually and in groups)

Examination (acc. PSO): Assignment (Hausarbeit)
Preliminary performance:

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no Prior knowlegde: no

Learning outcomes, competences (Qualification goals)

Subject Specific Competence Goals and Learning Outcomes

After successful completion of the module students:

- acquire basic skills for efficient digital terrain modeling working with vegetation elements, defining spatial relation-ships, distances and inserting the factor time in the models and making use of movement for understanding the environment
- will be capable to 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).
- acquire the skills needed for the design and creation of digital 3D sketches of landscape design and the integration on different planning levels and software
- Understand how to work with a database, conduct basic GIS analyses and handle data capturings of different sensors and technologies
- 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).

Generic Competence Goals and Learning Outcomes

Through theoretical explanations and practical exercises, students have expanded and deepened key generic competences (acquired in an integrated way) including:

- grounding in basic knowledge of the profession by recognizing the potential of using software (Geographical Information Systems (GIS), Computer Aided Design (CAD)/Visualisation etc.) for the continuous/extensive digitalisation of processes in open space and environmental planning.
- deepen elementary computing skills as LA about computer aided generating of virtual models based on analogue and digital data sources
- communication, organizational, methodological competences and presentation skills
- Capacity for project organisation and planning related to data workflow and data management skills

Main Topics

Students learn about computer aided generating of virtual models based on analogue 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).

Bibliography // Study Materials:

- Daniel Tal: Google SketchUp for Site Design: A Guide to Modeling Site Plans, Terrain and Architecture
- 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)
- Reader "GIS Application in Landscape Architecture: Introduction to the GIS-Workflow"
- different data sources, material- and object libraries, practical examples computer model vs. reality, lasermeasuring tools, PDA, android based devices

Name of Module: R8 - Materials and Construction

Module Coordinator: Prof. Trevor Sears

Teachers: Dipl.-Ing. Ruediger Amend, Prof. Trevor Sears

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Compulsory Courses

Semester: 2. Semester (summer)	Duration: one Semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: lectures, project work, group work

Examination (acc. PSO): project work
Preliminary performance:
Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- understand the scientific foundation of planning activities in the use of materials during the construction phase on the basis of current issues at a high level.
- learned about construction techniques, material-specific properties, surface qualities and machining options.
- master technical principles such as statics, connecting carrying elements or foundation of components.
- gained the ability 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
- are able to present the knowledge gained in a coherent construction plan with details on different scales based on design concepts in the Modules 'Atelier Urban/ Landscape Design I+II' both visually and textually very well and by working independently on problem solutions.

Generic Competence Goals and Learning Outcomes

After successful completion of the module, students have expanded and deepened key competences (acquired in an integrated way), including Communication, organizational, methodological and presentation skills. Moreover, with the project work students deepen key competences of self-management with the ability to work autonomously.

Main Topics

Use and properties of materials: soil, plants, wood, natural stone, brick and clinker, concrete, metals and other building materials.

Components and construction methods: ground modelling 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.

Bibliography // Study Materials:

- Charles Ward Harris, Nicholas T. Dines, Kyle D. Brown: Time-Saver Standards for Landscape Architecture, 1997
- Ryan, Tom; Allen, Edward, Rand, Patrick: Detailing for Landscape Architects: Aesthetics, Function, Constructability, John Wiley & Sons, Inc., New Jersey, 2011
- Christensen, Alan: Dictionary of Landscape Architecture and Construction, McGraw-Hill Companies Inc., 2005
- Sauter, David: Landscape Construction, 3rd Edition, Delmar Cengage Learning, 2011
- Calkins, Meg: Materials for Sustainable Sites: A Complete Guide to the Evaluation, Selection, and Use of Sustainable Materials, John Wiley & Sons, Inc., New Jersey, 2009
- Strom, Steven; Nathan, Kurt; Woland, Jake: Site Engineering for Landscape Architects, 6th Edition, John Wiley & Sons, Inc., New Jersey, 2013
- Thompson, Willian; Sorvig, Kim: Landscape Construction: A guide to Green Building Outdoors, 2nd Edition, Island Press, 2008
- Zimmermann, Astrid: Constructing Landscape: Materials, Techniques, Structural Components, Birkhäuser Publisher, Berlin/Basel/Boston, 2009
- Mader, Gunter; Zimmerman, Elke: Walls Elements of Garden and Landscape Architecture, München, 2008
- Holden, Robert/Liversedge, Jamie: Construction for Landscape Architecture, London, 2011
- Thompson, I./Sorvig, K.: Sustainable Landscape Construction- A Guide to Green Building Outdoors.
 Ed., Washington, 2011
- Landscape Architectural Graphic Standards, Leonard J. Hopper, 2007
- Websites for company products/materials

Name of Module: R9 - Sustainable Development

Module Coordinator: Prof. Dr. Alexander Schmidt

Teachers: Prof. Dr. Alexander Schmidt, M. Eng. Susanne Raabe

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Compulsory Courses

Semester: 2. Semester (summer)	Duration: one Semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: Seminar, group work

Examination (acc. PSO): written examination (Klausur) (90 min.)

Preliminary performance:
Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- understand the ecological, social and economic factors that influence sustainable development, planning and design
- acquired knowledge with different sustainability criteria and can apply their knowledge to evaluate the sustainability of existing projects using sustainability criteria.
- gain the ability to apply sustainability principles to plans and designs at different scales from global, regional, local and residential.
- Derive an understanding of 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.

Generic Competence Goals and Learning Outcomes

After successful completion of the module, the students have expanded and deepened key competences (acquired in an integrated way), including communication, organizational, methodological and presentation skills.

Main Topics

- concepts of sustainability and sustainable site design, concept of ecosystem services with focus on interconnection between ecological, social and economic factors and pressures that influence sustainability
- guiding principles for sustainable sites
- qualitative and quantitative criteria and different frameworks for the evaluation of
- policies and institutions of the European Union and the European Community
- several sources of EU-Law will be explained and discussed

- UNCED Rio-Declaration and the Convention on Biological Diversity
- EU-Treaties and EC-Directives relating to environmental protection and nature conservation
- examples of application of this EC-Directives
- EU-Initiatives and guidelines for a sustainable land-use and the German legislation on land-use planning

Bibliography // Study Materials:

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 Dinep and Kristin Schwab,
- Designing the Sustainable Site by Heather Venhaus
- The Sustainable Sites Handbook by Meg Calkins
- Calkins (2011): The Sustainable Sites Handbook
- Dinep/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

Name of Module: R10 - Planting Design

Module Coordinator: Prof. Dr. Wolfram Kircher

Teachers: Prof. Dr. Wolfram Kircher

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Compulsory Courses

Semester: 1. + 2. Semester	Duration: two Semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
	Lecture	-
Teaching Forms and corresponding	Seminar/ Practical Course	60 hrs
work load (acc. PSO, Anlage 4):	Internship	-
	Self-Study	90 hrs

Teaching Method: Tutorials, project work, group work, lecture, excursions

Examination (acc. PSO): oral examination (30 min.)

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- are able to interpret regional traits of planting design in dependence of social, cultural, historical and ecological background.
- are competent to investigate important aspects of planting design in a certain region and to present the results in a lecture.
- do know examples of ornamental plants from oceanic nemoral, continental influenced nemoral, subtropical and tropical climate.
- are able to derive plant ranges and maintenance demands from their knowledge about site conditions, habitats and population biological strategies.
- 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.
- Ability to rely on their acquired knowledge of the main approaches to planning and design and to principles for planting and plant use.
- Capacity for applying knowledge in practice by preparing and presenting a planting plan for a specific topic (individual work) related to the design concepts in the Modules 'Atelier Urban/ Landscape Design I+II'

Generic Competence Goals and Learning Outcomes

- Grounding in basic knowledge of the profession
- Capacity of analysis and synthesis, research and communication skills through individual research topics and presentation
- Understanding of cultures and customs of other countries through student's presentations about country specific planting designs in their home countries
- Ability to work autonomously by working on individual tasks
- advanced oral and written knowledge of a second language (English) through subject related research and presentation

Main Topics

A holistic approach is taught so that the overall context can be detected.

- 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)
- 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
- Fundamental elements for the development and presentation of a planting plan

Bibliography // Study Materials:

- 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=dunnett+dvnamic
- Catalogue Bruns-Nursery: http://www.bruns.de/en/catalog/
- Riedel et al., Perennemix-Lively Perennial Compositions. Bernburg, 2007
- Lecture Notes (pdfs of lectures)

Name of Module: Thesis Seminar Module Coordinator: Prof. Dr. Nicole Uhrig Teachers: Prof. Dr. Nicole Uhrig, Haripriya Singh M.A. Study Programme: Master Landscape Architecture (MLA) Classification in the Study Programme: Compulsory Courses Semester: 2. + 3. Semester **Duration:** two Semester **Group Size:** 25 Students Work Load: Presence Time of Work Load: **ECTS Credit Points:** 150 hrs 60 hrs Lecture Seminar/ Practical Course 60 hrs Teaching Forms and corresponding work load (acc. PSO, Anlage 4): Internship Self-Study 90 hrs

Teaching Method: seminar, lecture, online tutorials (45h in 3rd Semester)

Examination (acc. PSO): Assignment (Hausarbeit) - Presentation of thesis proposal Language: English Preliminary performance: -

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: successfully passed first and second semester

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

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.

Students should be aware of how to write in a formal or academic style and how to avoid plagerism 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.

Main Topics

To introduce students to the concepts and skill involved with:

- 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

Bibliography // Study Materials:

Grammar and style:

- "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. PellegrinoWriting a thesis
- "A Manual for Writers of Research Papers, Theses, and Dissertations", by K. Turabian
- "The Craft of Research", by W. Booth, G. Colomb, & J. Williams Writing and editing
- "Abstracts and the Writing of Abstacts", 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

Name of Module: Internship		
Module Coordinator: Prof. Dr. Nicole Uhr Teachers: Teachers of Anhalt University of	•	
Study Programme: Master Landscape Ar	chitecture (MLA)	
Classification in the Study Programme:	Compulsory Courses	
Semester: 3. Semester (winter)	Duration: 20 Weeks	Group Size: not relevant
Work Load: 750 hrs	Presence Time of Work Load:	ECTS Credit Points: 25
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	-
	Internship	750 hrs
	Self-Study	-
Teaching Method: Practical training and v	working, supervision	
Examination (acc. PSO): ungraded assessment (Leistungsnachweis) in form of an internship task in written form and presentation		Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: successfully passed first and second semester

Prior knowledge: no

Preliminary performance: no

Learning outcomes, competences (Qualification goals)

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.

Subject Specific and Generic Competence Goals and Learning Outcomes

After successful completion of the internship students:

- apply, deepen and reflect on the knowledge, skills and competences acquired in the first two semesters in planning and engineering offices, public authorities, associations etc.
- are able to deal with practical problems of an increasingly independent nature, solve them in a qualified manner and transfer them to other problems.
- familiarise themselves with the organisational forms and procedures of the authorities or companies and acquire, in addition to system competence and interdisciplinary knowledge, a high degree of social competence.

Due to the large number of different practical positions and specific activities - including some abroad - it is not possible to describe the knowledge, skills and competences to be acquired in detail.

Main Topics

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.

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

- 1) he/she will act as the mentor,
- 2) 3) the designated company is deemed suitable for the internship,
- 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.

Bibliography // Study Materials:

Further remarks (information for students):

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 4th semester

Name of Module: Master Thesis		
Module Coordinator: Teachers of Anhal Teachers: Teachers of Anhalt University		
Study Programme: Master Landscape A	rchitecture (MLA)	
Classification in the Study Programme	: Compulsory Courses	
Semester: 4. Semester (summer)	Duration: one Semester	Group Size: not relevant
Work Load: 900 hrs	Presence Time of Work Load:	ECTS Credit Points: 30
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	-
	Internship	-
	Self-Study	900 hrs
Teaching Method: -	•	•
Examination (acc. PSO): Assignment (H Colloquium Preliminary performance: -	ausarbeit) and Presentation/	Language: English

Course Requirements (from other modules of the study programme): Qualifications/Certificates: successfully passed first and second semester

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

In order to deepen their specialist and methodological skills and to develop their individual profile, students work on a complex application-oriented scientific question or task with a focus on a sub-area of Landscape Architecture and Environmental Planning. The application, consolidation and acquisition of specialist knowledge, skills and competences will vary according to the chosen topic.

Generic Competence Goals and Learning Outcomes

By the end of the thesis:

- Students proof a systematic understanding of their field of study and mastery of the methods of research associated with that field
- 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.
- 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.

Main Topics

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. Possible subjects and problems regarding landscape design, Landscape planning or urban design are interalia:

 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.)

Bibliography // Study Materials:

Further remarks (information for students):

It is possible to use the module 'Thesis Seminar' for preparation to write the Master Thesis at the end of the 2 nd and 3rd semester.

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.

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.

2. Elective Modules

Module Coordinator: Prof. Alexander Kader **Teachers:** Prof. Alexander Kader, Dottore Architekt

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Elective Module

Semester: 1. Semester (winter)	Duration: one Semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	15 hrs
	Seminar/ Practical Course	45 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: lectures, tutorials, and single-person or group projects

Examination (acc. PSO): oral examination (30 min.)

Preliminary performance:
Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no Prior knowledge: no

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- aquire fundamental knowledge about two major topics: "Site and Master Planning" and "Theories of Architecture" by learn about tools and strategies needed for a sustainable urban design
- acquired knowledge about the current state of architecture and design in regard to aesthetic, functional, energy-based, and climatic aspects.
- capable of applying skills, tools and proven strategies in sustainable as well as energy-efficient master planning.

Generic Competence Goals and Learning Outcomes

After successful completion of the module, students ...

- ability to understand the complex and dynamic systems in the context of urban planning
- ability to deal with complexity and ability to think and act in an integrated and holistic way
- capacity of analysis and synthesis, research and communication skills through individual research topics and presentation
- advanced oral and written knowledge of a second language (English) through subject related discourses, research and presentation
- ability to work in an interdisciplinary team and communicate with experts in other fields
- ability to apply new knowledge in a practical exercise.

Main Topics

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 emphasizing about sustainable and climate-adapted design concepts.

- Theories of Architecture
- Sustainable and Climate-Adapted Design Concepts
- Site and Master Planning
- Tools and Strategies for a Sustainable Urban Design

Bibliography // Study Materials:

- 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
- Luebkeman; 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

Name of Module: E2 - Project Management

Module Coordinator: Prof. Dr. Nicole Uhrig

Teachers: Prof. Dr. Nicole Uhrig, , M.A. Haripriya Singh

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Elective Module

Semester: 1. Semester (winter)	Duration: one Semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: tutorials, project work, group work, lectures

Examination (acc. PSO): project work
Preliminary performance:
Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no Prior knowledge: no

Learning outcomes, competences (Qualification goals)

The module enables students to apply different methods and techniques for a profitable construction and administration of complex projects and the appropriate use of communication methods (Comm. Skills) (Methods and Instruments of Project Management).

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- Ability to prepare, to structure and to evaluate projects in landscape architecture
- familiarized with software tools (MS Project)
- ability to function as Project Managers of teams drawing from newly developed personal skills (e.g. teamwork, presentation skills, negotiation, communication, moderation)
- General understanding of HOAI planning phases, planning office structures in Germany

Generic Competence Goals and Learning Outcomes

After successful completion of the module, students ...

- can communicate and present with confidence
- gain ability in negotiating, moderation and conflict management
- use appropriate software and other tools for project management
- deepen knowledge of a second language (English) through practical exercises and role plays
- gain experiences in group dynamics through practical exercises and role plays
- fundamental skills for leadership through practical exercises and role plays
- Capacity to adapt the skills and knowledge in new situation

Main Topics

- methods and techniques for a profitable construction and administration of complex projects and key concepts in Project Management
- focus on methods and instruments for landscape architecture projects
- exercises and role plays, the students' transfer thinking will be trained and they are free to apply their new expertise on various issues.

- 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)
- soft skills for the presentation, communication, leadership, moderation, mediation, participation and negotiation during project work will be taught in the course.

Bibliography // Study Materials:

- 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
- Hargie, Owen C.W.: The Handbook of Communication Skills; Routledge 1986/2003
- Cubero, Samuel N. "Essential communication skills for engineers, scientists and multi-
- disciplinary teams." International Journal of Information and Education Technology 7.7
- (2017): 483-494
- Hargie, Owen C.W.: The Handbook of Communication Skills; Routledge 1986/2003

Name of Module: E3 - New Media in Landscape Architecture

Module Coordinator: Prof. Dr. Matthias Pietsch

Teachers: Dipl.-Ing. Martin Weidel, Prof. Dr. Matthias Pietsch

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Elective Module

Semester: 2. Semester (summer)	Duration: one Semester	Group Size: 10 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	15 hrs
	Seminar/ Practical Course	45 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: seminar, exercise (individual and in groups)

Examination (acc. PSO): Assignment (Hausarbeit)
Preliminary performance:
Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: Module R7 Computer Sciences

Prior knowledge: Module R7 Computer Sciences

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- 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 audio-visual expression
- are introduced to the implementation of a diversity of modern technologies (e.g. WebGIS, MobilGIS, visualization) as utilized in participation processes and GIS projects
- familiarized about advanced GIS tools and methods as well as the capabilities needed in a GeoDesign process.

Generic Competence Goals and Learning Outcomes

After successful completion of the module, students ...

- Gain further information management skills
- ability to communicate with experts in other fields through designs and concepts which are generated in an authentic audio-visual expression
- advanced skills in project design and management in context of data management and efficient workflow for visualization processes
- advanced skills in communication and presentation using profession specific software für visualization
- capacity for applying knowledge in practice through seminar exercises and tasks (individual and in groups)

Main Topics

- landscape modeling: Digital Techniques for Landscape Visualization e.g. drafting, editing and analysis of surfaces and 3D objects (e.g. using GoogleEarth)
- GIS Application in Landscape Architecture: tools and methods (raster and vector) and the connection to GeoDesign processes
- animations, images and video stream

- implementation of hardware components in calculating, rendering and developing 3D models
- visualization techniques in communication and participation processes

Bibliography // Study Materials:

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

Name of Module: E4 - Graphics and Sociology

Module Coordinator:

Teachers: dr ir L. Tummers, Dipl. Des.Mireia TortNasarre (visualising)

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Elective Module

Semester: 2. Semester (summer)	Duration: one Semester	Group Size: 15 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: seminar, small group studies and exercises, discussions

Examination (acc. PSO): active participation; final report

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: Ability to understand and analyse written texts

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- understand the theory and concepts of planning sociology, both in urban and rural environments
- got familiar with methods of empirical social research that are useful for gathering information about user groups, i.e. questionnaires, interviews, observation methods.
- able to gather, analyse and present both quantitative and qualitative data about users.
- understand how the use of open space differs depending on cultural and social composition of groups.
- apply the concept of Placemaking to a specific site.
- 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 layouting software

Generic Competence Goals and Learning Outcomes

After successful completion of the module, students gain:

- capacity of analysis and synthesis through a targeted analysis and discussion of the theory and concepts of planning sociology (urban and rural context)
- research skills through a targeted analysis and discussion of the theory and concepts of planning sociology (urban and rural context)
- Interpersonal skills
- Teamwork through ability to work in an interdisciplinary team and communicate with experts in other fields
- capacity for applying knowledge in practice by gather, analyse and present subject related exercises and tasks (developing, testing and evaluation questionnaires, interviews, observations)
- advanced visual communication and planning competencies
- capacity to generate new ideas by applying the theory to planning issues and situations

Main Topics

- 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 colour exercises in different techniques.
- Teamwork Design of presentation posters of their own project.
- Designing aspects of presentation posters. Technical information about colour systems, typographical design, font sizes, layout, images, picture resolution, printing and the programs Photoshop and InDesign.

Bibliography // Study Materials:

- <u>Urban Health and Society: Interdisciplinary Approaches to Research and Practice</u> by Nicholas Freudenberg, Susan Klitzman and Susan Saegert (Aug 3, 2009)
- City Lights: Urban-Suburban Life in the Global Society by E. Barbara Phillips (Nov 13, 2009)
- Annual Editions: Urban Society by Myron Levine (Mar 11, 2011)
- Perspectives on Urban Society: Preindustrial to Postindustrial by Efren N. Padilla (Nov 13, 2005)
- <u>Urban Social Capital: Civil Society and City Life</u> by <u>Joseph D. Lewandowski</u> and Gregory W. Streich (Apr 2012)

Further remarks (information for students): no

3. Additional Modules

Modulhandbuch Master Landscape Architecture (MLA)

Name of Module: Z1 - English for Landscape Architecture

Module Coordinator: Prof. Dr. Uta Seewald-Heeg

Teachers: Robert Leppin, M.A.

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Additional Modules

Semester: 1. + 2. Semester	Duration: two Semester	Group Size: 25 Students
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: English classes feature exercises for active and passive language learning as individuals or in small groups.

Examination (acc. PSO): ungraded assessment (Leistungsnachweis)
Preliminary performance:
Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no Prior knowledge: Advanced English

Learning outcomes, competences (Qualification goals)

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.

Acquisition of all competences (listening, reading, speaking, writing) according to the CEFR level A1.

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.

Main Topics

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Bibliography // Study Materials:

- Bailey, Stephen (2011). Academic Writing A Handbook for International Students. Oxen/New York: Routledge.
- Heidenreich, Sharon (2008). English for Architects and Civil Engineers. Wiesbaden: Vieweg+Teubner.
- Murphy, Raymond (2004). English Grammar in Use (3rd Edition). Cambridge: CUP.

Further remarks (information for students): no

Module Coordinator: Prof. Dr. Uta Seewa Teachers: Katharina Hertel	ald-neeg	
Study Programme: Master Landscape A	rchitecture (MLA)	
Classification in the Study Programme:	: Additional Module	
Semester: 1. + 2. Semester	Duration: two Semester	Group Size: 25 Students (Division into beginners and advanced students in each semester)
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points: 5
	Lecture	-
Teaching Forms and corresponding	Seminar/ Practical Course	60 hrs
work load (acc. PSO, Anlage 4):	Internship	-
	Self-Study	90 hrs
Teaching Method: tutorial, teamwork pra-	ctices, simulation	
Examination (acc. PSO): ungraded assess Preliminary performance: -	ssment (Leistungsnachweis)	Language: German
Course Requirements (from other modul Qualifications/Certificates: no Prior knowledge: no	es of the study programme):	
Learning outcomes, competences (Qua Acquisition of all competences (listening, r This course trains basics in every compete comprehension and speaking. Topics are second semester topics are work & profes internship.	reading, speaking, writing) according ences of the German language with fo introduction, daily communication, sh	ocus on listening apping, date and time etc. In

Further remarks (information for students): no

4. Conversion Modules

The admission requirements are explained in the 'Examination and Study Regulations' § 1. Applicants with degrees pursuant to sentence 1 in the fields of architecture, urban planning and spatial planning as well as in related degree programmes must complete up to five online-based conversion modules before commencing the regular study programme as laid out in these regulations (cf. 'Examination and Study Regulations' Appendix 4 & 5). The respective modules are selected in a case-by-case system on the basis of individual qualifications and the result of the selection procedure. This selection than makes up an individual curriculum (cf. 'Examination and Study Regulations' Appendix 6). Admission to the Master's degree programme is granted on the condition that these modules are successfully completed before commencing the regular study programme. In exceptional cases, an extension can be requested at the course administration.

Name of Module: C1 – History of Landscape Architecture

Module Coordinator: Prof. Dr. Nicole Uhrig

Teachers: Dipl.-Ing. Meinhard Kuntz, Prof. Dr. Nicole Uhrig

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Conversion Module

Semester: individual start after matriculation	Duration: individual, latest finished by end of 1st semester	Group Size: not relevant
Work Load: 150 hrs	Presence Time of Work Load:	ECTS Credit Points:
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	-
	Internship	-
	Self-Study	150 hrs

Teaching Method: Online teaching - literature work, online tutorial, individual exercises via online material

Examination (acc. PSO): Course Work

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- have a basic knowledge of the main historical manifestations of gardens, open spaces and open space systems.
- are able to recognize the relationship of social, economic, cultural, artistic, ecological and functional aspects of garden art history
- are able to create a reference to current development processes and theories in contemporary landscape architecture.

Generic Competence Goals and Learning Outcomes

Students have expanded and deepened key competences (acquired in an integrated way), including Communication, organizational, methodological, documentation and presentation skills.

Main Topics

- Beginnings of landscape culture + horticulture
- Basic historical manifestations of gardens, open spaces and open space systems

Bibliography // Study Materials:

- Aben, Rob und Saskia de Wit: The Enclosed Garden, Rotterdam (010 Publishers) 1999. (out of print. full version on google/books.de)
- Carroll Maureen: Earthly Paradises. Ancient Gardens in History and Archaeology, London (British Museum Press) 2004.
- Clark, Emma: The Art of the Islamic Garden, (Crowood) 2010. see amazon look inside!!!
- Hill, Penelope: Contemporary History of Garden Design. European Gardens between Art and Nature, Basel/Berlin/Boston (Birkhäuser) 2004.
- Jellicoe, Geoffrey: The landscape of man, 1975.

- Newton, N.T.: Design on the Land (Belknap Press Harvard) 1971.
- Pregill, Philip; Volkman, Nancy: Landscapes in History. Design and planning in the Eastern and Western traditions, New York (Wiley) 1999
- Shepheard, Peter: Modern Gardens, London (The Archit. Press) 1953.
- Vercelloni, Virgilio + Matteo: Inventing the Garden, (Getty Trust) 2011.
- Weilacher, Udo: Between Landscape Architecture and Land Art, Basel etc.. (Birkhäuser) 1999.

Further remarks (information for students): The conversion module starts individual after matriculation.

Name of Module: C2 – Theory of Landscape Architecture

Module Coordinator: Prof. Dr. Nicole Uhrig

Teachers: Dipl.-Ing. Meinhard Kuntz, Prof. Dr. Nicole Uhrig

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Conversion Module

Semester: individual start after matriculation	Duration: individual, latest finished by end of 1st semester	Group Size: not relevant
Work Load: 150 hrs	Presence Time of Work Load:	ECTS Credit Points:
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	-
	Internship	-
	Self-Study	150 hrs

Teaching Method: Online teaching - literature work, online tutorial, individual exercises via online material

Examination (acc. PSO): Course Work

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- have a basic knowledge of the profession of landscape architect and environmental planner
- have acquired knowledge about career possibilities and professional framework conditions in a national and international context.
- have skills for efficient self-management of their studies.

Generic Competence Goals and Learning Outcomes

Students have expanded and deepened key competences (acquired in an integrated way), including Communication, organizational, methodological, documentation and presentation skills.

Main Topics

- 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

Bibliography // Study Materials:

- Corner, James: Recovering Landscape: Essays in Contemporary Landscape Theory
- Appleton, Jay: The experience of Landscape (Revised Ed.) 1996
- Groat, L. and Wang, D. Architectural Research Methods: John Wiley & Sons 2002
- Jackson J. B.: Discovering the Vernacular Landscape (Yale University Press, New Haven, CT) 1984
- Swaffield, S. ed.: Theory in Landscape Architecture: a Reader: University of Pennsylvania Press 2002
- Weilacher, Udo: Syntax of Landscape, (Birkhäuser) 2007
- Yencken, D. 'The View from Within and the View from Without: Australian Landscape Research', Landscape Review 1, pp. 40–53: 1995
- Laurie, Michael: Introductory Landscape Architecture

Further remarks (information for students): The conversion module starts individual after matriculation.

Name of Module: C3 – Landscape Design

Module Coordinator: Prof. Dr. Nicole Uhrig

Teachers: Dipl.-Ing. Meinhard Kuntz, Prof. Dr. Nicole Uhrig

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Conversion Module

Semester: individual start after matriculation	Duration: individual, latest finished by end of 1st semester	Group Size: not relevant
Work Load: 150 hrs	Presence Time of Work Load:	ECTS Credit Points:
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	-
	Internship	-
	Self-Study	150 hrs

Teaching Method: Online teaching - literature work, online tutorial, individual exercises via online material

Examination (acc. PSO): Course Work

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

In this course different approaches in design and planning methods for a creative and responsible landscape design will be discussed and applied by design exercises.

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- develop basic competencies for design tasks for landscape design and design of open spaces
- develop an understanding of the difference between various design disciplines (Architecture, Industrial Design, Landscape Design, etc.) through course discussions
- get familiar with the specifics of landscape design and landscape perception.
- get to know the landscape components and elements and its interdependencies
- ability to evaluate the appropriate use of analysis and assessment approaches for decision making and concepting.

Generic Competence Goals and Learning Outcomes

Students have expanded and deepened key competences (acquired in an integrated way), including Communication (especially written competencies), organizational, methodological, documentation and presentation skills through the individual course work, discussions and design exercises. Reflection skills on subject related topics are gained through course discussion.

Main Topics

- 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

Bibliography // Study Materials:

- Waterman, Tim: Fundamentals of Landscape Architecture, Lausanne 2009
- Dines N.T., Brown K.D. (2001): Landscape Architect's Portable Handbook,
- (McGraw-Hill Professional) 2001
- Appleton, Jay: The experience of Landscape (Revised Ed.) 1996
- Jellicoe, Geoffrey: The landscape of man (Revised Ed.), London 1987
- Internet: http://www.gardenvisit.com/landscape architecture

Further remarks (information for students): The conversion module starts individual after matriculation.

Name of Module: C4 - Landscape Analysis

Module Coordinator: Prof. Dr. Bartlett-Warren Kretzschmar

Teachers: Prof. Dr. Bartlett-Warren Kretzschmar

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Conversion Module

Semester: individual start after matriculation	Duration: individual, latest finished by end of 1st semester	Group Size: not relevant
Work Load: 150 hrs	Presence Time of Work Load:	ECTS Credit Points:
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	-
	Internship	-
	Self-Study	150 hrs

Teaching Method: Online teaching - literature work, online tutorial, individual exercises via online material

Examination (acc. PSO): Course Work

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

The module provides a basic understanding of landscape analysis and its principles of analysing, planning, design and development in the thematic area of nature and landscape.

Subject Specific Competence goals and learning outcomes

After successful completion of the module students gain a basically understanding and overview about professional and methodological competences for landscape analysis, e.g. computer-aided spatial analysis techniques, methods of landscape assessment, suitability analysis, visual assessment, cultural landscape character assessment, planning/design for landscape aspects of infrastructural projects, interpretation and management and/or conservation of cultural landscapes, master planning & green city development strategies, etc.

Generic Competence Goals and Learning Outcomes

After successful completion of the module, students know the basic aspects about the principles of analysing, planning, design and development in the thematic area of nature and landscape. They understand the cultural, visual and ecological components of the landscape as well as the factors that shape landscape. Students learn key aspects of theoretical knowledge on use-related and functional services of landscape as well as on perceiving and experiencing landscape including aesthetic-cultural, touristic and landscape development aspects. They gain a basic knowledge about various analysis (factual, evaluative, creative methods), design and planning approaches. Moreover they have expanded and deepened key competences (acquired in an integrated way), including communication, organizational, methodological and presentation skills.

Main Topics

Basic introduction to:

- landscape analysis, suitability analysis and methods of landscape assessment
- visual assessment, cultural landscape character assessment
- planning/design for landscape aspects of infrastructural projects
- interpretation and management and/or conservation of cultural landscapes
- master planning & green city development strategies

Bibliography // **Study Materials:** References to literature and additional course material will be announced at the beginning of the course.

Further remarks (information for students): The conversion module starts individual after matriculation.

Name of Module: C5 – Basics Design

Module Coordinator: Prof. Dr. Nicole Uhrig

Teachers: Dipl.-Ing. Meinhard Kuntz, Prof. Dr. Nicole Uhrig

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Conversion Module

Semester: individual start after matriculation	Duration: individual, latest finished by end of 1st semester	Group Size: not relevant
Work Load: 150 hrs	Presence Time of Work Load:	ECTS Credit Points:
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	-
	Internship	-
	Self-Study	150 hrs

Teaching Method: Online teaching - online tutorial, individual exercises via online material

Examination (acc. PSO): Course Work

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- will be familiar with creative processes, concepting, drawing and sketching for landscape architecture.
- know how to deal with proportion and different measurements or contours when drafting plots in 1:20,
 1:50 and 1:100 sizes and in coloured creative forms.
- developed basic competencies for design tasks and the basics of cognitive and intuitive creativity
- will be familiar with the specifics of creative design processes through course discussion about different approaches in creative work between various design disciplines
- will be familiar with different approaches in design and planning methods for a creative design like various materials, structures, concepting methods and ways of expressing ideas, through course discussions and design exercises
- 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
- are introduced to the proper layout of master plans featuring color and shadows as well as on different materials such as transparencies.

Generic Competence Goals and Learning Outcomes

After successful completion of the module, students:

- have expanded and deepened key competences (acquired in an integrated way), including Communication, organizational, methodological and presentation skills.
- The creativity techniques trained by the students in the design exercises enable them to recognise their creative potential and to approach various design and drafting tasks in a structured manner.

Main Topics

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.

Bibliography // Study Materials:

- Trudi Entwistle, Edwin Knighton: Visual Communication for Landscape Architecture
- Jack Hamm: Drawing Scenery: Seascapes and Landscapes

Further remarks (information for students): The conversion module starts individual after matriculation.

Name of Module: C6 - Communication Skills

Module Coordinator: Robert Leppin

Teachers: Robert Leppin

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Conversion Module

Semester: individual start after matriculation	Duration: individual, latest finished by end of 1st semester	Group Size: not relevant
Work Load: 150 hrs	Presence Time of Work Load:	ECTS Credit Points:
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	-
	Internship	-
	Self-Study	150 hrs

Teaching Method: Online teaching - online tutorial, individual exercises via online material

Examination (acc. PSO): Oral examination

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no Prior knowledge: Advanced English

Learning outcomes, competences (Qualification goals)

After this course, students will know more words to speak and write about landscape architecture for professors as well as professionals.

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 teached 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.

Main Topics

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Bibliography // Study Materials:

- Bailey, Stephen (2011). Academic Writing A Handbook for International Students. Oxen/New York: Routledge.
- Hargie, Owen (Ed.) (1986): A Handbook of Communication Skills, London
- Heidenreich, Sharon (2008). English for Architects and Civil Engineers. Wiesbaden: Vieweg+Teubner.
- Murphy, Raymond (2004). English Grammar in Use (3rd Edition). Cambridge: CUP.

Further remarks (information for students): The conversion module starts individual after matriculation.

Name of Module: C7 – Basics of Planting Design

Module Coordinator: Prof. Dr. Wolfram Kircher

Teachers: Prof. Dr. Wolfram Kircher

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Conversion Module

Semester: individual start after matriculation	Duration: individual, latest finished by end of 1st semester	Group Size: not relevant
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points:
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: Online teaching - online tutorial, individual exercises via online material

Examination (acc. PSO): Course Work

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

This conversion course is focusing the basics of planting design and provides the groundwork for habitat conforming plant selection as well as for optimized maintenance techniques to be applied in later professional practice.

Subject Specific Competence goals and learning outcomes

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.

Generic Competence Goals and Learning Outcomes

After successful completion of the module, students:

- With the individual study of plant examples for trees, shrubs, perennials an annual (in botanical sense
 as well as according to horticultural definition) students have extended competences to independently
 develop, summarize and document in a suitable manner the (knowledge exploitation).
- In the form of a seminar with online tutorials and individual exercises, the critical reflection about the learned topics especially the discussion about groundwork for habitat conforming plant selection as well as for optimized maintenance techniques is promoted and written skills in the presentation of the seminar as a course work improved.

Main Topics

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

an annual (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.

Bibliography // Study Materials:

- 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"!)
- "The Dynamic Landscape":
- http://lhanh.gbv.de/DB=1.2/SET=2/TTL=2/CMD?ACT=SRCHA&IKT=1016&SRT=YOP&TRM=dunnett +dynamic

Further remarks (information for students): The conversion module starts individual after matriculation.

Name of Module: C8 -Landscape Ecology

Module Coordinator: Prof. Einar Kretzler

Teachers: Prof. Einar Kretzler

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Conversion Module

Semester: individual start after matriculation	Duration: individual, latest finished by end of 1st semester	Group Size: not relevant
Work Load: 150 hrs	Presence Time of Work Load:	ECTS Credit Points:
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	-
	Internship	-
	Self-Study	150 hrs

Teaching Method: Online teaching - online tutorial, individual exercises via online material

Examination (acc. PSO): Course Work

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

The aim of the conversion course is to introduce students to conceptual basics of landscape ecology and its components.

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- have developed an understanding of the basic landscape ecology components (climate, relief, soil, water, vegetation, man)
- 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.).

Generic Competence Goals and Learning Outcomes

 In the form of a seminar with online tutorials and individual exercises, the critical examination of current scientific challenges of landscape ecology is promoted and written skills in the presentation of the seminar as a course work improved.

Main Topics

- main principles and methods of landscape ecology
- stability, impact, regulations
- environmental risks, pressures
- landscape analysis: landscape components (biotic and abiotic components e.g. 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

Bibliography // Study Materials:

- Bastian, O. & U. Steinhardt (2009): Development and Perspectives of Landscape Ecology
- Constanza, R. et al. (1997): The value of the world's ecosystem services and natural capital. Nature 387:253-260
- 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
- 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
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Further remarks (information for students): The conversion module starts individual after matriculation.

Name of Module: C9 – Basics GIS for Landscape Architecture

Module Coordinator: Prof. Dr. Matthias Pietsch

Teachers: M.A. Dae Yong Kim

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Conversion Module

Semester: individual start after matriculation	Duration: individual, latest finished by end of 1st semester	Group Size: not relevant
Work Load: 150 hrs	Presence Time of Work Load: 60 hrs	ECTS Credit Points:
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	60 hrs
	Internship	-
	Self-Study	90 hrs

Teaching Method: Online teaching - online tutorial, individual exercises via online material

Examination (acc. PSO): Course Work

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

As part of Master of Landscape Architecture curriculum, this course is designed to provide the students with the necessary basic knowledge of Geographic Information Systems (GIS) and spatial data. Students recognize map, map projections, data models (vector and raster) and basic analysis. Students are able to discover, use and define GIS and know how a GIS works throughout practical exercises and assignments.

Subject Specific Competence goals and learning outcomes

After successful completion of the module students:

- acquire basic understanding of EVAP-concept and an introduction of data acquiring techniques (e.g. GNNS, Remote Sensing).
- are able to assess the potential of spatial analysis in the context of landscape architecture and landscape planning.
- understanding and practice of the fundamental concepts of GIS and the major functionality

Generic Competence Goals and Learning Outcomes

- increase their individual IT-literacy
- extension of the presentation techniques
- reflection of the GIS based working techniques and presentation methods used in the landscape architectural design and communication process

Main Topics

- 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

Bibliography // Study Materials:

- 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

Further remarks (information for students): The conversion module starts individual after matriculation.

Name of Module: C10 – Basics CAD for Landscape Architects

Module Coordinator: Prof. Einar Kretzler

Teachers: Prof. Einar Kretzler

Study Programme: Master Landscape Architecture (MLA)

Classification in the Study Programme: Conversion Module

Semester: individual start after matriculation	Duration: individual, latest finished by end of 1st semester	Group Size: not relevant
Work Load: 150 hrs	Presence Time of Work Load:	ECTS Credit Points:
Teaching Forms and corresponding work load (acc. PSO, Anlage 4):	Lecture	-
	Seminar/ Practical Course	-
	Internship	-
	Self-Study	150 hrs

Teaching Method: Online teaching - online tutorial, individual exercises via online material

Examination (acc. PSO): Course Work

Preliminary performance: -

Language: English

Course Requirements (from other modules of the study programme):

Qualifications/Certificates: no

Prior knowledge: no

Learning outcomes, competences (Qualification goals)

The aim of the module is to practice various working techniques and presentation methods on the basis of a given landscape architectural design. In exercises that build on each other, the landscape architectural design is visualized in a 2D plan.

Subject Specific Competence goals and learning outcomes

- acquire basic understanding of CAD Design Process
- acquire fundamental concepts of CAD (2D) and the major functionalities and are able to draw plans and designs in the context of landscape architecture and landscape planning.

Generic Competence Goals and Learning Outcomes

- increase their individual IT-literacy
- extension of the presentation techniques
- reflection of the CAD based working techniques and presentation methods used in the landscape architectural design and communication process

Main Topics

- fundamental concepts of CAD
- Introduction to CAD tools and methods
- examples for CAD for landscape architects

Bibliography // Study Materials:

- Reader "CAD for Landscape Architects"
- different material- and object libraries, practical examples

Further remarks (information for students): The conversion module starts individual after matriculation.