Module Manual

Bachelor of Science (B.Sc.) in Spatial Planning

A joint program between:

The College of Spatial Planning and Applied Sciences, University of Duhok

and

The Faculty of Spatial Planning, TU Dortmund University, Germany

July, 2018
246 Credit Points Offered _ 17.07.2017
(240 Credit Points Required for Conferment of BSc Degree)

Developed by TU Dortmund University and Duhok University
July, 2017, updated September 2018
# Table of Contents

Module Manual......................................................................................................................... 1

Guiding Principles and Goals .................................................................................................. 7
Details and Clarifications: ........................................................................................................ 8

Preparatory Module: English for Planners ............................................................................... 9

Module 1: Introduction to Spatial Planning .............................................................................. 11
Course Name: Key Concepts of Spatial Planning (M1.1) .......................................................... 12
Course Name: Evolution of Spatial Planning (M1.2) ............................................................... 14
Course Name: Academic and Technical Writing for Planners (M1.3) ................................. 16
Course Name: Academic Debate (M1.4) ................................................................................ 17

Module 2: Planning Practice I (Beginners Project) ................................................................. 19
Course Name: Practical Planning Projects I and II (M2.1 & M2.2) ........................................ 21
Course Name: Facilitation and Presentation Techniques (M2.3) ............................................ 22

Module 3: Demography & Social Change .............................................................................. 23
Course Name: Urban, Rural Sociology and Social Change (M3.1) ....................................... 24
Course Name: Demography (M3.2) ......................................................................................... 26
Course Name: Gender and Development Planning (M3.3) ..................................................... 28
Course Name: Cultural Foundations of Planning and Development (M3.4) ......................... 29

Module 4: Economic Development ......................................................................................... 31
Course Name: Introduction to Macroeconomics (M4.1) ......................................................... 32
Course Name: Micro-Economic Foundations (M4.2) .............................................................. 33
Course Name: Investment Space and Politics (M4.3) .............................................................. 34
Course Name: Urban and Regional Economics (M4.4) ............................................................ 35
Course Name: Finance and Budgeting (M4.5) ........................................................................ 36

Module 5a: Environmental Planning ....................................................................................... 38
Course Name: Landscape Ecology (M5a.1) ............................................................................ 39
Course Name: Landscape Planning (M5a.2) ........................................................................... 41
Course Name: Waste Management (M5a.3) ......................................................................... 43

Module 5b: Natural Resource Management ........................................................................... 44
Course Name: Water Resources Management (M5b.1) ........................................................ 45
Course Name: Renewable and Non-Renewable Energy (M5b.2) ........................................... 47
Course Name: Sustainable Agriculture and Forestry (M5b.3) .............................................. 49

Module 6: Planning Law & Governance ............................................................................... 52
Course Name: Planning and Governance (M6.1) .................................................................... 53
Course Name: Planning Law in Iraq (M6.2) ........................................................................... 55
Course Name: Land Tenure and Land Management (M6.3) ..................................................... 56
### Module 7: Data Collection & Analysis Methods

- **Course Name:** Empirical Field Methods (M7.1) ................................................................. 58
- **Course Name:** Qualitative and quantitative Data Analysis (M7.2) ........................................... 60
- **Course Name:** Basic Skills in Statistics (M7.3) ...................................................................... 61
- **Course Name:** Thesis Writing and Research Design (M7.4) .................................................... 62

### Module 8: Spatial Analysis & Mapping

- **Course Name:** Introduction to GIS and Mapping (M8.1) ............................................................ 65
- **Course Name:** Remote Sensing (M8.2) ...................................................................................... 66
- **Course Name:** GIS and Spatial Analysis (M8.3) ....................................................................... 67

### Module 9: Regional Planning

- **Course Name:** Integrated National and Regional Planning (M9.1) ............................................ 69

### Module 10: Planning Practice II

- **Course Name:** Project Management (M10.2) ................................................................. 71

### Module 11: Theories of Planning & Spatial Development

- **Course Name:** Planning Theories (M11.1) ............................................................................. 74
- **Course Name:** Theory of Space and Location (M11.2) ........................................................... 75
- **Course Name:** Theories of Land Use (M11.3) ........................................................................ 77

### Module 12: Planning Methods

- **Course Name:** Planning and Decision Making (M12.1) ....................................................... 80
- **Course Name:** Conflict Resolution and Management (M12.2) ............................................... 81

### Module 13: Infrastructure Planning

- **Course Name:** Transportation Planning (Module 13.1) .................................................... 83
- **Course Name:** Water Provision and Sanitation (M13.2) ......................................................... 84
- **Course Name:** Energy Supply and Distribution (M13.3) ....................................................... 85
- **Course Name:** Education and Health Planning (M13.4) .................................................... 86
- **Course Name:** Health Planning (M13.5) .............................................................................. 88

### Module 14: Sectoral Economic Planning

- **Course Name:** Housing Policy and Planning (M14.1) ....................................................... 90
- **Course Name:** Tourism Development (M14.2) .................................................................... 91
- **Course Name:** Industrial Development (M14.3) ................................................................. 93
- **Course Name:** Commercial and Trading Development (M14.4) ......................................... 94

### Module 15a: Urban Planning & Design

- **Course Name:** Urban Design Studio I (M15a) ................................................................. 96

### Module 15b: Urban Planning & Design

- **Course Name:** Urban Design Studio II (M15b) ................................................................. 98

### Module 16: Internship

- **Course Name:** Internship .................................................................................................... 99
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

Course Name: Internship in Public or Private Sector (M16) ................................................................. 100
Module 17: Summer School in Germany (German Planning System).................................................. 101
Module 18: B. Sc. Thesis ...................................................................................................................... 102
  Course Name: B.Sc. Thesis (M18) ................................................................................................... 103
BSc in Spatial Planning Semester Overview ......................................................................................... 104
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

Guiding Principles and Goals

The “Urban and Regional Planning for Iraq” is a four year B.Sc. programme in Urban and Regional Development Planning and Management, which was jointly developed by:

1) The Faculty of Spatial Planning, TU Dortmund University, Germany;
2) Planning Institute, the University of Baghdad, Iraq;
3) The University of Diyala, Baquba, Iraq;
4) The Higher Institute of Planning, University of Dohuk, Kurdistan/Iraq;
5) The University of Mosul, Iraq.

The programme prepares urban and regional development planners and managers for the public sector (who will be placed either at central, regional or local government level), for private consulting, NGOs and international organisations. The course content is specially geared towards the needs of students from Iraq.

The course structure and content are oriented towards four overall objectives:

1) improvement in the organisational and planning capacities of Iraq
2) training of professionals in urban, rural and regional development planning and management
3) training of planners as process managers facilitating alliances between various stakeholders
4) imparting the importance of an interdisciplinary approach in spatial planning

Urban, rural or regional development planners and managers have to acquire a broad inter-sectoral knowledge and skills across the four major development planning fields of: urban planning, natural resource planning, physical infrastructure planning and socio-economic development planning.

He/she should have the capability to design local and regional development activities in a pragmatic, problem and action oriented manner. He/she should be able to structure the planning process in the sequence of the three major action phases of the planning cycle: analysis, planning and implementation. He/she should be able to reconcile participatory planning from below with the requirements of planning from above set by the framework of national policies.

Urban and regional development planners need professional knowledge of many fields and they should be able to combine various personal characteristics such as logical thinking, flexibility, creativity, organisational and communicative skills.

A planner should be able to:

- Collect, process, analyse, interpret and compile social and economic data.
- Understand and critically reflect concepts and theories underlying spatial development and planning.
- Project key social and economic indicators into the future.
- Translate target group requirements into land use plans, projects and programmes.
- Understand at least the basics of all major sectors of urban and regional development.
- Have a good command of planning, group facilitation and conflict resolution techniques.
- Critically appraise processes of spatial development at all levels against the backdrop of globalisation and accelerated urbanisation.
- Design and conduct planning-oriented empirical research.
- Write clear reports, manuals and memos.
Details and Clarifications:

- Examinations for Modules are either Module Exams (ME) or Course Exam (CE) based. Module Exams are exams or reports which cover all courses within an entire module and course exams are exams, reports or exercises which cover a single course within a module. Modules with course exams are only passes when all courses exams within the module are also passed. Refer to the Exam Regulations for a complete listing of each course and the type of exams required for each course.

- One semester has 15 weeks of instruction and two semesters has 30 weeks of instruction.

- One credit hour (CH) is equivalent to 45 minutes of faculty instruction per week for the duration of a 15 week semester; two CHs are equivalent to 90 minutes of faculty instruction per week over a 15 week semester; three CHs are equivalent to 135 minutes of faculty instruction per week over a 15 week semester, and so on.

- If a module has a one semester duration then all credit hours for that module are to be completed within a 15 week period. If a module has a two semester duration then all credit hours for that module are to be completed over 30 weeks.

- A credit point (CP) is a unit of measure that describes a student’s “academic work load” per semester, which includes both attending class for the specified number of CHs and self-guided homework (reading, writing, studying or researching) outside of formal faculty instruction. For every CH in the classroom, a student is expected to have 30 minutes of self-guided work outside of the classroom. To calculate the number of CPs from CHs, multiply the listed CH value by 1.5. To earn a degree, students must complete a specified number of CPs.

- Module Time is the total time a student should expect to spend completing all courses and assignments in one Module. To calculate Module Time, multiply the sum of all CPs by 30. Module Time is a minimum estimate.

- Compulsory Optional Subject (COS) – When a module has two courses listed as COS, students are only required to choose one of the two COS listed courses. This option gives students the opportunity to direct their own study within the module system by focusing on one course of preference over another course.

- All Instructors will provide students with an updated course syllabus, based on the existing course book as a guideline, at the beginning of each semester. Extensive deviations in actual course content compared to the course books should not be expected.

- Course attendance is expected from all students. All students are expected to complete homework on time. Absenteeism and incomplete assignments will result in course failure.
Preparatory Module: English for Planners

**B. Sc. Programme:**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Year</td>
<td>2 Semesters</td>
<td>Preparatory Year</td>
<td>0</td>
<td>2250</td>
</tr>
</tbody>
</table>

### 1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Basic English, 1&lt;sup&gt;st&lt;/sup&gt; semester</td>
<td></td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>English for Planning, both 1&lt;sup&gt;st&lt;/sup&gt; and 2&lt;sup&gt;nd&lt;/sup&gt; semesters</td>
<td></td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Advanced English, 2&lt;sup&gt;nd&lt;/sup&gt; semester</td>
<td></td>
<td>0</td>
<td>20</td>
</tr>
</tbody>
</table>

### 2 Language of instruction

English

### 3 Description of courses within the Module

1) Basic English skills to the level of A2 in the Common European Framework, including grammar, sentence structure, general vocabulary, reading and writing.

2) English for Planning includes technical language and terminology which are needed as the basics for report writing and understanding planning documents and concepts

3) Advanced English skills to the level of B2 in the Common European Framework, including grammar, sentence structure, general vocabulary, reading and writing


### 4 Competencies

- understand planning texts in English language
- keep up with lectures in English
- write small reports
- use the internet and library for self-guided learning and research purposes

### 5 Examinations

Written Exam and Assignments
### Type of Examinations

<table>
<thead>
<tr>
<th>6</th>
<th>Type of Examinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Covering the Entire Module:</td>
<td>(2) Relating to Individual Courses:</td>
</tr>
<tr>
<td>(1a) Placement entry exam with baseline scores recorded for all four sections so that strengths and weaknesses can be identified, improved and built-upon on a student by student basis.</td>
<td>(2a) Technical language vocabulary examination equivalent to a vocabulary test in which students are presented with a list of between 15-20 verbs, nouns and/or phrases specific FOR EACH Module where the students must define the word in English. Students must score a cumulative 65% or above to pass (the same percentage as the “competent English speaker” level in the TOEFL system).</td>
</tr>
<tr>
<td>(1b) TOEFL or equivalent exit exam after all English Module CPs have been satisfied, where students must demonstrate a cumulative TOEFL score above 79 points for all four sections (reading, listening, speaking, writing), indicating that the student has achieved the minimum qualification of “competent English speaker.”</td>
<td></td>
</tr>
</tbody>
</table>


### Prerequisites

<table>
<thead>
<tr>
<th>7</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td></td>
</tr>
</tbody>
</table>

### Status of the Module

<table>
<thead>
<tr>
<th>8</th>
<th>Status of the Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory</td>
<td></td>
</tr>
</tbody>
</table>

### Module Coordinator

<table>
<thead>
<tr>
<th>9</th>
<th>Module Coordinator</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashanti B Hicks</td>
<td>Department of Spatial Planning</td>
<td></td>
</tr>
</tbody>
</table>
Module 1: Introduction to Spatial Planning

**B. Sc. Programme:**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Year</td>
<td>2 semesters</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; and 2&lt;sup&gt;nd&lt;/sup&gt; Sem.</td>
<td>13.5</td>
<td>405</td>
</tr>
</tbody>
</table>

1 **Structure of the Module**

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Key Concepts of Spatial Planning, 2&lt;sup&gt;nd&lt;/sup&gt; Semester</td>
<td>4.5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Evolution of Spatial Planning, 1&lt;sup&gt;st&lt;/sup&gt; Semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Academic and Technical Writing for Planners, 1&lt;sup&gt;st&lt;/sup&gt; Semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Academic Debate, 2&lt;sup&gt;nd&lt;/sup&gt; Semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

2 **Language of instruction:** English

3 **Content of the Module**

1) Participation, decentralization, planning, planning levels, space, urban-rural, infrastructure, land management, regional delineation, culture and environment.

2) Ancient cities and urban civilisation in Mesopotamia, cities in Medieval ages, Islamic cities, global cities, post-war urban development, urban development after WW I in Iraq, major phases of urban history, settlement patterns, relationship between humans and settlement.

3) Different types of reports, articles, thesis, writing skills, dealing with writing problems, writing styles, structure of scientific and professional reports, creative writing.

4 **Competencies**

- understand cross-cutting concepts and theories of spatial planning and link them to thematic planning issues
- assess the analytical strengths and limitations of the covered theories
- identify and critically reflect the background of the historical urban and architectural concepts in Iraq
- apply the covered theories and concepts to the planning context of Iraq report writing competency

5 **Examinations**

Course Exams (CE): Written exam and assignments

6 **Type of Examinations**

(1) Covering the entire module:
   (1a) Comprehensive examinations
   (1b) Written essay assignments

(2) Relating to individual courses:
   (2a) Courses 1 and 2 include comprehensive examinations
   (2b) Course 3 includes written essay assignments

7 **Prerequisites:** None

8 **Status of the Module:** Mandatory

9 **Module Coordinator**

Jambally Muhammed / Dr. Hasan Sinemillioğlu

**Responsible department**

Department of Spatial Planning
Module 1

Course Name: Key Concepts of Spatial Planning (M1.1)

Instructors: Dr. Volker Kreibich; volker.kreibich@tu-dortmund.de
Jambally A. Mohammed; jambally.abdullah@uod.ac
Dr. Hasan Sinemillioglu; hasan.sinemillioglu@tu-dortmund.de

Course Overview

This course offers a basic knowledge and understanding of key concepts and theories in Spatial Planning (Urban and Regional Planning). The course aims to introduce the students to basic planning terminology, planning theories, major planning issues, and key urban planners to enable them to build an initial understanding of planning as a scientific discipline.

Learning Objectives

The major objective of this course is to provide students with a comprehensive overview of the field of spatial Planning. The students are expected to acquire the ability to

- understand basic concepts and terms of planning as a scientific discipline and a professional practice;
- understand cross-cutting concepts and theories of spatial planning and link them to thematic planning issues;
- comprehend economic, social, environmental and political implications of spatial planning;
- gain an introductory-level knowledge of the evolution of planning, including the historical roots of modern planning practice, through meeting key planners and their major works;
- gain an initial understanding of different aspects of planning such as planning laws, norms, standards and processes;
- gain an understanding of the wider strategic context for planning, esp. the regulation of access to spatial resources;
- identify and critically reflect the background of the historical urban and architectural concepts in Iraq;
- try to apply the covered theories and concepts to the planning context of Iraq.

Contents and Structure

The course presents key planning concepts such as space, place, access, planning levels, region, urban, rural, land management, infrastructure, participation, etc.

The course consists of several lectures followed by class/home assignments and quizzes. It will be complemented by 1-2 short field trips to relevant sites in Dohuk.
Course Reading List and References

Basic text books


The textbooks will be complimented by additional readings, glossaries and other materials.

The recommended readings will be available in the College Library (partially in multiple copies) or on the internet (links provided).
Module 1

Course Name: Evolution of Spatial Planning (M1.2)

1st semester spatial planning students

Instructors: Jowan Khorsheed: jowan@uod.ac
Dr. Hasan Sinemillioglu: hasan.sinemillioglu@tu-dortmund.de

Course Overview

The course follows a chronological overview of human development from prehistory through Mesopotamia and into the Middle Ages of Europe and the Middle-East, ending in a focus on Iraq. The focus is the human settlement development since Neolithic, i.e. New Stone Age.

The course has the following structure:

– Origins of human settlements
  • Palaeolithic (Old Stone) Age
  • The Neolithic Revolution (New Stone Age)

– History – prehistory: the spatial development after the invention of writing
  • Cities in Mesopotamia and in Egypt
  • Invention of Writing
  • Surplus and emerging of social classes

– Medieval age in Europe and in Middle-East
  • Medieval city
  • Peasantry

– Emergence of industrial society
  • Free society and democratic state
  • The city and the continuous change of human society

– Settlement Structure in Iraq
  • Settlement development since 1920
  • The recent challenges of rural-urban divide

Objectives

The course aims to understand the historical development of human settlements and the relationship between settlement pattern and structure and cultural and political organization. In particular, the course is designed to teach students about the settlement structure and historical development in Iraq so that students come away with an understanding of Iraqi settlement structure.

Furthermore the students should learn the main characteristics of the Islamic Urban Fabric and its historical development in comparison with European settlement patterns.
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

The recent global challenges facing the urbanization and their impacts on Iraqi settlement development will be discussed.

Course Reading List and References


− Lynch, Kevin: The Image of the City. Published by the Massachusetts Institute of Technology and Harvard University, 1960


Module 1

Course Name: Academic and Technical Writing for Planners (M1.3)

1st semester spatial planning students

Instructors: Ashanti B Hicks; bashanti83@gmail.com

Course Overview

Since students are required to do written assignments like essays and reports as a part of their academic assessment, it's highly important for them to be taught the techniques, skills and the different styles of writing. Knowing how to write an academic piece of writing will enable students to express their personal thoughts, ideas and visions about their interests in an organized way. This will help them to improve their imagination and critical thinking skills as well. It will also help them to successfully meet the requirements of their assessment criteria. In addition, academic writing requires reading other people’s writings, ideas and views about different subjects through which students can get worthy and up-to-date education and also become autonomous learners.

This will also be very important and useful for those students who have ambitions about studying their MA or PhD degree abroad, because having exams is not the only way of assessing students’ academic improvement in most of the European countries, in the USA and other countries.

Learning Objectives

In this course, students should learn

- basic skills about writing such as brain-storming, prewriting, drafting, peer reviewing and revising and editing
- the sentence structure and agreement, the forms of words and using the punctuation marks
- how to build up good paragraphs, how to write a good introduction and conclusion, share facts, present a description, ask questions, relate to incidents and use dialogues and quotation
- how to have unity and coherence in their writings
- how to use transitions, degree, compare and contrast, cause and effect plus facts and statistics

In terms of writing essays, students should know how to write a narrative essay, explanatory, persuasive and most importantly how to write a report including the use of the visual aids and referencing. The course also serves as a first glimpse into the expected rigors of writing the original BSc thesis in Module 7.4, Thesis Writing and Research Design.

Course Reading List and References

Module 1

Course Name: Academic Debate (M1.4)

2nd semester spatial planning students

Instructors: Dr. Nesreen Barwari; nesreen.barwari@uod.ac

Course Overview

"Debate" is rooted in the Western world's classical experience. The Greeks organized Contests for Speakers that developed and recognized the abilities their society felt central to democracy. Debate loosely means evidence based public reasoning. In the classic sense, Debate Encompasses skills of argumentation and public advocacy through a variety of rhetorical activities that focus on ethical, pragmatic, and philosophical issues. “Academic Debate”, is focused on student preparation for debate and the development of critical thinking.

Academic Debate class is a place for students to become better critical thinkers and communicators, and have a strong interest in local and world affairs in addition to literature. It is also a perfect place to be creative and competitive. Debate classes evolve team atmospheres, which support students in their academic and professional pursuits. Central to debate is intellect and creativity, while pursuing issues related to ethics and social justice. Come expecting to learn and broaden your perspectives and knowledge on a wide range of topics and issues.

Contemporary Ethical Issues will be presented and studied in a manner that is fully integrated into the main course content. As the class is geared around preparation for debate and critical thinking, ethics will inevitably play a central role in every debate of value and policy that the students will encounter.

Debate teams should keenly focus on researching and preparing for every debate assigned to them, whether it is related to political, environmental, personal matters, etc.. Debate is inherently non-prescriptive.

Learning Objectives

The primary student-learning objective of Academic Debate is to develop oral rhetorical ability through good spirited competitive and non-competitive speaking activities. Specific student learning outcome in this course:

- Develop written and oral argumentation skills in a workshop/team atmosphere.
- Focus on understanding the complexities of decision making in pluralistic societies.
- Research and develop advocacy briefs on controversial local, national and international topics.
- Use research to orally present arguments on philosophical and practical topics and the ethical issues that undergird them.
- Develop critical thinking skills and maturity as they become aware of the pervasive presence of debate and controversy in their academic and social lives.
- Develop skills in audience analysis and cross-cultural communication as they learn to research and orally defend positions that they may or may not personally believe in to diverse populations.
- This course reinforces the course M2.1, Facilitation and Presentation Techniques, which is taken concurrently.
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

Course Structure/Teaching and Learning Methods

*Competitive debate activities:* Will include Parliamentary Debate, "Worlds" style debate, Lincoln-Douglas Debate (one on one), the interpretation of literature and platform speaking events. There will be opportunities for weekly competition also based on specific issues.

Course Reading List and References

Materials are frequently e-mailed or the students will be referred to other debating websites to access. Competitive debaters develop extensive libraries related to debate theory and strategy in addition to specific issues. Students are expected to stay up to date on world events by closely following credible news periodicals (e.g. The Economist, Al Jazeera, BBC, NPR, The New Republic).

Although each debate has different resolutions and issues under contention, there are certain issues that standardly and routinely arise that will be focused on in weekly classes and practices. The 9 issues and accompanying readings will be focused on one week at a time. The required texts should be read always.
Module 2: Planning Practice I (Beginners Project)

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>2 Semesters</td>
<td>1\textsuperscript{st} and 2\textsuperscript{nd} sem.</td>
<td>21</td>
<td>630</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Practical Planning Project I: Group studio, 1\textsuperscript{st} Semester</td>
<td></td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Practical Planning Project II: Group studio, 2\textsuperscript{nd} Semester</td>
<td></td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Facilitation and Presentation Techniques: 1\textsuperscript{st} Semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

2 Language of instruction

English

3 Content of the Module

1) The students learn to deal with real life space-oriented problems and to identify possible solutions using planning tools and/or methods of scientific inquiry

2) Students work in groups of up to fifteen and each group is supported by at least two lecturers/supervisors of different units within the School of Spatial Planning

3) The topics of the project are related to actual/current problems and/or questions related to spatial development within Iraq

4) The cooperation with the local municipal institutions is one of the main purposes of the project groups, from which data is often obtained and to whom the final report is sent at the end of the semester.

5) The student groups may have regular excursions to the case study areas

4 Competencies

- successful group work skill development including moderation and discussion within individual work sessions, consensus building within the group and between stakeholders if applicable, conflict resolution of identified problems or challenges within the group or between stakeholders
- able to work with the planning cycle of analysis, alternatives planning and implementation strategies
- coordination of project workload and timing of work products necessary to carry out the project
- presentation techniques to transfer new knowledge to stakeholders and/or instructors
delagation of required group work tasks evenly amongst student participants

5 Examinations: Module Exam (ME): Written Report
6 **Type of Examinations**

<table>
<thead>
<tr>
<th>(1) Covering the entire module:</th>
<th>(2) Relating to individual courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(2a) Expose, submitted after the first 30 days of class – A summary of the research topic which includes problem statement, preliminary background research areas identified, research questions and design of research methodology to answer questions, project schedule through end of second semester. No results or discussion of results, as no field work has been completed yet.</td>
</tr>
<tr>
<td></td>
<td>(2b) Mid-term report, submitted within the first 15 days of the second semester – An expanded expose which demonstrates the substantial written completion of all expose elements including a full background section with synthesis supporting the research questions, a detailed research design methodology with some preliminary field research findings, mapping and diagrams as needed to support the background synthesis, research questions or field work methodology, an updated schedule indicating the successful completion of the project in the given remainder of the course. Includes a presentation to the instructor which includes all of the mid-term report contents, where skills from Section 1.3 are demonstrated.</td>
</tr>
<tr>
<td></td>
<td>(2c) Final report – All of the material from the mid-term report plus the results of the field work or research methodology and a discussion of the findings in light of the research questions. Includes an outlook for future research in the track of investigation and policy recommendations if applicable. Includes a 30 minute presentation to the instructor and advisor at the end known as the “disputation” which includes all of the material contained in the final report, where skills from Section 1.3 are demonstrated. All supporting data and documents are submitted to the instructor in an organized and useable manner (ie, via folder organized database on a DVD or via the Moodle online platform if possible).</td>
</tr>
</tbody>
</table>

7 **Prerequisites:** None

8 **Status of the Module:** Mandatory

9 **Module Coordinator**

| Pirjin Safar / Dr. Hasan Sinemillioglu |

**Responsible department**

| Department of Spatial Planning |
Module 2

Course Name: Practical Planning Projects I and II (M2.1 & M2.2)

1st year spatial planning students

Instructors: Different instructors based on the content of the courses

Course Overview

The practical planning project course is the first studio course introduction for students in the BSc program. At the beginning of the 1st semester, a different topic for the practical planning project is chosen and students work through the project in two semesters as a group. The project themes focus on current topics in Duhok, Kurdistan or Iraq and past projects have included the themes ranging from pedestrian mobility to the role of NGO’s in the management of internally displaced persons (IDP) camps.

As a studio course, students are expected to have their first exposure to qualitative or quantitative research methods, literature review, the use of research questions and a research design to answer the questions. As a studio project, the course is focused on the development of an expose or project description, a mid-term report and a final presentation and summary report. The course is explicitly linked to M2.3, Facilitation and Presentation Techniques, which students will learn adjacent to the planning project and will employ when developing mid-term and final presentations.

Learning Objectives

The objectives of the project are

- to teach students how to employ scientific inquiry in a planning project
- to learn how to design and carry out a project over a year period
- to learn how to work evenly and efficiently in a group setting
- to learn how to write a large summary report

Course Reading List and References

The reading list changes each year to reflect the selected project theme and is to be announced at the beginning of each semester by the instructor via the Moodle platform.
Module 2

Course Name: Facilitation and Presentation Techniques (M2.3)

1st semester spatial planning students

Instructors: Prjin S. Mohammed; zhen.mzory@uod.ac
Diman Mohamad; diman.doski@uod.ac
Shahadat Hossein; shahadat.hossain@tu-dortmund.de

Course Overview

The presentation is a type of verbal communication given by the presenters (student), who will stand in front of an audience (the students) to present and discuss a subject, thought, or an idea, using many tools to achieve a particular goal.

The focus of this course is to help students think more strategically about their public Speaking and presentation skills in order to improve their skills in transfer the information to others.

Learning Objectives

The main purpose of this course is

• to improve the communication skills of the students
• to increase the students confidence
• to encourage the students skills in discussion
• to explain how the effective presentation and group facilitation skills and types of appropriate activities can be more active in different situation
• This course is designed to interlock with M2.2, Practical Planning Project I: Group Studio, to teach students how to effectively communicate and present to decision makers, the public or other clients.

Course Work Organization

The course consists of class and home assignments, tasks, group work, sharing experiences and thoughts with classmates according to the students’ needs and requirements of learning the techniques of presentation. Also each lecture includes discussion on different subjects.

References

Module 3: Demography & Social Change

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>2 Semesters</td>
<td>1st and 2nd Sem.</td>
<td>18</td>
<td>540</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Urban, Rural Sociology and Social Change, 2nd Semester</td>
<td>compulsory</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Demography, 1st Semester</td>
<td>compulsory</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Gender and Development, 2nd Semester (compulsory optional subject - elective)</td>
<td>compulsory</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Cultural Foundations of Planning and Development, 2nd Semester (compulsory optional subject - elective)</td>
<td>compulsory</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

2 Language of instruction: English

3 Content of the Module

1) Urbanism, urban social problems, crime, homelessness, changing families, unemployment, the role of the state, rural deprivation, structure of society
2) Population structure and distribution, age pyramid, demographic projections, international and internal migration, carrying capacity, population policies, population growth of cities
3) Changing role of women, women at work, gender ratio and planning, gender equity, women and education
4) Changes of values, traditional customs, psychological effects of wars on society, acculturation, sub-cultures (ethnic, religious, professional), segregation/social areas

4 Competencies

- students acquire the professional competence to recognize theoretical projections and decisive questions of urban sociology, the gender perspective, demographic development and cultural backgrounds
- students understand the importance of these questions for spatial development and can utilize this knowledge in planning processes

5 Examinations: Module Exam (ME): Written exam and summary essay

6 Type of Examinations

(1) Module exams and essay writing
(2) Relating to individual courses:
   (2a) Each Course (1-4) includes a written exam except the courses chosen in (2b).
   (2b) Students may write a single essay which combines at least two of the topics in an 8-10 page written document. Students can choose the two subjects on which the written essay is based.

7 Prerequisites: None

8 Status of the Module: Mandatory

9 Module Coordinator

Dr. Hasan Sinemillioglu

Responsible department

Department of Spatial Planning
Module 3

Course Name: Urban, Rural Sociology and Social Change (M3.1)

2nd semester spatial planning students

Instructors: NN
Dr. Hasan Sinemillioglu; hasan.sinemillioglu@tu-dortmund.de

Course Overview

This course introduces students to sociological theories, and perspectives on society and social problems. There are some social problems that pose practical (if different) challenges for us all. This course introduces sociological perspectives on social problems relating to poverty and inequality, work and economy, school and education social welfare and wellbeing, and role of government.

It will help student to be familiar and learn about some important social terms and concepts related to planning and policy making.

The course examines theories of urban development and features of urbanism as a way of life, focusing on processes of urbanization and metropolitan development in both the developed world and in the developing world. It considers the urban transformation of predominantly rural societies, highlighting the implications of the rural-urban divide and issues related to urban poverty, housing and urban renewal. The course also discusses the rise of global cities and informational cities—and the development of modern society.

The focus of this course is to help students think critically about the social environment a general term for social background and other aspects of society that surround individuals and groups. Also help students to create and develop his/her sociological imagination which involves the ability to recognize that privat troubles are rooted in public issues and structural problems.

Learning Objectives

The main purpose of this course is

- To improve the student's skills and abilities to understand the social components of planning.
- To learn how to use sociological perspectives when assessing social problems or any development actions in the society.
- To focus specifically on social and qualitative research
- To explain the importance and effectiveness of social theories and perspectives in developing and reconstructing of societies, eliminating and solving social problems of planning

By the end of this course, students should be able to:

- Students can demonstrate understanding of the discipline of sociology and its role in contributing to our understanding of social reality.
- Students can demonstrate the role of theory in sociology.
- Students can demonstrate understanding of the role of evidence and qualitative and quantitative methods.
- Students can demonstrate knowledge and comprehension of: sociology, social change, sociological perspective, urbanization, urban and rural problems, social problem, poverty, social structure and
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

social interaction, institutions, race/ethnicity, gender, age, class inequalities, changing family, social welfare and social wellbeing.

- Students can articulate the reciprocal relationship between individuals and society.
- Students can articulate the macro/micro distinction and show they can apply it to their thinking/analysis.
- Students can articulate or list the three assumptions of the three major sociological perspective concerning urbanization.
- Students can demonstrate critical thinking.
- Students will develop values: articulate the utility of the sociological perspective; negative effects of social inequality.
- Students can communicate effectively.
- Students can effectively engage in problem-solving activities.
- Recognize types of questions and various ways to handle them.

Course Reading List and References

Module 3

Course Name: Demography (M3.2)
1st semester spatial planning students
Instructors: Dr. Obey M. Al-Wattar; obeyalwattar@yahoo.com

Course Overview
This is an introductory course in Demography, and it assumes that the student has had some knowledge in statistics and maths. It covers the following topics: concept, scope, and importance of demography; sources of demographic data; and elements of Population Dynamics with special attention given to natality and mortality. Moreover, the course contains a chapter on fertility with emphasis on total fertility rate (TFR), its measurement and determinants plus some data on TFR in Iraq and some other countries. Elements of population theory, including the theory of demographic transition; population composition and population pyramids; and a glimpse at population projections, are parts of the course. Other topics include population policy, the adverse effects of population growth on the natural environment. Needless to say that statistical data in support of the concepts etc., on the local, regional, etc., are indispensable.

Learning Objectives
The main objectives of the course are:

• To familiarize the student with the basic demographic concepts, as well as their measurement, using the available statistical data.
• To provide the student with a relatively good background material in Demography.
• Towards the end of the course the student should be able to collect, organize, and analyze population data in such a way that he can move from the conceptual level to the facts, analysis, and conclusions.
• Critical thinking related to population and settlement structure

Course Reading List and References

Important references
– UN, Economic and Social Affairs, Principles and Recommendations for Population and Housing Censuses, Revision 2 (New York: UN publications, 2008).
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

- UNDP, Human Development Report 2014 (New York: UN publications); earlier issues.
- Earth Policy Institute (www.earthpolicy.org).
- UNDP (www.hdr.org).
Module 3

**Course Name: Gender and Development Planning (M3.3)**

*2nd semester spatial planning students - elective course*

**Instructors:** Aihan Jamal Taha; aihan.jamal@uod.ac

**Course Overview**

It’s the aim of this subject to change the role of women, women at work, Gender ratio and planning, gender equality, women and education. The policy formulation, constitution and an example of Gender equality. Analyze women status in the real life.

**Learning Objectives**

Students acquire the methodical competence to ascertain and analyze relevant data in an empirical way for spatial research and planning. The students conduct ascertainment and analysis on their own and thereby learn to choose suitable methods of ascertainment and analysis.

The students should be able to:

- To draw a clear plan on the problem that they face through the process of planning;
- Assess environmental, social and economic status problems;
- To have a clear understanding that men and women should have an equal opportunity regarding to job, education and every aspect of life.
- Making the students understand how laws and regulations are made
- Through constitution male and female students will know their rights and as an example of how planning rules work I gave them an example of health and policy planning
- To be able to analyze the political, economic and social factors
- To have an idea about items of Gender

**Course Teaching and Learning Methods**

Using PowerPoint presentations, data show, pin boards, cards and charts

**Course Reading List and References**

Module 3

Course Name: Cultural Foundations of Planning and Development (M3.4)

2nd semester spatial planning students – elective course

Instructors:  Mohammed Alaulddin; aqiqi@uod.ac
Jambally A. Mohammed; jambally.abdullah@uod.ac

Course Overview

This course is designed to introduce the students to the broader concepts and other aspects of culture, cultural planning and mapping, as well as cultural plans.

Learning Objectives

The course is intended to introduce the students to the following:

- Concepts, principles and advantages of cultural planning;
- Relationship between cultural planning and other types of planning – urban and regional, and development;
- Cultural mapping process as part of cultural planning;
- Concepts such as changes of values, traditional customs, acculturation, sub-cultures (ethnic, religious, professional), and segregation/social areas;
- Importance of cultural backgrounds for spatial development and utilize this knowledge in planning processes;
- Different approaches to cultural resources and planning at community, urban or regional levels;
- Structure and contents of a cultural plan for a city or a town.

By the end of this course, the students will be able to:

- Improve their understanding of culture and cultural resources;
- Understand various definitions of cultural planning, concepts and its implications for contemporary cultural and planning practice;
- Understand the history and principles of cultural planning;
- Identify and understand the relationship between cultural planning and other types of planning – urban and regional;
- Understand the cultural mapping and its significance to cultural planning;
- Develop a cultural plan at a local level.

Course Teaching and Learning Methods

The course consists of lectures followed by class/home assignments. The course is based on the principles of 'telling, showing and doing'. It is a kind of interactive course that requires active participants and not passive observers. It will develop the student knowledge and understanding of culture and cultural planning basics.
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

Course Reading List and References

Textbooks and reading lists are posted on the course page in Moodle at the beginning of the semester from books, journal articles and internet sources. The lectures and handouts to be used in this course can be made available for the students for reproduction (photocopying, etc.).
Module 4: Economic Development

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>2 Semesters</td>
<td>3rd and 4th sem.</td>
<td>12</td>
<td>360</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Macro-Economic Foundations, 3rd Semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Micro-Economic Foundations, 3rd Semester</td>
<td>1.5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Investment Space and Politics, 4th Semester</td>
<td>1.5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Urban and Regional Economics, 4th Semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Finance &amp; Budgeting, 4th Semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

2 Language of instruction: English

3 Content of the Module

1) Economic indicators, economic context and political control options that determine the revenue of a region and its labour market, are explained. Finally the main features of the structural change in economy and its determinants are elucidated.

2) Role and nature of investments, distribution (allocation) of investments, governmental policies regarding investments, economic disparities, Economic behaviour of consumers and providers are explained; Functioning and failure of markets are shown; Potentials and Barriers of public planning are illustrated.

3) The state and problems of the Iraqi economy, the regional disparities, the impacts of use of natural resource and rural-urban economic relations.

4) It is illustrated how spatial terms and conditions act on economic development and vice versa how economic changes affect the spatial development and structure. Insight in the objectives and measures of the regional economic policy is conveyed and the structure and spatial distribution of public finances is explained using the example of municipal budgeting.

5) Estimation and assessment of private and public financial capacity of a district against calculated financial needs of development programmes and projects; budgeting procedures; tools for evaluation of development programmes and projects.

4 Competencies

- acquisition of professional competence to recognize economic correlations of spatial development
- establish a systematic basis for spatial planning with the help of pivotal questions, methods and explanatory approaches of economic sciences

5 Examinations

Course Exams (CE): Written exams

6 Type of Examinations

(1) Covering the entire module: (2) Relating to individual courses: (2a) Written exam for each course

7 Prerequisites: Modules 1 & 2

8 Status of the Module: Mandatory

9 Module Coordinator

Dr. Hasan Sinemillioglu

Responsible department

Department of Spatial Planning
Module 4

Course Name: Introduction to Macroeconomics (M4.1)

3rd semester spatial planning students

Instructors: Dr. Hasan Sinemillioglu, hasan.sinemillioglu@tu-dortmund.de

Course Overview

This course in macroeconomics is an elementary introduction to the subject. It assumes that the student has had a course in statistics. The topics expected to be covered in the course are the following: Scope of macroeconomics and basic concepts such as the labour force and the rate of unemployment, inflation and the rate of inflation, the short period analysis, etc; concept, origin and measurement of the GDP and national income; aggregate consumption expenditure and its relation to national income; investment as a concept and aggregate investment as a crucial quantity; a simple model on income determination; money and the financial markets; other topics, depending on the time available. Supporting data is used whenever possible.

Learning Objectives

The main objectives of the course are:

- To familiarize the student with the basic macroeconomics concepts, as well as their measurement, using available statistical data.

- To provide the student with a good macro background on e.g. the GDP, aggregate investment, employment generation, etc., suitable for his/her later and related courses.

- Towards the end of the course the student should be able to collect, organize, and analyse macroeconomic data in such a way that he can move from the conceptual level to the facts, the analysis, and the conclusions; and using them as a planner...

Course Teaching and Learning Methods

To be determined by instructor.

Course Reading List and References


Module 4

Course Name: Micro-Economic Foundations (M4.2)

3rd semester spatial planning students

Instructors: Dr. Hasan Sinemillioglu, hasan.sinemillioglu@tu-dortmund.de

Course Overview

Foundation of economics deal with economics sciences which try to answer a very important question in order to solve (Economics Problems) which focus on the reallocation of resources, between scarcity and needs of people. The questions are what, how and to whom? What we are produce? How we are produce? To whom we are produce?

And use all the theoretical tools to solve these problems such as:

- The demand and supply theory.
- The production function.
- The costs and revenues.
- The wage theories.
- The saving and investments accelerator.
- The expenditure and the multiplier approach.
- The redistributions of income through PARITO optimality and LORNES curve.

Learning Objectives

- Give the students a wide information about economics definitions.
- Give the students method of thinking able them to solve the problem of scarcity of resources from one side and how to deal with an infinity of human needs.
- Give the students a scientific tools and technical way to relocation economics resources between a large number of consumers they have a limit of among to buy goods and services.
- Give standard economic approach to guarantee that we will use satisfy material to cover Human wants.
- Give students as future planners how to use land and any material of building as commodities to construction housing area which is leading to urban expansion.

Course Reading List and References

Course Name: Investment Space and Politics (M4.3)

4th semester spatial planning students

Instructors: NN

Course Overview

The state and state institutions at all levels are responsible for development policies and their implementation. There are problems of the Iraqi economy, caused by the continuous crisis but also because of strict top-down policies and huge bureaucratic burdens. The strong regional disparities cause the continuous outmigration from the rural regions; the small towns and cities are neglected. On the other hand the very weak private sector is not able to enfold investments.

The impacts of basically oil based revenues of the state and not divers economical activities doesn’t allow a proper employment policy. The challenges of global warming and the missing natural resource management are hindering the economic development and rural-urban economic relations.

Learning Objectives

The major objective of this course is to provide students with a comprehensive overview of the field of investment policies and spatial structure. The students are expected to acquire the ability to

• understand basic concepts of policy making related to the spatial distribution of the investments;
• understand cross-cutting concepts and theories of spatial planning and link them to thematic investment policies and to the planning in Iraq.

Course Reading List and References

– Other textbooks can be used which is available at Faculty of Administration & Economics Library
Module 4

*Course Name: Urban and Regional Economics (M4.4)*

*4th semester spatial planning students*

*Instructors: NN*

**Course Overview**

Regional and urban economy in modern times is a very important subject due to confront contemporary problems, which are many and various. Particularly the economic and social difficulties experienced by people who are living and working in the cities, which are more complex and difficult to handle. The increased number of world population of six billion higher than at the beginning of the last century was accompanied by a large degree of urbanization, which created serious problems in the field of urban transport, crime, housing and environmental pollution. Generated a growing need to provide multiple services, adding to the unemployment problem in urban areas. Economics and sociology is no longer enough to solve these problems in addition; this theoretical approach is no longer able to solve these problems. The adoption of three dimensions economic, social, & environmental aspects in planning included emerging of a new science: the regional and urban economy, which deals with contemporary economic problems in spatial dimensions.

**Learning Objectives**

- The main objective of the study of urban and regional economy is the absence of full knowledge on this subject, particularly in developing countries that are in need of finding radical solutions to the problem of urbanization, increasing population density, poor distribution of natural resources, and methods of preservation of the environment in cities and provinces .... etc.
- Focus on the region’s economy, urban definitions and general concepts about the importance of this topic. Then takes a detailed explanation of theories on the subject, particularly the theories of the place, as well as the study of wages and living standards and contrast between different cities.
- Study the differences between urban and rural areas, especially the discussion of local communities for both rural and urban areas.
- Study ideas and practical aspects related to the development of economic sectors in urban and the region. The informal economic sector and its positive and negative effects on society in terms of the contribution of this sector in reducing unemployment and providing goods and services needed by the community.
- Study the importance of the statement and the structure of municipal finance, which is one of the important institutions in the development of cities and solving their problems.

**Course Reading List and References**

- Philip Mc Cann, urban and Regional Economics, Printed in Great Britain 2009.
Module 4

Course Name: Finance and Budgeting (M4.5)

4th semester spatial planning students

Instructors: NN

Course Overview

This course focuses on the financial management of the private corporate and it is important to understand the financial environment for these firms. The main purpose of this course is to provide the students with a theoretical framework and required tools to understanding problems faced by corporate decision-makers and provided them flexible model for solving these financial management problems and issues through appropriate topics covered, but are not limited to concepts and theories including financing, raising capital, managing working capital and long term investments and management of liabilities which are critical functions within any firm framework in order to enable the financial and firm manager to better understand how corporate decisions impact the value and risk of the firm.

Learning Objectives

The major objective of this course is to provide students with a comprehensive overview of the field of spatial planning. The students are expected to acquire the ability to

- understand basic concepts and terms of planning as a scientific discipline and a professional practice;
- understand cross-cutting concepts and theories of spatial planning and link them to thematic planning issues and to the planning in Iraq.

Course Reading List and References

- Other textbooks can be used which is available at Faculty of Administration & Economics Library:
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

Module 5a: Environmental Planning

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>1 Semester</td>
<td>3rd &amp; 4th Sem.</td>
<td>10.5</td>
<td>315</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Landscape Ecology, 3rd sem.</td>
<td>4.5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Landscape Planning, 4th sem.</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Waste Management, 3rd sem.</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

2 Language of instruction

English

3 Content of the Module

1) Desertification, climate change, environmental management systems, protected environmental areas, pollution (air, soil and water), eco-systems and environmental flows, green manufacturing.
2) Recreation areas, re-moulding areas, green belt planning, artificial lakes, green areas in the cities, planning of open spaces, playgrounds.
3) Types of waste, waste dumps, recycling, waste treatment and waste collection systems, waste re-use systems, reduction of waste, costs of waste management, soil and water pollution, waste in coastal waters, nuclear waste, radiation, chemical waste.

4 Competencies

- identify needed interventions/management measures to ensure sustainability of natural resources
- assess environmental and natural resources issues and problems
- apply various planning approaches for specialised types of land uses
- participate in the formulation of policies related to natural resources, land use, land tenure and agricultural development
- assess and propose mechanisms for efficient land management

5 Examinations

Course Exams (CE): Written exam and Assignments

6 Type of Examinations

(1) Covering the entire module: (2) Relating to individual courses:

(2a) Courses 1 and 2 written exam
(2b) Course 3 assignment

7 Prerequisites

none

8 Status of the Module

Mandatory

9 Module Coordinator

Qaidar Kochar

Responsible department

Department of Spatial Planning
Course Name: Landscape Ecology (M5a.1)

3rd semester spatial planning students

Instructors:
Dr. Ing. Bryce T. Lawrence; bryce.lawrence@tu-dortmund.de
Dr. Jian Hassanpour; jian.hass@uod.ac

Course Overview

This course gives students the first fundamental overview of physical geography and ecological themes, including geology and geomorphology, soils, hydrology, plant and animal communities and properties, climates and air circulation systems and introduces concepts such as ecosystems, landscape functions and ecosystem services. These ‘fundamentals’ of ecology and physical geography are also brought into the realm of spatial planning by discussing the relationship between fundamental systems and their functions with the needs and limits of spatial planning. This approach ensures that students learn the fundamental properties of Earth systems and learn specifically why it is important to retain and utilize natural process in landscape planning and spatial planning and what happens when humans change properties or relationships between systems.

Learning Objectives

- To break through general knowledge of the environment and into the scientific and graphical understanding of earth processes
- To build a base of fundamental knowledge about soils, hydrology, vegetation, biodiversity, air, climate change and weathering so that students can work confidently with natural resources as the BSc program progresses.
- To make students aware of the world around them in a detailed way so that they no longer see a static landscape, but rather see a mosaic of processes which need to be cared for via landscape planning and which are not always visible
- To develop a ‘land ethic’ or ‘sustainability ethic’ within students

Course Structure / Teaching Methods

The course is co-taught by Dr. Lawrence and Dr. Issazadeh and designed with two parts, where the first part of the course, physical geography fundamentals, is taught by Dr. Issazadeh and the second part, ecological synthesis, is taught by Dr. Lawrence.

The first part of the course will focus on the abiotic factors within physical geography and earth process basics with lectures from Dr. Issazadeh including plate tectonics and vulcanism, geology and geomorphology, soils and pedogenesis, hydrology and fluvial geomorphology, climates and energy balance. These lectures will be powerpoint delivered lectures which are accompanied by short practical exercises in class to solidify the knowledge transfer and build the ‘graphical eye’ of students and then supported by follow-up readings or assignments as homework.

The second part of the course will be a three week intensive session with two lectures per week taught by Dr. Lawrence, and will focus on the biotic factors such as plant and animal communities, biodiversity, ecosystems and landscape ecology and the linkages between fundamental ecological themes and practical planning. The courses in the second part of the semester will follow the same pattern of lecture, class exercises and readings, but will also include one or two field trips where students will finally have the
opportunity to see in the field the processes they have been studying in class. The course will include a written and graphical final examination covering all subjects.

Course Reading List and References


Module 5a

Course Name: Landscape Planning (M5a.2)

4th semester spatial planning students

Instructors:  Dr. Ing Bryce T. Lawrence; Bryce.lawrence@tu-dortmund.de
Dr. Shireen Younis; shiren457@yahoo.com

Course Overview

This course provides an overview of landscape planning systems from the USA and Europe and focuses on the levels of National, State, Regional, and Sub-Urban for the creation of landscape plans.

Learning Objectives

• Understand the components and processes of a landscape planning system and how it fits within the over-arching spatial planning system
• Fundamental understanding of the differences between formal and informal landscape plans at the scales of nations, states, regions and cities
• Spatial data and analysis needs at each level of landscape planning
• Legal instrumentation needed in general for implementation of landscape planning; specific instrumentation related to Kurdistan or Iraq
• Governmental organization necessary for implementation of a landscape planning system

Course Structure/Teaching and Learning Methods

The course is structured in three parts: an on-line section for 7 weeks accompanied by individual practical exercises, followed by a 3 weeks of lectures and field study, followed by three weeks of individual student work time where students must develop and submit an individual written report on landscape planning.

All on-line courses will be given by the instructor from Dortmund, Germany and all lecture materials and readings are made available in the Moodle system. Most on-line lectures are accompanied by a practical exercise related to the lecture material. During the three weeks of field study, the instructor is present at Duhok University for lectures, to review progress on practical exercises, to participate in field trips with the co-teacher and students to support the lecture material and to discuss ideas with students for their final written reports. Students are expected to work individually to develop their final reports and are encouraged to use the remaining 2 or 3 lecture times for the development of the report.

Reading List and References

Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning


- Lawrence, Bryce T. (2017): The County Diagnostic: A regional environmental footprint for the USA. Dissertation


Module 5a

Course Name: Waste Management (M5a.3)

3rd semester spatial planning students

Instructors: Qaidar N. Abdulsamad; qaidar.kochar@uod.ac
Dr. Ing. Mathias Kaiser; mathias.kaiser@tu-dortmund.de

Course Overview

The course covers the process of the Waste and integrated waste management, type of the waste and how it can affect to the environment and public health, if it is not treated in a proper way (what should be done to reduce the risk). The course contents also type, characteristics and sources of solid waste, solid waste management, treatment and disposal methods of solid waste. Soil and water pollution by waste, types and sources of waste, the effect of soil and water pollution and methods to control and reduce water and soil pollution. Hazardous waste management, integrated hazardous waste management, detoxify hazardous wastes and store some forms of hazardous Waste.

Learning Objectives

By the end of this course, the students will be able to:

- Learn basics of types of waste, waste sources;
- Learn basics of solid waste types, sources and integrated solid waste management; collection, transport, process, transferring and disposal.
- Learn knowledge about solid waste treatment and disposal methods,
- Learn about types of soil and water pollution, affects to human health and environment and how to prevent or reduce it.

Course Structure/Teaching and Learning Methods

The course consists of lectures followed by class/home assignments. Each class includes open discussion on the lecture and may include a quiz to test. And the teaching include work trip during course study and then the students in groups will give a report and presentation at the end. Can include guest lecture (expert with good experiences in real life related to the subject).

Course Reading List and References

Module 5b: Natural Resource Management

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>2 Semesters</td>
<td>5th &amp; 6th sem.</td>
<td>10.5</td>
<td>315</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water Resource Management, 6th Semester</td>
<td>M</td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Renewable and Non-Renewable Energy Resources, 5th Semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Sustainable Agriculture and Forestry, 5th Semester</td>
<td>M</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

2 Language of instruction

English

3 Content of the Module

1) Desertification, lakes and dams, irrigation systems, water management and distribution, water needs (agriculture, industry, population), water treatment.
2) Oil resources, solar- wind- and hydro- energy.
3) Sustainable production and consumption of agric. products, sustainability of agricultural systems, sustainable forestry, a forestation (reforestation - increasing forests), problem of deforestation.

4 Competencies

- professional competence to classify spatial problems from a environmental and sustainable point of view
- develop awareness of different kinds of energy generation with their respective pros and cons

5 Examinations

Course Exams (CE): Student Exercises (Assignments)

6 Type of Examinations

(1) Covering the entire module:
(2) Relating to individual courses:
   (2a) Assignments for each course

7 Prerequisites

Module 5a

8 Status of the Module

Mandatory

9 Module Coordinator

Dr. Jian Hassanpour

Responsible department

Department of Spatial Planning
Module 5b

**Course Name:** Water Resources Management *(M5b.1)*

*6th semester spatial planning students*

**Instructors:** Dr. Jian Hassanpour; jian.hass@uod.ac

**Course Overview**

The course of integrated water resources management provides students with comprehensive knowledge and skill relating to various water resource problems, fundamentals of the water cycle, hydrology, Desertification, Water Need (agriculture, industry and population), Water Treatment and water use trends and categories necessary for water resources planning, planning process, its implementation activities and its various theoretical bases. It also provides an introduction to the political and institutional context of water resources protection and management, to introduce the various planning and evaluation tools as well as their applicability and usefulness.

**Learning Objectives**

At the end of this topic, the students will be able to:

- Define various water resource problems including scarcity and surplus
- Describe fundamentals of the water cycle, hydrology and water use trends and categories necessary for water resources planning;
- Discuss the planning process, its implementation activities and its various theoretical bases;
- How to understand the political and institutional context of water resources protection and management;
- Distinguish the various planning tools as well as their applicability and usefulness;
- Evaluate component(s) of specific water resource planning project. Describe the concept and importance of deficit irrigation under water scarce condition;
- Manage an irrigation system by integrating the disciplines of soils and agronomy
- To learn how to analyze and comprehend basic principle of water resources and its planning and management
- To visualize systematic process on environmentally water resource management and sustainable water resource development
- To launch the skillful techniques on application of IT for water resource planning and management

**Course Structure/Teaching and Learning Methods**

Start teaching with discussing about the subject. All lecture will be presented by PowerPoint. All PowerPoints for teaching is made in English. To encourage students I design some questions and make an activity between students to solve it. It is important, all student's concentration should be in the class, so I am trying to use body language and push students to focus on the subject. During the course I consider
some short quizzes or assignments after two or three lecture, to make sure students get the subject in good way.

References


Useful references


Magazines and review (Internet)


− Paper accepted to Irrigation and Drainage, 53(1-18). Published online in http://www.interscience.wiley.com
Module 5b

**Course Name: Renewable and Non-Renewable Energy (M5b.2)**

5th semester spatial planning students

**Instructors:** Qaidar N. Abdulsamad; qaidar.kochar@uod.ac

**Course Overview**

The aim of this course is to introduce the students to Renewable energy. The course will explore the basic concepts of renewable and non-renewable energy, renewable energy commercialization, Economics. Advantages and disadvantages of each Resources. Growth of renewable, industry and policy trends. Constraints and opportunities. Availability and reliability, etc.

Why Renewable Energy is Important for Planning?

Energy demand is increasing due to rapid rising of the world population and developing technology. Fossil fuels have been generally used to provide the increasing of energy demand for a long time. Increasing the usage of these sources have caused some problems. Therefore, some developed countries head towards the new and renewable energy to meet their increasing energy demands.

Renewable energy sources have also been important for humans since the beginning of civilization; for example, both hydropower and wind have been used for powering pumping water for agriculture.

Renewable energy sources that use indigenous resources have the potential to provide energy services with almost zero emissions of both air pollutants and greenhouse gases. Renewable energy resources are abundant in nature.

**Learning Objectives**

Upon successful completion of this course students will be able to:

- Demonstrate knowledge of the concepts of Renewable & Non-Renewable energy.
- Explore ways of making Renewable energy in Iraq, and to understand the key impacts associated with Renewable energy. World’s largest Renewable energy plants, e.g. World’s largest photovoltaic power plants. Progress in Photovoltaics: Research and Applications, etc.
- Demonstrate the ability to collect, evaluate, interpret, and communicate scientific information in the field of Renewable & Non-Renewable energy concepts.

**Course Reading List and References**

Key references

- 3. EIA, Energy Information Administration, 2012 Statistics

Useful references
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

- The Ministry of Electricity, Iraq, website: www.iraqdirectory.com/files/articles/article372.htm
- The KRG Ministry of Electricity website: http://moel.gov.krd/
- UK - Environmental Protection – Climate change and energy - Action in the UK – Energy and climate change – Environmental Transformation, Department for Environment. 2010
Module 5b

Course Name: Sustainable Agriculture and Forestry (M5b.3)

5th semester spatial planning students

Instructors: Jian Hassanpour; jian.hass@uod.ac

Course Overview

Sustainable agricultural systems employ natural processes to achieve acceptable levels of productivity and food quality while minimizing adverse environmental impacts. Sustainable agriculture must, by definition, be ecologically sound, economically viable, and socially responsible.

Similarly, sustainable forestry refers to an overall commitment to environmental conservation that integrates the production of trees for useful products with reforestation and conservation of soil, air, water quality, wildlife and aesthetics. Sustainable agriculture relies on long-term solutions using proactive rather than reactive measures at system levels.

This course uses a socio-economic approach to examine the competing types of management, uses, and resulting products of the world's agriculture and forests. Knowledge of the significant issues related to agriculture and forests and their products, and how they are interrelated is critical to making sound decisions.

Learning Objectives

- Acquire knowledge and appreciation of the characteristics and dynamics of agricultural and forest ecosystems;
- Acquire knowledge of the realized and potential economic importance of forests;
- Obtain knowledge and skills of various agricultural and forest technologies;
- Acquire knowledge and skills in the management, protection and conservation of forest and agro forestry ecosystems;
- Develop the ability to transfer relevant knowledge and skills of appropriate agricultural and forest management practices to relevant stakeholders.
- Scientific principles on which sustainable agriculture and forestry is based
- Understanding the application concepts of environmentally sound agriculture in fields selected from:
  - Agriculture, Agro-economy, Agro-mechanization Agro-planning; livestock management (sheep, goats, cattle, swine, and horses)
- Forestry planning
- Natural resource management
- Ability to develop and adopt innovative approaches to the production, post production, and marketing aspects of agriculture
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

- Develop an understanding of the role of agriculture in the changing geophysical, economic, and sociocultural world environment
- Develop an understanding of the central role food production plays in supporting sustainable communities
- Learn the relationship between managing the contribution of the food system to the mitigation of climate change.

Course Structure/Teaching and Learning Methods

Start teaching with discussing about the subject. All lecture will be presented by PowerPoint. All PowerPoints for teaching is made in English. To encourage students, I design some questions and make an activity between students to solve it. It is important, all student’s concentration should be in the class, so I am trying to use body language and push students to focus on the subject. During course, I consider some short quizzes or assignments after two or three lectures, to make sure students get the subject in good way.

Course Reading List and References

Main references


Useful references


Magazines and review (Internet)

Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning


Module 6: Planning Law & Governance

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>1 Semesters</td>
<td>7th &amp; 8th Semester</td>
<td>9</td>
<td>270</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Planning and Governance, 7th semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Planning Law in Iraq, 7th semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Land Tenure and Land Management, 8th semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

2 Language of instruction

English

3 Content of the Module

1) Centralisation of government, Decentralisation, e-government, structure of public administration, planning and decision-making at local, regional and national level, the role of civil society, NGOs and private economic actors, public participation.

2) Legislation regarding master-plans, land-use, environmental protection, archaeological and architectural heritage, building codes, transport laws, land expropriation and compensation laws.

3) Land ownership laws, land leasing laws, land expropriation and compensation for public uses, informal land ownership practices, public ownership of land, private use of land, agrarian reform.

4 Competencies

- professional competence to classify spatial problems from a legal point of view
- professional competence to evaluate different land policy approaches and strategies in a critical way
- familiarisation of legal planning instruments in Iraq

5 Examinations

Course Exams (CE): Written exam and Assignments

6 Type of Examinations

(1) Covering the entire module:

(2) Relating to individual courses:

(2a) Courses 1 and 2 assignments

(2b) Course 3 written exam

7 Prerequisites

None

8 Status of the Module

Mandatory

9 Module Coordinator

Dr. Nesreen Barwari

Responsible department

Department of Spatial Planning
Module 6

Course Name: Planning and Governance (M6.1)

7th semester spatial planning students

Instructors: Dr. Nesreen Barwari; nesreen.barwari@uod.ac

Course Overview

This course starts from the premise that urban and regional (or rural?) politics and governance arrangements can both enable and constrain effective planning action. The course examines an array of governance structures (centralized versus decentralized institutions; local versus national states; participatory budgeting, etc.) and political conditions (democracy versus authoritarianism; social movements and civil society). In addition to assessing the impacts of these structures and conditions on (or urban and rural/regional) policy formation and implementation, the course asks which governance arrangement and/or political contexts are more or less likely to produce equitable, inclusive, and sustainable planning processes.

Learning Objectives

The course seeks to address key concepts and debates in the field, including those relating to institutional power and governance, state autonomy and state capacity, bureaucratic rationality, connections between decentralization and democratization, tensions between legitimacy and efficiency, and trade-offs between democratic process and equitable outcomes. In our discussion of the role of state in urban and regional governance and politics, we ask whether and how their interventions and actions are affected by organizational and bureaucratic structures, by the territorial scaling of governance capacities, and by the embrace of market, political, and/or social logics at the local, national, or global scale. Finally, we turn to a discussion of the ways that organized civil society actors – ranging from NGOs to social movements to interest groups defined around efforts to defend social, class, or market position – can affect the policy priorities of states and/or political parties through political mobilization, participation, or other forms of political claim-making.

Course Structure/Teaching and Learning Methods

Each class session is devoted to one “case study” reading and one more theoretical reading. In preparation for in-class discussion, students should have a good grasp of the empirical evidence presented in the case study, be able to say what the case tells us about the role of politics in governance, policy and planning, and be willing to reflect on how the theoretical reading accommodates (or not) the grounded reality presented in the case study.

An essay is also required. For this task, students are expected to select a current or prior planning issue and analyze it from a vantage point of his/her choosing. It can be from the point of view of a developer, a resident, a city official, a neighborhood organization, an urban planner, a politician – or anyone who might have had a stake in the issue. The aim should be to assess the who, what, how and why.

Course Reading List and References

Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

- Friedmann, John: The Prospect of Cities. Chapter 4 – Citizenship: Statist, Cosmopolitan, Insurgent
Module 6

Course Name: Planning Law in Iraq (M6.2)

7th semester spatial planning students

Instructors: Prjin S. Mohammed; zhen.mzory@uod.ac

Course Overview

This course will introduce students to Iraqi and Kurdistan Region laws and regulations in regard of planning and how these laws and regulations are made, in addition to refer that the sustainable development required planning laws which can be modified in corresponding to the new needs and circumstance of society that’s the law is designed to serve it.

This course also intended to encourage students to involve in the planning process through identifying the best planning policies (that had been applied) at the regional and international level in the subjects that will be addressed.

Learning Objectives

The purpose of this course is to help the students to get a legal knowledge about the planning laws in order to be able to assess the different planning policies approach and strategies in a critical way. The students should be able to:

- To have a legal knowledge about the planning issues
- Explore the planning policies in other countries
- To help the students to know the planning laws that had been applied in Duhok city
- Recognize the best rules and decisions in the planning process in Iraq and Kurdistan Region.

Main references

- Iraqi Laws and Regulations (Municipal Administration Law No. 165 of 1964 amended)
- Duhok Master Plan, Issued by German company develops.
- Law of Roads and Buildings No. 44 -1935
- Municipal Administration Law no 6 -1993
- Law No. (3) of 1997: Protection and Improvement of Environment
- Regulations No. (2) of 2001: Preservation of Water Resources
- Law No.55 of 2002 For The Antiquities & Heritage of Iraq
- Law of Transportation No. (80) of 1983 Resolution No. 815

Useful references

- Saeed, F. (2013). Legal issues in urban planning legislations dealing with Spatial Planning and Land Use Management, Duhok University.
Course Overview
This course aims to provide students with a profound knowledge of many aspects of land tenure, as well as how to access and control the land by the government through local laws and regulations to achieve public interest, and the rights over land.

The course also tries to qualify the students in approaching the land tenure in local context. Also, the course intends to involve the changing of laws, regulations regarding land ownership. Another objective is to encourage the students to get the ability of analyzing the political, economic and social factors related to the lands.

Learning Objectives
The purpose of this course is to help getting a legal terminology related to land tenure and to enable them to assess the different land policy approaches and strategies in local context in a critical way. Also, to know the importance of law for better access of land in a proper way. The students should be able to:

• To have a legal knowledge to deal with the issues related to land tenure,
• Evaluate economic and social dimensions and legal problems related to land tenure;
• To recognize the best rules and decisions in the planning process in the area of land tenure.
• To recognize the rights related to land as well as the rights and duties of the owner in this regard.
• To recognize between the public and private ownership of land.

Main references
– Al-Bashir & Taha, Right in Rem (Al-7eqq Al-3aineya). Iraq, the Ministry of Higher Education. Available in the Central Library In Duhok University.
– Iraqi Civil Code

Useful references
– Conference Paper, Available on http://usir.salford.ac.uk
Module 7: Data Collection & Analysis Methods

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>1 and 2 Semesters</td>
<td>1st &amp; 7th Semesters</td>
<td>18</td>
<td>540</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Empirical Field Methods, 1st semester</td>
<td></td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Qualitative and Quantitative Data Analysis, 2nd semester</td>
<td></td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Basic Skills in Statistics, 1st Semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Thesis Writing and Research Design, 7th semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

2 Language of instruction

3 Content of the Module

1) Conveys the basics approaches and importance of empirical field methods and data analysis in spatial planning.
2) Conveys analysis methods for the solution of concrete scientific and planning problems, including the application of statistical procedures for quantitative validation.

4 Competencies

- competence to obtain and analyse relevant data in an empirical way for spatial research and planning
- ability to independently conduct analysis and choose suitable methods of field inquiry
- ability to analyse field collected data with descriptive and inferential statistics
- Prepares students to carry out individual and group research projects later in the BSc curriculum

5 Examinations

Course Exams (CE): Written exams and Assignment

6 Type of Examinations

1) Covering the entire module:
2) Relating to individual courses:
   (2a) Course 1 assignment
   (2b) Course 2 written exam

7 Prerequisites

None

8 Status of the Module

Mandatory

9 Module Coordinator

Dr. Muhammed Jalal

Responsible department

Department of Spatial Planning
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

Module 7

Course Name: Empirical Field Methods (M7.1)

1st semester spatial planning students

Instructors: Jambally A. Mohammed; jambally.abdullah@uod.ac

Course Overview

Empirical field methods course involves collection of qualitative and quantitative data in the field. It combines theoretical in-class lecturing with practical sessions, in class or in the field, - both are designed to build specific skills for conducting field data collection.

This course will develop the student knowledge and understanding of empirical research/ field methods, but more importantly it will help them improve their skills and techniques in applying these to their real-life work situations. It will convey the basics of important empirical field methods in spatial planning. In this course, the students will learn how to conduct research using empirical methods namely data collection, which will rely on observation and experimentation.

The course is designed to introduce the spatial planning students to different empirical field methods including research project development and data collection. The students will learn how to define a study project, conduct a background research, choose appropriate research methods, and prepare a brief research proposal. They will also learn how to identify the relevant data and develop collection tools (guides such as questionnaires and interview questions), using most common and realistic empirical methods, which will rely on field work, observation, and experimentation. This course is important for the planning students as it focuses on different data collection methods, such as surveys, questionnaires, observations, and interviews. These methods will form the basis of data analysis and decision-making processes.

Content of the course: The course will convey the basics approaches and importance of empirical field methods - data collection - in spatial planning.

Learning Objectives

This course is intended to help the students acquire basic knowledge and skills of how to identify, formulate and explore a research problem. The purpose is to enable the students to learn and acquire theoretical knowledge and practical skills of important empirical field methods including various data collection methods, acquire scientific knowledge on most common empirical methods, and apply them to the real-life experiences, i.e. in practice. It will also help them develop a course paper with focus on researching a public issue and using data to be collected through empirical field methods.

The course is also expected to qualify the students for working in relevant planning tasks whether with the public sector or private sector as well as organizations after they graduate.

By the end of the course, the students will be able to:

- learn concepts such as empiricism and research;
- learn basics of developing study projects and researches;
- learn knowledge about various data collection methods such as surveys, questionnaires, interviews, and observations;
- learn how to conduct field work to collect data related to planning tasks;
- learn how to compile data and present them to a larger audience;
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

- be competent to obtain relevant data in an empirical way for spatial research and planning

Course Structure/Teaching and Learning Methods

The course consists of 11 lectures followed by class/home assignments and quizzes. Each lecture includes open discussion and debates on the topic and may include a quiz or a class or field assignment to test and ensure that the students have revised the reading materials and understood them as well.

The course is based on the principles of 'telling, showing and doing'. It is a kind of interactive course that requires active participants and not passive observers. It focuses on the students' specific learning needs, and matches their needs to the duties and requirements of the job. It involves a wide variety of learning methods and techniques, including pair and group work, sharing experiences with colleagues, practical exercises, role plays, prepared tasks, coursework, debate and discussion, presentations, and readings. Each 2-3 students will be required to work on a group project which will form the basis for a term paper (final assignment). The project will examine a social, environmental or any other problem/issue in the public sphere in Dohuk city or any other locations, and will involve collection of relevant data using one or more empirical field methods – data collection methods.

Each student will also be required to present a report including summaries of the lectures delivered. This is a means to be used to ensure that the students apprehend the lectures since the course involves no exams.

Course Reading List and References


Other references will be used as necessary to ensure that the students receive up-to-date knowledge and information. Softcopies of both books will be made available on the course page on Moodle website.
Module 7

Course Name: Qualitative and quantitative Data Analysis (M7.2)

2nd semester spatial planning students

Instructors:  Mohamad Jalaladeen Noori; mohammed.jalal@uod.ac
            Dr. Shahadat Hossain; shahadat.hossain@tu-dortmund.de

Course Overview

Qualitative data analysis focus on text-on qualitative data while quantitative analysis focus on numbers. Qualitative researchers analyze is most often transcripts of interviews from participant observation sessions.

Qualitative and quantitative data analysis differ in the priority to the prior views of the researcher and to those of the subjects of the research. Qualitative data analysts seek to describe their textual data in ways that capture the setting or people who produced this text or their own terms rather than in terms of predefined measures and hypotheses.

Quantitative data must be prepared in a format suitable for computer entry. Questionnaires or other data entry forms designed to facilitate this process.

Learning Objectives

Students acquire the methodical competence to ascertain and analysis relevant data in an empirical way for spatial research and planning. The students conduct an ascertainment and analysis on their own and thereby learn to choose suitable methods of a ascertainment and analysis.

- How to collect different data types (quantitative and qualitative)
- design questionnaire form
- find mean, medium, standard deviation
- find correlation coefficient
- find regression equation
- analysis data
- draw graphs
- write report
- presentation of results

Course Reading List and References

Module 7

Course Name: Basic Skills in Statistics (M7.3)

1st semester spatial planning students

Instructors: Mohamad Jalaldeen Noori; mohjalal2003@yahoo.com

Course Overview

Statistics is the science of collecting, organizing and interpreting numerical and non-numerical facts, which we call data. Knowledge of statistical methods are useful for informatics specialists of various fields such as data mining, knowledge discovery, neural network, fuzzy system and so on. Whatever else it may be, statistics is, first and foremost, a collection of tools used for converting raw data into information to help decision makers in their work.

This course provides an elementary introduction to the statistics with applications. It is intended for Bachelor students in applied geoscience department. The course aimed to apply some statistical techniques to gain insight into real problems and situations.

Learning Objectives

The objectives of this course are:

- to study elementary concepts and techniques in statistics;
- to understand the need for data collection and summarize data sets into meaningful information
- to motivate the use of statistical inference in practical data analysis;
- to execute appropriate statistical procedures and write sound interpretations for use in practical decision-making
- to become familiar with “SPSS project for statistical computing and graphics”, and basic introductory technical skills in this software to visualize and interpret data

Course Structure/Teaching and Learning Methods

In theoretical lectures, I use the smart board with data show and solve examples on the black board. Practical part: we use computer lab, and practicing the theoretical issues with SPSS program. Due to the nature of the subject, the theoretical examination include mathematical equation with some definitions and explanation.

Course Reading List and References

Module 7

Course Name: Thesis Writing and Research Design (M7.4)

7th semester spatial planning students

Instructors: Dr. Heike Wendt; heike.wendt@tu-dortmund.de

Course Overview

With their Bachelor theses the students are supposed to demonstrate subject and method competencies that are relevant to answer a research question in special planning in a given time frame, independently and according to scientific standards in both content and methods. The central aim of this course is to enhance students’ methodical competences to deal with spatial planning problem independently and with the aid of scientific methods and to prepares students to report their scientific findings in the Anglo-American tradition, which, guided by the APA, emphasizes objective style, active voice, and clearly articulated theses.

Learning Objectives

After having participated in this seminar, students will be able to

- propose a research problem in the field of spatial planning that can be investigated with the aid of scientific methods and a given period of time,
- identify all of the stages of qualitative, quantitative and mixed-methods research studies,
- and apply these logically reflecting the research problem and questions,
- identify all of the components of a publication-ready, bachelor thesis,
- work with the APA Style Guidelines and are able to use active, objective voice, avoid plagiarism, and format consistently,
- document all components of a research study to deliver a concise, compelling written presentation.

Course Structure/Teaching and Learning Methods

This course is deliberately structured as a seminar, which might be contrasted with, for example, a lecture. The Oxford English Dictionary defines a seminar as, “a class at university in which a topic is discussed by a teacher and a small group of students.” In this vein, ours is a collaborative learning community, wherein each has an equal stake in the others’ learning and teaching. One might therefore consider our seminar to be more democratic, constructivist, problem-based, and student-centered than a traditional lecture would be. For it to function for all, all must participate, take ownership and keep up his or her end of the intellectual bargain.

Course Reading List and References

Required Readings: For our seminar excerpts from a variety of research design texts as well as example thesis will be assigned for every meeting, which are due before the start of seminar. Copies can be found in the library of the Spatial Planning Department as well on Moodle.
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning


**Course Work Organization**

Each seminar will include instruction as well as a directed discussion component. Further, so that the course content is project based and student-centered, seminar will be tailored to participants’ own scholarly work. To this end, there will be a short directed instruction oriented to learning outcomes in every class, which may include presentations, videos, and applied examples, but also always a group discussion of the week’s reading. Every class will also include an evaluated written activity, a student presentation to start the seminar based on the previous reading assignments. Every class will be followed by a learning portfolio aimed at using content from the seminar to further develop ideas for the thesis or to ensure that course content is understood and can be applied to the own research task.
## Module 8: Spatial Analysis & Mapping

### B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>2 Semesters</td>
<td>3rd &amp; 4th Sem</td>
<td>12</td>
<td>360</td>
</tr>
</tbody>
</table>

### 1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to GIS and Mapping, 3rd Semester</td>
<td>3</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Remote Sensing, 3rd semester</td>
<td>4.5</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>GIS and Spatial Analysis, 4th Semester</td>
<td>4.5</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### 2 Language of instruction

English

### 3 Content of the Module

1) Theoretical foundation and practical skills when dealing with important methods of graphical analysis and presentation.

2) Fundamental questions concerning the different techniques of analysis and presentation as well as cartographical communication are theoretically conveyed and implemented or rather deepened by practical experience with appropriate software by means of concrete tasks.

3) Element 1 provides an introduction to the basics of graphical analysis and mapping.

4) Element 2 is about the application and usefulness of cartography and surveying within spatial planning.

5) Elements 3 and 4 deal with the analytical and technical presentation of space-related data and spatial planning with the aid of Geographic Information Systems (GIS).

### 4 Competencies

- methodological competence to assimilate or combine spatial information at different scales and to illustrate them in a visual way
- spatial analysis and mapping from collecting data, analysing data, technical adaption or transformation of data and selection of an adequate form of graphical communication and presentation
- individual proficiency using Geographical Information Systems (GIS)

### 5 Examinations

Course Exams (CE): Assignments

### 6 Type of Examinations

(1) Covering the entire module

(2) Relating to individual courses:

(2a) Assignment for elements 1, 2, 3 and 4

### 7 Prerequisites:

None

### 8 Status of the Module

Mandatory

### 9 Module Coordinator

Hussein Hamid

Responsible department

Department of Spatial Planning
Module 8

Course Name: Introduction to GIS and Mapping (M8.1)

3rd semester spatial planning students

Instructors: Mohamad Jalaladeen Noori; mohjalal2003@yahoo.com

Course Overview

Since planning studies concerned with the earth and spatial data, so it is important for the students to know some information about the earth and the subjects and tools which relate to it such as: study of maps as a general and topographic maps especially, contouring, its characteristics, types of scales, measurement of distance, slopes, types of drainages, make sections, determine locations on the earth (longitude and latitude), types of datum, spatial data analysis (overlay function, measurement function, neighbourhood function, and classification functions).

Learning Objectives

Upon successfully completing the course, students should be able to:

- draw topographic maps
- make sections
- measure distance
- determining locations and height
- finding slope, drainage lines, distance
- understanding spatial analysis
- presenting maps

Course Reading List and References

Module 8

**Course Name: Remote Sensing (M8.2)**

*3rd semester spatial planning students*

**Instructors:** Hussein H. Hassan; hosseinhamid@uod.ac

**Course Overview**

This course allows students to gain basic principles of remote sensing tool and how benefited from it for different planning applications. They should be capable of understanding simple spatial analyses using digital image analysis software like Ilwis, ENVI, etc.

**Learning Objectives**

The course will cover the principles of remote sensing, including interactions of electromagnetic energy with the atmosphere and earth’s surface, satellite systems and sensors. The end of the course provides students with a conceptual and practical introduction to remote sensing data, processing, and interpretation. Students should know applications of remote sensing in the field of planning in general and in the field of urban planning in particular.

**Course Reading List and References**

**Main references**


**Useful references**


**Magazines and review (Internet)**

- Journal: Remote Sensing of Environment
- International Journal of Remote Sensing
Module 8

Course Name: GIS and Spatial Analysis (M8.3)

4th semester spatial planning students

Instructors: Mohamad Jalaladeen Noori; mohjalal2003@yahoo.com

Course Overview

GIS is any computerized information system that is designed to store, manipulate, retrieve, analyze, and display spatially referenced data. Geographic Information Systems (GIS) are a new technology that combines the world of database management with digital maps and graphics. The geographic information system is a computer based system that supports the study of nature and man-made phenomena with an explicit location in space.

GIS allows data entry, data manipulation, the production of interpretable output that may provide new insights about the phenomena. There are many uses for GIS technology including soil science, measurement of agricultural forest and water resources: urban planning, geology, cadaster and environmental monitoring. The advantage of GIS: Time minimization, accuracy improvement, data can be managed efficiently and high cost/benefit ratio.

Learning Objectives

The main objective of this course is to lay the foundation for the student to become proficient in the use of GIS technology. Furthermore, the goal is to define a common understanding and terminology for follow-up modules which the student may elect later in his/her respective program.

By the end of this course, it is accepted that student:

- knowing the importance of program Arc GIS
- entering data and make shape files
- analyzing data
- make maps
- presentation of maps and data

Course Structure/Teaching and Learning Methods

Lectures using the smart board with data show and black board.

Course Reading List and References

- Mohamed Yagoub. Introduction to Geographic information systems (GIS), 1997.
Module 9: Regional Planning

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>1 Semester</td>
<td>5th semester</td>
<td>10.5</td>
<td>315</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Integrated National and Regional Planning, 5th semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Regional Master Plan Studio, 5th semester</td>
<td>4.5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sectoral Inputs for Regional Planning Studio, 5th semester</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

2 Language of instruction

English

3 Content of the Module

1) The planning at the national level deals with the guidelines for the whole lower level planning activities. The development of the sectors and their integrated relations at the national level; the main spatial axes and transportation systems; the regional balance, decentralisation policies and the rural-urban context are explained.

2) Regional development and its relation to the national level are on a case study demonstrated.

3) Requirements of different sectors are handled.

4 Competencies

- understanding of the planning hierarchy at national and regional levels
- ability to understand the relations of different levels and between different planning sectors
- ability to develop sectoral or regional plans integrated to the national level policies

5 Examinations

Course Exams (CE): Written exam and defence of regional master plan

6 Type of Examinations

(1) Covering the entire module:

(2) Relating to individual courses:

(2a) Written exam for subject 1

(2b) Defence for subjects 2 and 3

7 Prerequisites

Modules 1, 2 & 3

8 Status of the Module

Mandatory

9 Module Coordinator

Dr. Hasan Sinemilioglu

Responsible department

Department of Spatial Planning
Module 9

**Course Name: Integrated National and Regional Planning (M9.1)**

5th semester spatial planning students

**Instructors:** Mohammed Alaulddin M. Aqiqi; mohamadaqiqi@gmail.com

**Course Overview**

Regional and urban planning in modern times is a very important subject due to confront contemporary problems, which are many and various. Particularly the economic and social difficulties experienced by people who are living and working in the cities, which are more complex and difficult to handle. The increased number of world population of seven billion higher than at the beginning of the last century was accompanied by a large degree of urbanization, which created serious problems in the field of urban transport, crime, housing and environmental pollution. Generated a growing need to provide multiple services, adding to the unemployment problem in urban and regional areas. Regional planning is no longer enough to solve these problems in addition; this theoretical approach is no longer able to solve these problems. The regional planning adoption three dimensions economic, social, & physical aspects in planning included emerging of a new science: the regional and urban planning which deals with contemporary social and economic problems in spatial dimensions.

**Learning Objectives**

- The main objective of the study of regional planning is the absence of full knowledge on this subject, particularly in developing countries that are in need of finding radical solutions to the problem of urbanization, increasing population density, poor distribution of natural resources, and methods of preservation of the environment in cities and provinces .... etc.

- Focus on the region's planning, Regional definitions and general concepts about the importance of this topic. Then takes a detailed explanation of theories on the subject, particularly the theories of the regional planning, as well as the study of regional types and the standards and contrast between different regions.

- Study the differences between urban and rural areas, especially the discussion of local communities for both rural and urban areas.

- Study ideas and practical aspects related to the development of social economic sectors and physical in the region.

- Study the importance of the statement and the structure of regional planning, which is one of the important to practical in the development of regional and solving their problems by planning.

**Course Reading List and References**

- Adedeji, Oludare Ph.D. Rural and regional planning (EMT), Lecture Notes, 8/1/2011.
- Philip Mc Cann, urban and Regional Economics, Printed in Great Britain 2009.
Module 10: Planning Practice II

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>2 Semesters</td>
<td>5th and 6th Sem.</td>
<td>15</td>
<td>450</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Advanced Planning Project: Group Studio, 5th and 6th Semesters</td>
<td></td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Project Management, 6th Semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

2 Language of instruction

English

3 Content of the Module

1) Practice working with complex space-oriented problems and identification of possible solutions in a cooperative way aided by the application of scientific tools.
2) Group work of up to eight students guided by at least two instructors from different units of the faculty or from external departments or professions.
3) Project work is focused on actual problems and questions of spatial planning within Iraq.
4) Cooperation with individuals or departments within professional practice is encouraged.

4 Competencies

- self-motivated and autonomous working within a larger group framework
- enhancement of ability to perform project work as a team member, including coordination of the course of the project, presentation, moderation and discussion, consensus building and conflict resolution within the group

5 Examinations

Module Exam (ME): Summary reports and oral defence

6 Type of Examinations

(1) Covering the entire module:
   (1a) Preparing three reports as described in Module 2
(2) Relating to individual courses:

7 Prerequisites

Modules 1 & 2

8 Status of the Module

Mandatory

9 Module Coordinator

Dr. Shireen Younis

Responsible department

Department of Spatial Planning
Module 10

Course Name: Project Management (M10.2)

6th semester spatial planning students

Instructors: Dr. Eng. Shireen Y. Ismael; shiren457@yahoo.com

Course Overview
This course gives students the understanding and tools necessary to carry develop and carry out necessary project management.

Learning Objectives
- To understand the meaning and reason of Project Planning and management
- To learn tools of Project Planning and management
- To understand the process of Problem and stakeholder identification and analysis,
- To understand the complex relationship among problems, through identifying their causes
- Alternative analysis for different types of projects
- Methods and Legal instruments of project assessment

Course Structure/ Teaching and Learning Methods
The course will be delivered in a lecture/discussion format. Pre-final and Final presentations are required from student groups (content, presentation structure, students’ performance and time management) will be considered in the evaluation, this will help to review and exam their practical work. It’s also required of each group to write a report no less than 20 pages.

Course Syllabus/ Contents
- Introduction (identifying the main concepts, project / project planning and management / program)
- How to establish Problem-tree and Logical framework of the project
- How to propose projects and the alternatives
- Practical part consist of:
  1. Project proposal - Selection of project based on priorities (development strategy, pressing urban and regional development issues)
     - Brainstorming, selecting and categorizing according to the important of the issue and cause and effect relationship.
     - Developing problem tree and identify possible projects
  2. Project examination and selection
     - Impact and cause- benefit analysis
     - Project selection based on the impact of the project and it is cost, explain to what extend the city or the region will benefit from the selected project and if the cost is reasonable in relation to the benefit it will bring.
3. Project planning and management

- Formulation the goal and objectives of the project and the outcome
- Formulating measurable indicators
- Identify the deferent steps and activates
- Identify the sequence of each activates
- Calculating time, cost and manpower

Course Reading List and References

- Government projects archive for example the archives of the Presidency of Municipality and Urban planning agencies in Duhok
Module 11: Theories of Planning & Spatial Development

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>1 Semester</td>
<td>3rd Semester</td>
<td>10.5</td>
<td>315</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Planning Theories, 3rd semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Theories of Space and Location, 3rd semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Theories of Land Use, 3rd semester</td>
<td></td>
<td>4.5</td>
<td>3</td>
</tr>
</tbody>
</table>

2 Language of instruction

English

3 Content of the Module

1) Theories of planning, general principles of different planning schools of thought, relationship between planning practice and planning theory and the history of development planning.
2) Patterns of urban growth, growth pole theories, rural-urban locations and their relations in the space.
3) Main tools of land use planning and their importance.

4 Competencies

- understanding different theories of spatial development and the ability to apply them within spatial planning
- ability to understand and describe the spatial patterns in Iraq
- ability to use land use theories for the spatial development in Iraq

5 Examinations

Module Exam (ME): Written exam

6 Type of Examinations

(1) Covering the entire module:
   (1a) Written exam and assignments for the whole module
(2) Relating to individual courses

7 Prerequisites

None

8 Status of the Module

Mandatory

9 Module Coordinator

Dr. Shireen Younis

Responsible department

Department of Spatial Planning
Module 11

Course Name: Planning Theories (M11.1)

3rd semester spatial planning students

Instructors: NN

Course Overview

This course is a guide on how to cover the concepts and theories of planning and their role in the process of urban built environment. In addition to the process and approaches the course will cover the evolution of planning theories, the traditional, the contemporary approaches and current trends in planning theories and profession, international examples, local and regional examples will be studies and analyzed.

Learning Objectives

Planning theories deals primarily with the process of cities evolution and different trends in dealing with the built environment, taking social, economic and technical aspects into consideration as well as environment:

- Understanding the domain of planning theory and how different theories affected and shaped cities in the world
- Dealing with traditional, modern, post-modern, and contemporary theories in planning to expose students to different approaches
- Comparing between theories and their application in different regions in the world. To gain knowledge of how planning theories are needed to understand the process of planning in cities
- Gain the proper scientific understanding of different planning theories planning
- Understand the differences between classical, and contemporary approaches in planning theories
- Submit an accepted report linking between theory and practice in planning using application of theories in spatial planning practice

Course Reading List and References

- Magazines and review (internet): UN publications/ UN Habitat
Module 11

Course Name: Theory of Space and Location (M11.2)

3rd semester spatial planning students

Instructors: Dr. Nesreen Barwari; nesreen.barwari@uod.ac

Course Overview

How we experience, understand and represent spaces demands very much on how we approach them – culturally, intellectually, historically, ideologically, politically or even economically. We cannot take ‘place’ (or its meanings) for granted. A place is never ‘just a place’. Its physical dimensions (how big it is, what it is used for) are always overlain (or underdetermined) by a complex set of cultural, moral, economic and ideological assumptions. The purpose of this course is to explore some of these assumptions in order to arrive at a richer understanding of place and space. What is ‘place’? How is it different from ‘space’? How can two short words be so complex? And what about scale?

An overview of contemporary theories of space, place and scale will be provided. We’ll encounter three principle approaches to place and space:

1) Descriptive

2) Phenomenological / humanist

3) Social Constructionism, which is an umbrella term for
   a. Marxist
   b. Feminist / embodies
   c. Postcolonial

Learning Objectives

Why the turn to place and space? Many of the social and political issues that have become increasingly central within literary studies have a fundamentally spatial dimension, including: nationalism, imperialism and colonialism; cultural globalization, gender, urbanization, digital cultures, and environmentalism. The last two decades have been increasingly concerned with the ways in which space and place inform culture, and politics. This course will attempt an overview of some of the thinkers, themes, and issues that animate this line inquiry. In this class, students will be able to see, learn and discuss about these issues to be able to handle planning challenges they will face in the future.

Course Structure/Teaching and Learning Methods

Discussion Opener: Each student will sign up for a week during which he/she will make some brief remarks and observations that open up at least one of the week’s readings for discussion (it is not needed to account for all of the assigned texts). The success of this assignment depends upon previewing the week’s reading and “pairing” it well with the week’s theoretical readings.

Group Paper: Roughly 6-10 pages in length, due after week 13. Your paper might be on a topic and approach, as it clearly engages with a significant theme or themes of the course.

Project Presentation: During the final class meeting, students will make a 10-minute presentation on the topic of their seminar paper to disseminate their own work to the class and to prompt a discussion that will (ideally) help in completing the project.
Course Reading List and References

Because this course approaches a nexus of related theoretical issues in an interdisciplinary, synthetic way, there is no neatly defined corpus of writings that circumscribes the topic at hand. The material will draw upon discourses and disciplines that, more often than not, have no explicit connection to literary studies: geography, philosophy, architecture, anthropology, and sociology, to name a few.

- Tuan, Yi-Fu (1977). Space and Place: The Perspective of Experience. Minneapolis, Minnesota University of Minnesota Press
- Additional reading materials and articles will be assigned each week
- Further media as vehicles for the aesthetic expression of place and space, including film, photograph, painting, architecture, and music
Module 11

Course Name: Theories of Land Use (M11.3)

3rd semester spatial planning students

Instructors: Dr. Ing. Shireen Y. Ismael; shiren457@yahoo.com

Course Overview

The way cultures and societies organize their land use possibilities and limitations shapes spatial planning outcomes. This course introduces students to different theories of land use and discusses how each of the theoretical lenses shapes positive and negative spatial planning outcomes.

Learning Objectives

- To gain a deeper understanding of concepts related to land and the basic principles of land-use planning for various categories of land-use.
- To acquire an acceptable level of competence in the application of land-use survey and analytical techniques in land-use studies.
- To become familiar with the various approaches to planning specialized types of land-uses.
- To understand how sustainable urban/rural development can be achieved through land use planning.

Course Structure/Teaching and Learning Methods

Theories of land use course is taught in a lecture/discussion format. Lectures occur once weekly and focus on topics that provide information necessary in the subject. It is required that each group of students deliver a presentation, the topics will be selected by the instructor. These topics are chosen specifically to help the students understand the course’s content. Such topics like Eco-city/Masdar city, Gentrification, Urban Agriculture, upgrading informal settlement (content, presentation structure, students’ performance and time management) will be considered in the evaluation. Final written exam is also required.

Course Syllabus/Contents

Part One: Introduction

- Introduction to land-use planning; concepts (Land, land use, land use planning), tools and applications
- Why do we need Land use planning?
- What is Central Business District?

Part Two: The complex relationship between Land use, land Value, and Urban Structure / Discussing the Classical Modes of Land use

- Bid – Rent theory
- Burgess – Concentric Zone
- Hoyt – Sector Model
- Harris and Ullman – Multiple Nuclei
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

- Mann – Model of Urban structure
- Vance – Urban Realms Model
- The peripheral Model
- What is Urban Sprawl?

Part Three: Land use Classification:
- Anderson and LBCS (Land-Based Classification Standards)

Part Four: Land use Policies/ Land use planning steps (in Kurdistan Region)
- Discussed from Government policies and regulations

Part Five: Land Use and Sustainable Development
- How land use planning can play a role in addressing the various urban challenges?
- Environmental/Cultural/Economical implications in land use planning
- Land use and Transportation (The complex relationship)
- Main Principles of New Urbanism
- Shaping a more Compact City? Intensification (Population, Buildings, and activities) this section will be supported by Video
- Conservation & Revitalization of Historic Urban Area, as a model of Compact city
- (Scenario Building) a tool for Land use decision (Amedy city land use as an example)

Part six: Current Issues (current practice of Land use planning in Kurdistan Region)
- Supported by many examples provided from the Kurdistan region

Course Structure/Teaching and Learning Methods

Written exam, presentations by groups (Masdar City, Eco-City, Costa Rica vision (2021) for Zero CO2 Emission, Urban Agriculture, conflict-sensitivity of Shale Gas industry in US, Strategies for upgrading informal settlements); presentations delivered by group of students (content, presentation structure, students’ performance and time management) will be considered in the evaluation.

Course Reading List and References
- Urban land use planning, fifth edition /Philip R. Berke, 2005
- Land and city, Patterns and Processes of Urban Changes/ Philip Kivell, 2003
- Urban land use planning, second edition, by F. Stuart Chapin, Jr., Professor of planning University of North Carolina, 1995
- Land use and transportation, Stephen Marshall, Bartlett School of planning, University College London, London, UK, David Banister Oxford University Centre for the Environment, 2008
# Module 12: Planning Methods

## B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>2 Semesters</td>
<td>5th Semester</td>
<td>6</td>
<td>180</td>
</tr>
</tbody>
</table>

## Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Planning and Decision Making Methods, 5th Semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Conflict Resolution and Management, 5th Semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

## Language of instruction

English

## Content of the Module

1) Distinction between goals and objectives, alternative identification and analysis, evaluation methods, risk analysis and management, goal achievement matrix, implementation planning, scenario writing as a holistic forecasting tool, feasibility studies, output analysis-cost-benefit analysis and balance score cards.

2) Negotiation techniques, natural resources in conflict resolution, conflict prevention techniques and applied sociology regarding conflicts.

## Competencies

- ability to identify and analyse spatial problems, develop alternative plans and scenarios and compare the different alternatives
- ability to solidify alternatives in suitable plans
- proficiency dealing with conflicts and applying conflict resolution techniques to manage the participatory planning process

## Examinations

Module Exam (ME): Assignment and Written Examination

## Type of Examinations

(1) Covering the entire module:
(1a) Assignment and written Exam

(2) Relating to individual courses:

## Prerequisites:

None

## Status of the Module

Mandatory

## Module Coordinator

Dr. Hasan Sinemillioglu

## Responsible department

Department of Spatial Planning
Module 12

Course Name: Planning and Decision Making (M12.1)

5th semester spatial planning students

Instructors: Ali Ibrahim Bakh; ali.ibrahim@uod.ac

Course Overview

This course is intended as a specialized course on decision making in planning, especially in spatial planning, such as risky, competitive, and difficult decisions - in a safe context. This course will cover decision making theory, interactive decision making including game theory techniques, learning in games, as well as selected topics involving decentralized systems. In addition, the course will introduce the students to scenario writing as a planning tool.

Learning Objectives

Planning and decision making is no doubt the main step of building the planner’s vision towards making good decisions related to space, environment and organizations (i.e. decision making in case designating areas for specific purposes or locational decisions for bulky infrastructure; rational decision for people and organizations). The course deals with enhancing capacity building in the fields above, with a view of rational decision-making in policy formulation within the areas mentioned. Tools for helping students make better decisions will be presented, and examples to illustrate the concepts and techniques will be presented. Students who study this material and apply these concepts and techniques should become better decision-makers.

The students will also be introduced to the methods of writing multi-sectoral scenarios. At the end of the course they should be able to develop alternative scenarios for a planning region or a city.

Course Reading List and References

Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

Module 12

**Course Name: Conflict Resolution and Management (M12.2)**

5th semester spatial planning students

**Instructors:** Prof. Dr. Einhard Schmidt-Kallert; einhard.schmidt-kallert@tu-dortmund.de

Diman Mohamad; diman.doski@uod.ac

**Course Overview**

Sooner or later conflicts between different stakeholders arise in nearly every planning process. Thus planners should have a good understanding of methods of (peaceful) conflict resolution. This course will equip the students with both theoretical knowledge and practical skills in conflict management.

In the first part of the course the students will be introduced to the analysis of typical planning and/or environmental conflicts, especially their history, the positions and interests of the conflicting parties, and the planner’s role in conflict management. Subsequently different methods of conflict management by outsiders will be discussed, with a special focus on mediation (on the basis of the Harvard model).

The last part of the course will be fully devoted to an extended role play in conflict management through mediation. The role play will take the participants through all phases of a mediation process, and will be followed by a final group reflection.

**Learning Objectives**

The students will be able to analyse long-standing conflicts, particularly with regard to the parties’ positions, real needs and interests.

They will also be in a position to organise a mediation process on the basis of the Harvard model of conflict management. ...

**Course Reading List and References**


Module 13: Infrastructure Planning

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>1 Semester</td>
<td>3rd &amp; 4th Semester</td>
<td>15</td>
<td>450</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Transport Planning, 3rd Semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Water Provision and Sanitation, 4th Semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Energy Supply and Distribution, 4th Semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Education Planning, 4th Semester (COS-elective)</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Health Planning, 4th Semester (COS-elective)</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

2 Language of instruction

English

3 Content of the Module

1) Traffic planning, urban transport, national and inter-regional transport, roads-rail-air-ship, cost issues regarding location and transport, supply and demand of transportation, transport methods (e.g. operations research), mass transportation / private transportation.

2) Water network infrastructure in towns and rural regions, sewage systems, sewage treatment, drainage and urban water storage.

3) Electricity networks and grids, gas network, kerosene for heating (domestic), renewable energy supply, safety issues, environmental concerns and pumping stations.

4) Hierarchy / levels of education facilities, installation of schools, location planning criteria, health centres and hospitals planning, levels of health facilities, emergency planning, health standards, health education/prevention and community medicine/social medicine.

4 Competencies

- Knowledge of the function of different sectors and how they are related to each other
- Management of technical services in cities, towns and rural locations
- Organisation of necessary social services
- Legal frameworks of technical and social services
- How to develop services in an sustainable way

5 Examinations

Module Exam (ME): Assignment

6 Type of Examinations

(1) Covering the entire module:
   (1a) Assignment covering the whole module

(2) Relating to individual courses:

7 Prerequisites

Mandatory
Course Name: Transportation Planning (Module 13.1)

This course aims to understand the sustainable transportation planning; it explains the introduction of urban transportation planning such as data collection, and issues of transport for instance quality of service, traffic congestion, global warming, and global oil consumption. It also deals with population growth and traffic growth, measurements for accessibility, need for public transport and various kind of transport mode.

Learning Objectives

- Understanding transportation planning issues and transportation policy
  - Multi-modal mobility
  - Transport networks
- Analyzing data for using in transportation planning
- Estimating future trends and comparing alternatives
- Ability to work in team in effective communion and collaboration

Course Reading List and References

Module 13

Course Name: Water Provision and Sanitation (M13.2)

4th semester year spatial planning students

Instructors: Qaidar Nammo; qaidar.kochar@uod.ac
Dr. Ing. Mathias Kaiser; mathias.kaiser@tu-dortmund.de

Course Overview

The course covers water supply and network distribution, selection of network type according the district characteristics, and teaches students how to calculate a balance for water distribution form the source to house tap.

The course also covers the urban drainage process and its characteristics, the necessity of water drainage systems in relationship to urban growth, the designing of proper sewage system to avoid public health problems, and the selection of the best sewerage systems alternatives for low income communities.

Learning Objectives

The main objectives of the course are:

- For students to learn about water supply networks
- To make plans for storage water supply, develop the potential water balance between source and distribution network, and learn about operation and maintenance of a water supply network
- To learn about urban drainage, sustainability of urban drainage, types of drainage systems
- To calculate waste water generation, wastewater treatment plant process, sewer water as a risk factor to public health and how to avoid it

Course Reading List and References

Main references:

Module 13

**Course Name: Energy Supply and Distribution (M13.3)**

4th semester spatial planning students

**Instructors:** Qaidar Nammo; qaidar.kochar@uod.ac

**Course Overview**

The course “Energy Supply” within the module “Infrastructure Planning” covers methods and instruments used for energy supply development and energy security. The role as a spatial planner will be discussed too as well as best practice examples will be given.

**Learning Objectives**

The course objective is to give students a deeper insight in the following topics: Electricity networks/grid, gas network, kerosene for heating (domestic), renewable energy supply, safety issues, environmental concerns, pumping stations. The understanding of spatial, environmental and social impacts of energy supply systems are key aspects that are taught, moreover, that urban and rural areas need different kinds of strategies. Best practice examples are used for demonstration.

The students should learn about the functionality and the spatial impact of different types of energy production and supply systems as well as what types are suitable for the Kurdish region. Furthermore, the role of a spatial planner and the methods, instruments and key factors for a sustainable and secure energy development are main learning outcomes.

**Course Reading List and References**

- Moriarty, Patrick; Honnery, Damon 2011: “What is the global potential for renewable energy?” in Renewable and Sustainable Energy Reviews 16 (2012) 244-252
- Narbel, Patric André; Hansen, Jan Peter 2014: “Estimateing the cost of futre global energy supply”, ind Renewable and Sustainable Energy Reviews 34 (2014) 91-97
Module 13

**Course Name: Education and Health Planning (M13.4)**

4th semester spatial planning students

**Instructors:** Dr. Mohammed Jalal; mohammed.jalal@uod.ac

**Course Overview**

Education System in Society (Fend, 1980, 2006): Functions of Education System in Society (on systematic and individual Level); Legal frames, governance structures and actors in Education Systems;

Education sector planning: key concepts, contextual factors and main stages; Comparative and international perspectives: major trends in educational development in different parts of the world, the related challenges for forward planning; Frameworks for planning: ‘new’ international commitments (such as Education for All, the Fast Track Initiative, poverty reduction strategies, Millennium Development Goals (MDG’s), etc.) and their influence on the approaches, instruments, and processes for the development of educational planning.

**Learning Objectives**

After the course students can:

- Discuss different functions of Education systems in Society
- Identify and compare differences between education systems and its legal frames and governance structures; have a better understanding of the education system in Iraq
- Master key concepts, characteristics and main stages of education sector planning;
  - Identify the main contextual factors affecting educational planning;
  - Discuss the main challenges facing educational planning;
  - Compare educational development patterns in different regions;
  - Identify and discuss the international commitments, frameworks and developmental approaches guiding educational planning;

**Course Reading List and References**

Readings (selection)

- Chesswas, J.D. (1969). Methodologies of educational planning for developing countries. UNESCO: IIEP.


– UNESCO IIEP. Distance Education Programme on Education Sector Planning. Module 1. Educational Planning approaches, challenges and international frameworks.


Additional resources (selection):


– Fundamentals of educational planning No. 41, Paris: IIEP-UNESCO (Chapters 1, 2, 4 and 7).


Module 13

*Course Name: Health Planning (M13.5)*

*4th semester spatial planning students*

*Instructors: NN*
Module 14: Sectoral Economic Planning

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>1 Semester</td>
<td>7th and 8th Semesters</td>
<td>13.5</td>
<td>405</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Housing Policy and Planning, 7th semester</td>
<td></td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Tourism Development (compulsory optional subject), 8th</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Industrial Development, 7th semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Commercial and Trading Development, 7th semester</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

2 Language of instruction: English

3 Content of the Module

1) Construction industries, redevelopment / improvement strategies, supply and demand of building materials, green housing, clever housing, housing for migrants and refugees, suburbs development, housing markets
2) Relation of tourism to religious sites, historic sites / cities, national parks, reserved protected areas, recreation areas etc.
3) Small and medium enterprises (SME), food processing industry, site location, industrial system and clusters, green manufacturing, technology parks, automation versus labour, industrial waste management and recycling
4) Export promotion / import, market places, bazaars, enterprise zones / free zones, site location, e-commerce, protectionism

4 Competencies

- knowledge of the function of different economic sectors and how they are related to each other
- management of housing supply in cities, towns and rural locations
- management of potentials for the development of a tourism economy
- spatial identification of industrial locations and preparation of industrial development plans within the framework of national policies,
- development of policies for the commercial and trading services, especially at the regional level

5 Examinations:

Course Exams (CE): Assignments

6 Type of Examinations

- (1) Covering the entire module:
- (2) Relating to individual courses:
  - (2a) One assignment in the subject 1
  - (2b) One assignment in one of the subjects 2, 3 or 4

7 Prerequisites: None

8 Status of the Module: Mandatory

9 Module Coordinator: Ali Ibrahim

Responsible department: Spatial Planning
Module 14

Course Name: Housing Policy and Planning (M14.1)

7th semester spatial planning students

Instructors: Dr. Shahadat Hussein; shahadat.hussein@tu-dortmund.de
Dr. Nesreen Barwari; nesreen.barwari@uod.ac

Course Overview

The course addresses a range of key issues of contemporary urban housing planning. The aim of the course is to introduce housing policies and planning criteria. Additionally, the main aspects of sustainability in Housing and its importance for the urban environment will be presented. The Students will work in groups to analyze the residential area and housing projects in the city as case studies.

Learning Objectives

• Studying the housing policies and strategies
• Understanding planning Criteria of Housing Projects.
• Understanding the social, environmental and economic aspects of urban Housing
• Studying and analyzing of housing projects and its requirements.

Course Reading List and References

– Graham Towers 2005: An Introduction to Urban Housing Design: AT HOME IN THE CITY
– Mike Biddulph 2007: Introduction to residential Layout, Published by Elsevier Limited.
– Cliff Moughtin with Peter Shirley 2005: Urban Design: Green Dimensions
– Avi Friedman 2007: Sustainable Residential development: Planning and Design for Green Neighborhood
– UN-Habitat Global Housing Strategy Framework Document Housing and Slum Upgrading Branch
Module 14

Course Name: Tourism Development (M14.2)

8th semester spatial planning students

Instructors: Dr. Eng. Shireen Y. Ismael; shiren457@yahoo.com

Course Overview

Tourism is a key economic sector in many countries, region, cities and villages and the assessment of the tourism opportunities can bring vital income to places which otherwise may not have a strong or diversified economy. This course will help to understand how tourism planning fits to the spatial planning aims.

Learning Objectives

- Students will be able to appropriately understand the basic nature of tourism development by focusing on tourism planning, management and how this can fit to the spatial planning system.
- Understanding the role of tourism in the economic development, the perspectives of different countries.
- Identify different stakeholders and the potentials and challenges facing Kurdistan Regional Government in developing tourism industry.

Course Structure/Teaching and Learning Methods

Tourism development course is taught in a lecture/discussion format. Lectures occur once weekly and focus on topics that provide information necessary in the subject. It is required that each student write an essay about the role of tourism in the development mainly the economic development in a city, rural area, or a country (covering all the types of tourism) and then discuss the content in the class. Students need to participate in the field visit to the different touristic sites in the region, final written exam also is required.

Course Syllabus / Content

- Part one: Introduction to Tourism (What is Tourism, Why Tourism, tourism theories, tourism destinations and types of tourists?)
  - The role of Tourism in the development, the perspective of different countries
  - Discussing the updated statistics regarding the movement of tourists around the world and their expenditure
- Part Two: How can Tourism planning components and processes fit within the Spatial planning system?
- Part Three: What is Touristic city, and how we can integrate different types of tourism in the urban area.
  - Strategic plan for urban tourism, (Barcelona and Alexandria city as an example)
- Part Four: What is rural tourism? And the role of tourism activities in the rural development.
- Part five: Sustainable tourism development
- Part six: Current potentials and challenges for tourism development in Kurdistan, this will
  - Include field visit to some of the touristic sites in the region.
Course Reading List and References

– Ismael, (2014), Promoting Integrated Heritage Conservation And Management In Iraqi Kurdistan Region: Applicability Of Values-Based Approach; The Case Study Of Akre And Amedy City In Duhok Province, Germany


Module 14

Course Name: Industrial Development (M14.3)

7th semester spatial planning students

Instructors: Ali Ibrahim Mohammad Ameen; ali.ibrahim@uod.ac

Course Overview

For creating job opportunities and absorbing the unemployment as the main objective this course will try to cover most kinds of manufacturing industry and new technology-related development in industry to make a progress in economy. Getting knowledge about the creating jobs and developing the economy especially in countries with economy in transition is important for the spatial planners when they decide on specific industry.

The economic geography of the world has been changing greatly in the last few decades with old established industrial centers in the developed countries in decline, and new centers emerging in countries that were once thought of as poor and still developing (Olsson, O. (2012).

Learning Objectives

The main objective of this course: is to prepare the students for the next phase which is making decisions about the projects and industries in economic prospect. Through this course materials the students will be able to understand the core points of the development process via industries, and how to create more jobs for the coming youth generations in Kurdistan region of Iraq or their work areas.

- Students learn to do feasibility study on existing industries and for the future plans related industries in urban and rural areas.
- Students will be able to understand the economic background of the industries and how the industry will absorb the unemployment and trigger the development.
- To reach this target, students have to learn how to get sufficient information that could help them to plan for better industry that could help their regions.

Course Reading List and References

Main references

- Industrial Development for the 21st Century: Sustainable Development Perspectives

Magazines and review (Internet)

- https://www.wto.org/ World trade organization
Module 14

Course Name: Commercial and Trading Development (M14.4)

8th semester spatial planning students

Instructors: Ali Ibrahim Mohammad Ameen; ali.ibrahim@uod.ac

Course Overview

This course covers the concept of commerce and commercial activities, market places, export promotion, import and protectionism, enterprise location, free zones, e-commerce. It deals with the development of policies to promote trade particularly across regions, and foreign trade policies in general.

Learning Objectives

Commercial and trading development will deal with issues that have direct and non-direct impact on the trade locally and internationally (i.e. primary export (Oil), tariff, protectionism, free trade, globalization, and World Trade Organization). The course deals with enhancing capacity building in the fields above, with view of rational decision-making in policy formulation within the areas mentioned.

- Students learn to deal with the context commercial and its impact on the development.
- They have to recognize the reality of the current trade, analyze business environment and its impact on growth.
- To reach this target, students have to learn how to get sufficient information that could help them to plan for better trade and greater growth.

Course Reading List and References

Main references
- Economics of Development (Sixth Edition) by Dwight H. Perkin (Author), Steven Radelet, David L. Lindauer

Magazines and review (Internet)
- http://www.odi.org/ Shaping policy for development
- https://www.wto.org/ World trade organization
Module 15a: Urban Planning & Design

**B. Sc. Programme:**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>2 Semesters</td>
<td>4th sem.</td>
<td>7.5</td>
<td>180</td>
</tr>
</tbody>
</table>

1. **Structure of the Module**

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.1</td>
<td>Urban Design Studio I, 4th Semester</td>
<td></td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>a.2</td>
<td>Sectoral Inputs for Urban Design Studio I, 4th Sem.</td>
<td></td>
<td>1.5</td>
<td>1</td>
</tr>
</tbody>
</table>

2. **Language of instruction**

English

3. **Content of the Module**

1) Historic preservation (cities, sites), climate sensitive buildings, riverside urban development, inner city redevelopment and regeneration, neighbourhood planning and city identity.

2) Principles of urban planning are discussed in this module as a basis for the student to learn the nuts and bolts of master plan and documentation creation.

4. **Competencies**

- learning to work in small groups of 3 to 5
- competences of elaborating plans on the municipal level
- implementation of general principles for spatial planning in spatial concepts
- application of urban site analysis methods and urban design

5. **Examinations**

Course Exam (CE): Group reports and oral defence of reports and plans

6. **Type of Examinations**

- (1) Covering the entire module:
- (2) Relating to individual courses:
  - (2a) A report / plan covering M15a.1 and M15a.2

7. **Prerequisites**

Modules 1, 2, 3

8. **Status of the Module**

Mandatory

9. **Module Coordinator**

NN

**Responsible department**

Department of Spatial Planning
Module 15a and 15b

Course Name: Urban Design Studio I (M15a)

4th semester spatial planning students

Instructors:  
Dr. Nesreen Barwari; nesreen.barwari@uod.ac  
Jambally A. Mohammed; jambally.abdullah@uod.ac  
Dr. Michael Zirbel; michael-zirbel@t-online.de

Course Overview

The studio-based course will give the participants insight into design strategies and processes for urban transformation. The main focus of the course is to introduce and critically discuss urban textures and how aspects of architectural design act in the scale and context of urban planning and design. This will be done through (1) focused workshops on a chosen aspect to go in-depth into its properties and conditions, (2) theoretical lectures, seminars, reading and writing, and (3) a contextualized analysis and proposal of change of a given area.

An area will be studied as different textures related to theories - such as mass and void, landscapes and flows, or programmed and emergent use - followed by a final project for a transformation into a sustainable urban setting, in a future where this has changed from an aim to a necessity. This will be joined by a written reflection of the relation between theory, analysis, and design proposal.

Studio work builds on intense group and individual work in rapid parallel production, reflection, and alteration of analysis and proposal supported by continuous supervision, theory sessions, and presentations. Students can expect to not only work with digital tools but also other forms of representation so as to develop the understanding of and critical relations between question, media, representational form, and proposal.

The course will further serve as an introduction and overview of the basic tenets, disciplinary threads, and bodies of scholarship associated with the idea of urbanism with urban form and structure in focus but informed by other fields as geography, sociology and history. Integration of theory and design intends to enable students to adopt a critical & reflective perspective.

Learning Objectives

The aim of this studio-based course is to give an introduction to urban planning and design strategies, introducing and investigating a series of forms in which they are materialized in the built environment. The students will be trained in thinking of urban form with a series of different foci investigating on the one hand how architectural concepts behave in the urban scale, and on the other, the complexity brought into the design process when acting in urban planning and design contexts. The course will also give insight in different media of investigation and presentation, hereby training and improving the use and understanding of a set of tools used in the design process, and in the process of translation between ideas, analyses, proposals, and projects. Seen through these different textures, the course will introduce participants into the social, cultural and political implications of urban transformation as well as provide training in analyzing, describing and responding to urban spaces as a materialized texture.
Module 15b: Urban Planning & Design

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>2 Semesters</td>
<td>7th sem.</td>
<td>7.5</td>
<td>180</td>
</tr>
</tbody>
</table>

1. **Structure of the Module**

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.1</td>
<td>Urban Design Studio II, 7th Semester</td>
<td></td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>b.2</td>
<td>Sectoral Inputs for Urban Design Studio II, 7th Sem.</td>
<td></td>
<td>1.5</td>
<td>1</td>
</tr>
</tbody>
</table>

2. **Language of instruction**

3. **Content of the Module**

   1) Advanced neighbourhood level multi-nexus projects related to transport, environment, housing, displaced persons, economic redevelopment, urban redevelopment, parks and park planning, environmental management and restoration or other relevant topics
   
   2) The module focuses on challenges in planning, where students will need to use the basic skills they learned from 15a within a more complicated and multi-topic oriented project

4. **Competencies**

   - mastering of efficient group work
   - competences of elaborating plans on the neighbourhood level (Urban Design Studio II)
   - implementation of general principles for spatial planning in spatial concepts
   - application of urban site analysis methods and urban design for neighbourhood level planning

5. **Examinations**

   Course Exam (CE): Group reports and oral defence of reports and plans

6. **Type of Examinations**

   (1) Covering the entire module:
   
   (2) Relating to individual courses:
   
   (2a) A report / plan covering M15b.1 and M15b.2

7. **Prerequisites**

   Modules 1, 2, 3

8. **Status of the Module**

   Mandatory

9. **Module Coordinator**

   NN

   **Responsible department**

   Department of Spatial Planning
Module 15b

Course Name: Urban Design Studio II (M15b)

7th semester spatial planning students

Instructors: NN

Course Overview

This course is a guide on how to cover the basic principles, definitions, concepts and elements of urban planning and design with types of plans, and their role in the process of urban development. In addition to the process and approaches needed at macro and micro levels planning, the traditional and current trends in Urban Design profession, Visual studies, spatial analysis and Conceptual design, Major elements and determinants of urban Design forms and spaces. City identity and heritage.

Learning Objectives

Urban Planning & Design theories deal primarily with the design and management of city spaces. By the end of course students need to know how to:

- Plan and Design of Neighborhoods urban planning, and Design of different land uses, services, transport.
- Deal with Public space (i.e. the 'public environment', 'public realm' or 'public domain'), and the way public places are experienced and used. Public space includes the totality of spaces used freely on a day-to-day basis by the general public, such as streets, plazas, parks and public infrastructure. Some aspects of privately owned spaces, such as building facades or domestic gardens, also contribute to public space and are therefore also considered by Urban design theory.
- Solving different urban planning problems dealing with population, land use, built environment in a sustainable approach taking into consideration new aspects of planning and creating lively urban environment follows the new sustainable UN goals.

By the end of this course the students should

- learn the proper scientific way of studying different challenges in urban planning and design in environmental, social, economic dimensions.
- Submit an accepted Urban planning and design solution of a certain Urban planning challenge or challenges, including Maps, Statistics, Scenario in reports and presentation.

Course Structure/Teaching and Learning Methods

Lectures will depend on Power points, dialogues, joint and group discussions, using flipcharts and boards.

Course Reading List and References

- The image of the city, Kevin Lynch, 1961
- Design First Design Based –Planning for Communities, 2005 David Walters, Linda Luise Brown
- Planning Urban Desig standards. 2006 Emina Sendich, Wiley, New Jersey
- UN Agenda of Urban planning and Sustainable goals (internet)
Module 16: Internship

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Year</td>
<td>6-8 weeks full-time</td>
<td>Between 4th and 5th Semester</td>
<td>6</td>
<td>180</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Internship in Public or Private Sector</td>
<td></td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

2 Language of instruction
English / Other

3 Content of the Module

1) An internship in the field of spatial planning which gives students an idea of projects undertaken by spatial planners, the daily flow of work and the organizational structure of civil or private planning agencies.

2) The internship should be in the public sector (ie for a government agency or department), in the private sector (ie. a private planning office) or in a scientific research institute. Internships may not be from any departments related to the University of Duhok as the intent is to earn experience outside of the University setting.

4 Competencies

• strengthening of the competency and efficiency of students to work in the practical field of spatial planning or within a research setting.
• practice working on projects with different objectives, content and at different scales
• practice working with others in a complex setting and with project deadlines
• experience in the management of an office or department, including project proposals and procurement, project fee and project management and long-term project workload projections.
• development of a student’s experience within the broad field of spatial planning so that they can refine their own interests and perspective within the field as preparation for the writing of the B.Sc thesis.

5 Examinations: None

6 Type of Examinations

(1) Covering the entire module: A signed letter from the internship provider indicating that the minimum 6 week internship was performed.

(2) Relating to individual courses

7 Prerequisites: none

8 Status of the Module
Mandatory

9 Module Coordinator
Hossain Hameed

Responsible department
School of Planning
Module 16

Course Name: Internship in Public or Private Sector (M16)

Between 4th and 5th Semester

Instructors: NN

Course Overview

This course includes student’s internship in the field of spatial planning which gives students an idea of projects undertaken by spatial planners, the daily flow of work and the organizational structure of civil or private planning agencies. The internship should be in the public sector or a private planning office or NGOs.

The course includes internship forum; a single day conference or lecture series where spatial planning practitioners from different organizations with different specialties and project ranges are invited to present representational current and past projects. Students have the opportunity to learn about an area they are interested in or to develop an interest. Interviews for internships may also be carried out during this time.

Learning Objectives

- Strengthening of the competency and efficiency of students to work in the practical field of spatial planning.
- Practice working with others in a complex setting and with project deadlines, and project management environment.
- Developing the student’s experience within the broad field of spatial planning to refine their own interests and perspective within the field as preparation for the writing of the B.Sc thesis.
- Attendance is to be verified by Directorate and Report is to be verified by Duhok University staff

Course Structure/Teaching and Learning Methods and Duration

The course will include single day presentations and discussions arranged with guest lecturers from public or private directorates explaining projects implementation and challenges faced in the spatial planning field.

Course References

- Leaflets and booklets delivered by directorates and NGOs
- Internet websites related to public and private directorates.
## Module 17: Summer School in Germany (German Planning System)

### B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yearly</td>
<td>1 semester</td>
<td>6th Semester</td>
<td>18</td>
<td>540</td>
</tr>
</tbody>
</table>

### 1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>German Planning System</td>
<td></td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Administration System and History of Germany</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Sectoral Planning Examples and Excursions</td>
<td></td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>City and Municipality of Dortmund</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Cross-Border Planning, Case Berlin/Brandenburg</td>
<td></td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Planning in Germany in the Context of European Planning</td>
<td></td>
<td>1.5</td>
<td>1</td>
</tr>
</tbody>
</table>

### 2 Language of instruction

English

### 3 Content of the Module

1) Participation and decentralization approaches in planning system of Germany.
2) Planning levels, space, urban-rural, infrastructure, land management, regional delineation and culture in German Planning and administration system.
3) Sectoral planning in Germany - social and physical Infrastructure; history of industrial development; the role of agriculture as a sector.
4) How does a city like Dortmund get organised - the third layer of decentral organisation of Germany (Community-level organisation)
5) Cooperation between two "Länder": how does the planning organised in cooperation by two federal state members?
6) Planning System in Germany in the context of European planning approaches and frameworks.

### 4 Competencies

- understand the cultural and historical context of German Administration System
- understand the role of sectoral planning in Germany
- understand the basic elements of German Planning System
- understand the organisation at the community level
- understand the cooperation of federal state members in planning matters
- understand the European context for planning in Germany

### 5 Examinations

Module Exam (ME): Assignment

### 6 Type of Examinations

1) Covering the entire module:
   - (1a) Assignment
2) Relating to individual courses

### 7 Prerequisites

none

### 8 Status of the Module

Mandatory

### 9 Module Coordinator

Dr. Basheer Saeed, Dr. Hasan Sinemillioglu

Responsible department

School of Planning

Module Manual 101
Module 18: B. Sc. Thesis

B. Sc. Programme:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
<th>When taught</th>
<th>Credit Points</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every year</td>
<td>2 Semesters</td>
<td>8th Sem.</td>
<td>12</td>
<td>360</td>
</tr>
</tbody>
</table>

1 Structure of the Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Courses</th>
<th>Type</th>
<th>Credit Points</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B.Sc. Thesis, 8th Semester</td>
<td></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

2 Language of instruction

- English

3 Content of the Module

1) The B.Sc. Thesis is a scientific work in the field of spatial planning. The thesis could be one theoretical, empirical or conceptual development research writing. It has to be about 60 to 80 pages.

2) The students are encouraged to submit original proposals for the subject of their thesis.

4 Competencies

- students acquire the professional and methodical competences to deal with spatial planning problem independently and with the aid of scientific methods
- work is expected to be completed within a given period of time

5 Examinations

- Module Exam (ME): Thesis report and oral defence

6 Type of Examinations

<table>
<thead>
<tr>
<th>(1) Covering the entire module:</th>
<th>(2) Relating to individual courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1a) B.Sc. Thesis</td>
<td></td>
</tr>
</tbody>
</table>

7 Prerequisites:

- All the modules for the whole study except M14 and M6

8 Status of the Module

- Mandatory

9 Module Coordinator

- Dr. Basheer Saeed,
- Dr. Hasan Sinemillioglu

Responsible department

- Department of Spatial Planning
Module 18

**Course Name: B.Sc. Thesis (M18)**

8th semester spatial planning students

**Instructor:** Different supervisors based on the titles of the theses

**Course Overview**

The B.Sc. Thesis is a scientific work in the field of spatial planning. The thesis could be one theoretical, empirical or conceptual research writing. It has to be about 40 to 45 pages at least without figures and maps and pictures between 12000 to 15000 words. Appendix (i.e. enclosure) is not included. Appendix can be as long as it is necessary. The students can make proposals for the subject of their thesis. This must be approved by the department of Spatial Planning in Duhok and Dortmund.

**Learning Objectives**

With the bachelor thesis the students acquire the professional and methodical competences to deal with spatial planning problems independently with the aid of scientific methods and within a given period of time.

- The bachelor thesis is a work with focus on planning and development issues, such as sustainable resource management, global warming, urban and regional development, social and demographical change, sectoral development policies, equity and justice or other themes. Application of planning approaches such as top down versus bottom up, decentralisation and spatial development policies, community development and participation are expected.

- The thesis provides the student the opportunity to choose different planning aspects and arguments related to the topic chosen. It may include the environmental, sociological, physical or economic aspects such as sustainable planning issues, housing, industry, infrastructure, heritage, gender, etc.

**Course Syllabus/Contents**

The thesis begins on the second Semester of the fourth year, with a selected supervisor by the student. The Scientific committee in department will approve the topic. In case the scientific committee doesn't approve the topic, the student has to revise the topic or suggest a new topic and apply it to the scientific committee. The student is expected to complete the first stage of Thesis research by the end of the fall semester each year in a documented Expose which contains final research concept and clear topic, problem statement, research questions and significance and table of contents reflecting a clear research design. The thesis itself is submitted at the end of the 8th semester.

**Course Structure/Teaching and Learning Methods**

The thesis is supervised by at least one PhD holder. This supervisor can be a member of the scientific member of Duhok University or of the TU Dortmund University. It will be aspired to for thesis research to be co-supervised by two members of the cooperating universities. A second supervisor with a Master's degree could participate as the second advisor in the case that two PhD holding supervisors cannot be identified.

**Course Reading List and References**

Students are required to develop their own list of references necessary to support their BSc thesis.
Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning

BSc in Spatial Planning Semester Overview
<table>
<thead>
<tr>
<th>Module</th>
<th>First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1.1</td>
<td>Key Concepts and Approaches of Spatial Planning</td>
</tr>
<tr>
<td>M1.2</td>
<td>Evolution of Spatial Planning</td>
</tr>
<tr>
<td>M1.3</td>
<td>Academic Debate</td>
</tr>
<tr>
<td>M1.4</td>
<td>Writing for Planners</td>
</tr>
<tr>
<td>M2.1</td>
<td>Practical Planning Project I</td>
</tr>
<tr>
<td>M2.2</td>
<td>Practical Planning Project II</td>
</tr>
<tr>
<td>M2.3</td>
<td>Facilitation and Presentation Techniques</td>
</tr>
<tr>
<td>M3.1</td>
<td>Urban, Rural Sociology and Society Change</td>
</tr>
<tr>
<td>M3.2</td>
<td>Demography</td>
</tr>
<tr>
<td>M3.3</td>
<td>Empirical Field Methods</td>
</tr>
<tr>
<td>M3.4</td>
<td>Basic Skills in Statistics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4.1</td>
<td>Urban and Regional Economics</td>
</tr>
<tr>
<td>M4.2</td>
<td>Landscape Planning</td>
</tr>
<tr>
<td>M5.1</td>
<td>Introduction to GIS and Mapping</td>
</tr>
<tr>
<td>M5.2</td>
<td>Remote Sensing</td>
</tr>
<tr>
<td>M5.3</td>
<td>Planning Theories of Space and Location</td>
</tr>
<tr>
<td>M5.4</td>
<td>Theories of Land Use</td>
</tr>
<tr>
<td>M6.1</td>
<td>Introduction to GIS and Spatial Analysis</td>
</tr>
<tr>
<td>M6.2</td>
<td>Urban Design Studio I</td>
</tr>
<tr>
<td>M6.3</td>
<td>Water Provision and Sanitation</td>
</tr>
<tr>
<td>M6.4</td>
<td>Energy Supply and Distribution</td>
</tr>
<tr>
<td>M7.1</td>
<td>Social Design Studio I</td>
</tr>
<tr>
<td>M7.2</td>
<td>Qualitative and Quantitative Data Analysis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module</th>
<th>Module Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1.1</td>
<td>N/A</td>
</tr>
<tr>
<td>M1.2</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Faculty of Spatial Planning and Applied Sciences, Department of Spatial Planning
### Curriculum "Bachelor of Science (B.Sc.) in Spatial Planning"

#### Third Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th</td>
<td>M5b.2 - Renewable and Non-Renewable Energy Resources</td>
</tr>
<tr>
<td></td>
<td>M5b.3 - Sustainable Agriculture and Forestry</td>
</tr>
<tr>
<td></td>
<td>M10.1 - Advanced Planning Project Group Studio</td>
</tr>
<tr>
<td></td>
<td>M10.2 - Project Management</td>
</tr>
<tr>
<td></td>
<td>M9.1 - Integrated National and Regional Planning</td>
</tr>
<tr>
<td></td>
<td>M9.2 - Regional Master Plan Studio</td>
</tr>
<tr>
<td></td>
<td>M9.3 - Sectoral Inputs for Regional Planning Studio</td>
</tr>
<tr>
<td></td>
<td>M12.1 - Planning and Decision Making Methods</td>
</tr>
<tr>
<td></td>
<td>M12.2 - Conflict Resolution and Management</td>
</tr>
<tr>
<td>6th</td>
<td>M5b.1 - Water Resources Management</td>
</tr>
<tr>
<td></td>
<td>M10.1 - Advanced Planning Project Group Studio</td>
</tr>
<tr>
<td></td>
<td>M10.2 - Project Management</td>
</tr>
<tr>
<td></td>
<td>M17.1 - German Planning System</td>
</tr>
<tr>
<td></td>
<td>M17.2 - Administration System and History of Germany</td>
</tr>
<tr>
<td></td>
<td>M17.3 - Sectoral Planning Examples and Excursions</td>
</tr>
<tr>
<td></td>
<td>M17.4 - City and Municipality of Dortmund</td>
</tr>
<tr>
<td></td>
<td>M17.5 - Cross-Border Planning, Case of Berlin/Brandenburg</td>
</tr>
<tr>
<td></td>
<td>M17.6 - Planning in Germany in the Context of European Planning</td>
</tr>
</tbody>
</table>

**Total Credit Points:** 28.50

#### Fourth Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th</td>
<td>M6.1 - Planning and Governance</td>
</tr>
<tr>
<td></td>
<td>M6.3 - Land Tenure and Land Management</td>
</tr>
<tr>
<td></td>
<td>M6.2 - Planning Law in Iraq</td>
</tr>
<tr>
<td></td>
<td>M14.1 - Housing Policy and Planning</td>
</tr>
<tr>
<td></td>
<td>M14.3 - Industrial Development</td>
</tr>
<tr>
<td></td>
<td>M14.4 - Commercial and Trading Development (COS)</td>
</tr>
<tr>
<td></td>
<td>M14.2 - Tourism Development (COS)</td>
</tr>
<tr>
<td></td>
<td>M15b.1 - Urban Design Studio II</td>
</tr>
<tr>
<td></td>
<td>M15b.2 - Sectoral Inputs for Urban Design Studio II</td>
</tr>
<tr>
<td></td>
<td>M18.1 - B.Sc. Thesis Writing</td>
</tr>
<tr>
<td>8th</td>
<td>M7.4 - Thesis Writing and Research Design</td>
</tr>
</tbody>
</table>

**Total Credit Points:** 240

#### Summer

- M16.1 - Internship
- Total Credit Points: 6