



## Module Outline

### **Module: Architectural Physical Planning**

**Prerequisite: None**

**Credit hours: 2**

**Semester: Second semester 1394-1395**

**Lecturer: Dr. Mina Kaboudarahangi**

### **Module Synopsis**

Architectural physical planning is a process to achieve more advantages from a building or a complex in terms of functional aspects through the time and in the future. It means to have maximum profit from buildings, it's necessary to make appropriate decisions on building formation and consequences between functional spaces. This approach assists architects to suggest the best solutions in buildings' physical development to achieve client goals. In fact the process of architectural physical planning is the qualitative organization of spaces and it happens before the process of architectural design which is the quantitative creation of place. In past it wasn't a distinct boarder between physical planning, design and construction of buildings. However, these days because of improvements in construction technics and variety of building functions, the role of knowledge and architectural physical planning is more evident. Nowadays, limitations in construction fields, importance of time and finance management and variety of users' perceptions increase the importance of planning before design. Accordingly, with architectural planning, the goal and main strategies related to functional aspects, user's needs and other building issues are determined. By knowing this module, students could have better choices in space arrangements to design more practical.

### **Module Goal:**

The main goal of this module is to teach the importance, necessity, details and procedures of architectural physical planning

### **Module Teaching Objectives**

- 1- To define the terminologies of architectural physical planning
- 2- To clarify urban design and architectural design standards, specially population capitations and building densities in urban context
- 3- To understand the methods of collection and interpretation of data to do planning and make decisions according to architectural standards and urban densities
- 4- To carry on an environmental study in urban and architectural perspective

### **Learning Outcomes:**

Upon successful completion of the subject, students will be able to:

- 1- Have a systematic viewpoint in architectural physical planning

- 2- Understand land functions, building's population and their relationships with architectural planning
- 3- Recognize compatible and incompatible urban elements, the levels of incompatibilities and neighborhood criteria
- 4- Design and prepare urban building quality maps
- 5- Explain urban design rules and their impact on architectural physical mass
- 6- Understand hierarchies of urban infrastructures and determine their locations
- 7- Prepare an architectural physical plan for complexes such as residential, commercial, recreational etc....

### Modes of Delivery

This is a 2 credit hour module held over 16 weeks. Lectures, tutorials, seminars, on-line discussion and self-study are employed by lecturer.

Lecture: 1 hours/week  
 Tutorial: 1 hours/week  
 Self-Study: 4 hours/week

### Office Hours

Students are encouraged to visit the lecturer concerned for assistance during office hours. If the office hours do not meet the student's schedule, it is suggested that the student notify the instructor, and set appointment times as needed.

Email: [m-ahangi@srbiau.ac.ir](mailto:m-ahangi@srbiau.ac.ir)  
 viber & whatsapp 09212761229

### Common Graduate Capabilities

The teaching and learning approach at this course is focused on developing the Graduate Capabilities in its students; capabilities that encompass the knowledge, cognitive capabilities and soft skills of our graduates. Module Learning Outcomes and Graduate Capabilities acquired by students upon successful completion of the module.

Discipline Specific Knowledge		Graduate Capabilities Acquired Through Module Learning Outcomes
1.0	 Discipline Specific Knowledge	
1.1	Able to put theories into practice.	√
1.2	Understand ethical issues in the context of the field of studies.	√
1.3	Understand professional practice within the field of studies.	

Cognitive Capabilities		
2.0	 Lifelong Learning	
2.1	Learn independently.	
2.2	Locate, extract, synthesize and utilize information effectively.	√
2.3	Be intellectually engaged.	√
3.0	 Thinking and Problem Solving Skills	
3.1	Think critically and creatively.	√
3.2	Define and analyze problems to arrive at effective solutions.	√
Soft Skills		
4.0	 Communication Skills	
4.1	Communicate appropriately in various setting and modes.	
5.0	 Interpersonal Skills	
5.1	Understand team dynamics and mobilise the power of teams.	
5.2	Understand and assume leadership.	
6.0	 Intrapersonal Skills	
6.1	Manage one self and be self-reliant.	
6.2	Reflect on one's actions and learning.	
6.3	Embody social core values.	
7.0	 Citizenship and Global Perspectives	
7.1	Be aware and form opinions from diverse perspectives.	
7.2	Understand the value of civic responsibility and community engagement.	
8.0	 Digital Literacy	
8.1	Effective use of information and communication (ICT) and related technologies.	

## **General Rules and Regulations**

### **Late Submission Penalty**

The instructor imposes a late submission penalty for work submitted late without a valid reason e.g. a medical certificate. Any work submitted after the deadline (which may have been extended) shall have the percentage grade assigned to the work on face value reduced by 10% for the first day and 5% for each subsequent day late. A weekend counts as one (1) day. Absenteeism at intermediate or final presentation will result in zero mark for that presentation.

### **Attendance, Participation and Submission of Assessment Components**

Attendance is compulsory. Any student who arrives late after the first half-hour of class will be considered as absent. The lectures and tutorials will assist you in expanding your ideas and your assessments. A minimum of 80% attendance is required to pass the module and/or be eligible for the final examination and/or presentation.

Students will be assessed based on their performance throughout the semester. Students are expected to attend and participate actively in class. Class participation is an important component of every module.

Students must attempt all assessment components. Failure to attempt all assessment components worth 20% or more, including final exam and final presentation, will result in failing the module irrespective of the marks earned, even though the student has achieved more than 50% in the overall assessment.

### **Plagiarism**

Plagiarism, which is an attempt to present another person's work as your own by not acknowledging the source, is a serious case of misconduct which is deemed unacceptable by the University.

"Work" includes written materials such as books, journals and magazine articles or other papers and also includes films and computer programs. The two most common types of plagiarism are from published materials and other students' works.

#### **Published Materials:**

In general, whenever anything from someone else's work is used, whether it is an idea, an opinion or the results of a study or review, a standard system of referencing should be used. Examples of plagiarism may include a sentence or two, or a table or a diagram from a book or an article used without acknowledgement.

Serious cases of plagiarism can be seen in cases where the entire paper presented by the student is copied from another book, with an addition of only a sentence or two by the student.

While the former can be treated as a simple failure to cite references, the latter is likely to be viewed as cheating in an examination.

Though most assignments require the need for reference to other peoples' works, in order to avoid plagiarism, students should keep a detailed record of the sources of ideas and findings and ensure that these sources are clearly quoted in their assignment. Note that plagiarism also refers to materials obtained from the Internet too.

Other Students' Work:

Circulating relevant articles and discussing ideas before writing an assignment is a common practice. However, with the exception of group assignments, students should write their own papers. Plagiarizing the work of other students into assignments includes using identical or very similar sentences, paragraphs or sections. When two students submit papers that are very similar in tone and content, both are likely to be penalized.

### **Student Participation**

Your participation in the module is encouraged. You have the opportunity to participate in the following ways:

Your ideas and questions are welcomed, valued and encouraged.

Your input is sought to understand your perspectives, ideas and needs in planning subject revision.

You have opportunities to give feedback and issues will be addressed in response to that feedback.

Do reflect on your performance in Portfolios.

Student evaluation on your views and experiences about the module are actively sought and used as an integral part of improvement in teaching and continuous improvement.

### **Student-centered Learning (SCL)**

The module uses the Student-centered Learning (SCL) approach. Utilization of this method embodies most of the principles known to improve learning and to encourage student's participation. SCL requires students to be active, RESPONSIBLE participants in their own learning and the teachers are to facilitate the students learning process. Various teaching and learning strategies such as experiential learning, problem-based learning, site visits, group discussions, presentations, working in group and etc. will be employed to facilitate the learning process for the module.

In SCL students are to be:

- active in their own learning
- self-directed to be responsible to enhance their learning abilities
- able to cultivate skills that are useful in today's workplace
- active knowledge seekers
- active players in a teamwork

## Types of Assessment and Feedback

Each student will be graded in the form of formative and summative assessments. Formative assessments will provide information to guide the student in the design/research process. This form of assessment will be conducted through Interim Critique/Review sessions. Summative assessment will inform the student about the level of understanding and performance capabilities achieved at the end of each project with form of a final examination.

### Assessment Plan

Assessments	Type	Learning outcomes	Presentation	(Submission)	Marks
Project	Group	2,3,5,6,8	-	Week 16	8
Final exam	Individual	All	-	Week 16	12
Portfolio	Individual		-	-	Optional
Total					20

### Assessment Components

#### 1- Group Project: Architectural physical planning practice

The aim of project is to expose and introduce students to identify the characteristics and functional requirements of an architectural physical planning project. They are required to do necessary analysis and come up with solutions for the case that lecturer is offering them as a functional architectural project.

Students must critically report and analyze the space and suggest functional solutions and diagrams by using proper methodology.

The aim of the assignment is on the practical application and testing methods of architectural physical planning. Students are required to submit an A4 report in addition to the soft copy.

#### 2- Final exam

The final exam is designed to assess the ability of the students in solving design, environmental and technical issues related to buildings physical mass. The format of the assessment will be in forms of design of bubble diagrams and essay writing.

## Module Schedule

Week /Date	Topics/Readers	Lectures	Tutorial	Self directed study
		Hours	Hours	Hours
<b>Week 1</b>	General introduction: Module Outline and Project Brief	2	-	4
<b>Week 2</b>	<ul style="list-style-type: none"> <li>- definitions</li> <li>- Some examples of architectural planning</li> <li>- The need for coordination</li> <li>- Variables</li> <li>- Stages of the planning process</li> </ul>	2	-	4 Online research for project
<b>Week 3</b>	<ul style="list-style-type: none"> <li>- More about project</li> <li>- Typology</li> <li>- Evaluation of projects</li> </ul>	1	1	4
<b>Week 4</b>	<ul style="list-style-type: none"> <li>- Planning from different perspectives</li> <li>- Planning Position</li> <li>- Physical planning of urban lands</li> <li>- Physical mapping of urban lands</li> </ul>	2	-	4
<b>Week 5</b>	<ul style="list-style-type: none"> <li>- Population density and per capita</li> <li>- Classification of land use</li> <li>- Control the buildings height</li> <li>- Determine building's footprint</li> <li>- Determine building's height</li> </ul>	2	-	4
<b>Week 6</b>	<ul style="list-style-type: none"> <li>- Planning direct / reverse / Comparative</li> <li>- Goals and objectives of the project</li> </ul>	1	1	4
<b>Weeks 7</b>	<ul style="list-style-type: none"> <li>- Data collection and analyze</li> <li>- Value systems</li> <li>- Reliability of the information</li> <li>- Data interpretation</li> <li>- Information classifications</li> </ul>	1	1	

<b>Week 8</b>	- Architectural planning instruments - Site analysis	2	2	4
<b>Week 9</b>	- Recognition of planning strategies	1	1	4
<b>Week 10</b>	- Fundamental structures in architectural physical planning	1	1	4
<b>Week 11</b>	- Composition of the building - The crowd in the building - Area , per capita and its variants	1	4	4
<b>Week 12</b>	- design indicators - suitable distribution of spaces	1	1	4
<b>Week 13</b>	Tutorials on Project	-	2	4
<b>Week 14</b>	Tutorials on Project	-	2	4 (BL) ( 50% of 8 hours of E-portfolio)
<b>Week 15</b>	Tutorials on Project	-	2	2. (BL) ( 50% of 4 hours of Digital Upload )
<b>Week 16</b>	Tutorials on Project	-	2	

Note: This module outline is subject to change with short notice.

## References

### Main References

- Emmitt, S. (1999). *Architectural Management in Practice*. Routledge.
- Emmitt, S. (2014). *Design Management for Architects, 2nd Edition*. Wiley-Blackwell.
- Emmitt, S., Prins, M., & Otter, A. (2009). *Architectural Management: International Research and Practice*. Hoboken: Wiley-Blackwell.
- Nelson, C. (2006). *Managing Quality in Architecture*. Routledge.
- Hershberger, R. (2016). *Architectural Programming and Predesign Manager*. Routledge.
- Nicholson, M. P. (1992). *Architectural Management*. Taylor & Francis.