

General Information:

Name of Course: COMPLEX DESIGN 3

Course Code: EPM320AN

Semester: 9th
Number of Credits: 11

Allotment of Hours per Week: 8 Practical Lessons + 2 lectures Week

Evaluation: Signature (with grade)

Prerequisites: Completed Complex Design 2

Instructors: Erzsébet Szeréna ZOLTÁN DLA associate professor

Office: 7624 Hungary, Pécs, Boszorkány u. 2.

E-mail: zoltan.erzsebet@mik.pte.hu

János GYERGYÁK DLA associate professor Office: 7624 Hungary, Pécs, Boszorkány u. 2.

E-mail: gyergyak.janos@mik.pte.hu

Gergely SZTRANYÁK DLA associate professor Office: 7624 Hungary, Pécs, Boszorkány u. 2. E-mail: sztranyak.gergeyl@mik.pte.hu

Shaha MAITEH PhD student

Tianyu ZHAO DLA student

Introduction, Learning Outcomes:

This course aims to summarize the previously gathered architectural skills focusing on the built public environment, emphasizing functional features in a designated multifunctional urban area with the focus on new ways of living.

The design task is a masterplan of a newly developed residential neighborhood of high architectural value, regarding volume and layout, materiality, and also constructional details. Students are encouraged to suggest and add new aspects based on the analysis of social and urban situation and the newest standards. Students must carry out an urban design analysis and present a thorough research on (1.) the masterplan level, (2) the urban landscape and immediate surrounding of the residential blocks (3) on the buildings and apartments.

The project is to be presented on posters with rich architectural content and high-quality representation at a scale of 1:4000, 1:1000, 1:200 printed scale according to poster size and final paper model in a scale specified by the instructor and 1:50 sections of the façade. Students' acquired knowledge is assessed continuously over the semester.

The course focuses on exploring a design problem, benefitting from all design skills and methodologies in a specific area of interest, and engaging in design research within the architectural field.

The finished and accepted project is shown and presented in the Final Presentation for a jury to demonstrate the acquired architectural knowledge and abilities.

General Course Description and Main Content:

This subject includes an urban and architectural task where students prove their design skills before the diploma.

Upon completion of this course, the student should be able to:

- analyze the design problems and the built environment,
- work efficiently and on time according to their individual design process,
- manage complex architectural relationship like demonstrate a progression in terms of understanding relevant functional needs, programming and construction techniques at the same time

- apply and employ their individual creativity,

Faculty of Engineering and Information Technology University of Pécs, H-7624 Pécs, Boszorkány u. 2., HUNGARY

Phone: +36 72 501 500/23769

e-mail: architecture@mik.pte.hu, informatics@mik.pte.hu, civilengineering@mik.pte.hu,

http://www.engineeringstudies.net/







to communicate their project both visually and orally to a jury

This course aims to introduce students to architectural design from a complex view that also involves parts of the planning process, which are supervised by specialized departments. Furthermore, this subject intends to have students practice the design phase related to planning permission documentation. Students study existing buildings with similar functions and examples in outstanding scientific literature during the preparation period, and on this basis, they finalize their design project. During the design process, they continuously consult with chosen teachers from the Department of Design and the Department of Building Constructions.

Methodology:

The course is based on individual architectural skills with regular consultations and presentations.

Schedule:

COURSE OUTLINE COMPLEX DESIGN 3 Tue 8:00-16:30								
month	day	week	Lecture on Building Structures 8:00-9:00 A008	practice 9:00 - 11:00 A 008	lecture A019 /research A008 11:15-12:45	practice 13:15-16:30 A008		
	7	1	site visit					
September	14	2	intro discussion about the design task					
	21	3	LECTURE	consultation / individual work	RESEARCH critical analysis of at least 5 high quality, contemporary examples of sustainable urban development	consultation / individual work		
	28	4	LECTURE	consultation / individual work	LECTURE A019	consultation / individual work		
October	5	5	LECTURE	consultation / individual work	RESEARCH critical analysis of at least 5 high quality, contemporary examples of sustainable residential neighborhood development	consultation / individual work		





	12	6	LECTURE	consultation / individual work	LECTURE A019	consultation / individual work			
	19	7	LECTURE	MIDTERM PRESENTATION - SUBMISSION OF THE APARTMAN BLOCK DESIGN					
	26	8	FALL BREAK						
november	2	9	CONSULTATIO N ON BUILDING STRUCTURES	consultation / individual work	RESEARCH critical analysis of at least 5 high quality, contemporary examples of sustainable housing project	consultation / individual work			
	9	10	CONSULTATIO N ON BUILDING STRUCTURES	consultation / individual work	LECTURE A019	consultation / individual work			
	16	11	CONSULTATIO N ON BUILDING STRUCTURES	consultation / individual work	SUBMISSION OF THE RESEARCH WORK	consultation / individual work			
	23	12	CONSULTATIO N ON BUILDING STRUCTURES	consultation / individual work	LECTURE A019	consultation / individual work			
	30	13	CONSULTATIO N ON BUILDING STRUCTURES	consultation / individual work	EVALUATION OF THE RESEARCH WORK	consultation / individual work			
december	8	14	CONSULTATIO N ON BUILDING STRUCTURES	consultation / individual work	LECTURE A019	consultation / individual work			
	15	15	LAST CHECK ON BUILDING STRUCTURES FINAL REVIEW FOR SIGNATURE			URE			
	16	21	FINAL PRESENTATION FOR GRADE						



MIDTERM PRESENTATION week 7

CONCEPT DESIGN (30 POINTS) - Poster + digital Presentation 2-4

A) Urban architecture part:

- -Design of the missing transport axes to ensure the use of the area. Establish a car, bicycle, and pedestrian connection to the city center and explore possible routes to connect the southern parts of the city. It depicts the created system on maps and schematics of different scales. (M: 10000, M: 4000, M: 2000)
- -Design of a new green space and public space system for the entire action area. Connecting existing and planned parks as a single green space wall system, corridor. As the development progresses, make the site more attractive and livable. Depict the primary landscape and public space manners and atmosphere of the concept!
- Design of the master plan of a residential neighborhood, including green surface and cladding system of the areas between the buildings. Design of community, green, sports surfaces, and residential meeting points.
- -Design of the access points of the residential block. Planning pedestrian, bicycle, and car entrances. Planning a cultured, indoor storage for different means of transport. The visual appearance of vehicles should not burden the living environment.
- -Design of the residential buildings of the block. Install the blocks of flats based on the considerations described in the design task paragraph. The number of buildings, the number of levels of the buildings, the grouping of the apartments, the system of the stairwells is a planning task. A dense living environment should be created that is livable, airy, architecturally exciting, avoiding monotonous, unimaginative organization!

The posters should include the following information and drawings:

- -urban scale diagrams, maps, master plan (M.4000, M: 2000)
- -Analysis, schematic diagrams, concept diagrams.
- -Site plan of the bigger context area (M: 2000)
- -Visual plans, mass sketches paper model (M1:2000)
- -Site plan (M: 1000): Representing the layout of the entire residential block and its immediate surroundings

Ground level floor plans (Masterplan) M: 500 (Integrated or per residential building with the representation of the building environment, dwellings, and transport systems.

- -Volume and mass sections M: 500
- -Visual plans, mass sketches
- -Visual plans of the main building types.

RESEARCH PRESENTATION week 11

- 1. presentation and critical analysis of at least 5 high quality, contemporary examples of sustainable urban development
- 2. presentation and critical analysis of at least 5 high quality, contemporary examples of sustainable residential neighborhood development
- presentation and critical analysis of at least 5 high quality, contemporary examples of sustainable housing project uploaded to the TEAMS on week

FINAL PROJECT PRESENTATION. Week 16

- DESIGN PROJECT (60 POINTS) poster presentation -developing and improving the urban design parts.
- Site plan (M: 500): Representing the interior use of the entire residential block, with a top view of the buildings. (By displaying spatial planning and landscape architecture details)
- floor plans M: 200
- -Sections of buildings M.200
- -Facades M: 200
- -Visual plans, mass sketches.

Faculty of Engineering and Information Technology University of Pécs, H-7624 Pécs, Boszorkány u. 2., HUNGARY

Phone: +36 72 501 500/23769

 $e-mail: \underline{architecture@mik.pte.hu}, \underline{informatics@mik.pte.hu}, civilengineering@mik.pte.hu$

Complex Design 3 / Architect Course Code: EPM320AN Autumn 2021/2022 1..



-Visual plans of the buildings. A visual design that restores the use of materials, facade details, and the harmony and atmosphere of the

building.

Floor plans of -a-b-c type apartments M: 100 With the technical details of the design and the detailed furnishing of the apartments.

1:50 / 1:25 scale facade section

Studio Culture:

Information on PTE's studio culture policy can be found at the following location: www.pte.hu In all cases. Annex 5 of the Statutes of the University of Pécs, the Code of Studies and Examinations (CSE) of the University of Pécs shall prevail. https://english.mik.pte.hu/codes-and-regulations

Attendance:

The course can be attended by gradual and Erasmus students. Unexcused absences will adversely affect the grade, and in case of absence from more than 30% of the total number of lessons, students will fail the course. In the case of an illness or family emergency, the student must present a valid excuse, such as a doctor's note.

Evaluation + Grading

Grading will follow the course structure with the following weight: Study booklet – 10%, Project Presentation - 01, 30%, Project Presentation 02, 60%. Please note that attendance will adversely affect one's grade, both in direct grade reduction and in missing work in the development of a project. The final grade will be based on the following guidelines:

- **5. Outstanding work.** Execution of work is thoroughly complete and demonstrates a superior level of achievement overall with clear attention to detail in the production of drawings, models, and other forms of representation. The student can synthesize the course material with new concepts and ideas in a thoughtful manner and can communicate and articulate those ideas in an exemplary fashion.
- **4. High quality work.** Student work demonstrates a high level of craft, consistency, and thoroughness throughout drawing and modeling work. The student demonstrates a level of thoughtfulness in addressing concepts and ideas and participates in group discussions. Work may demonstrate excellence but less consistently than a '5' student.
- **3 Satisfactory work.** Student work addresses all of the project and assignment objectives with few minor or major problems. Graphics and models are complete and adequate, exhibiting minor problems in craft and detail.
- **2** Less than satisfactory work. Graphic and modeling work is substandard, incomplete in significant ways, and lacks craft and attention to detail.
- 1 Unsatisfactory work. Work exhibits several major and minor problems with basic conceptual premise, lacking both intention and resolution. Physical representation in drawing and models is severely lacking and is weak in clarity, craft, and completeness.

Grading Scale:

Numeric Grade:	5	4	3	2	1
Evaluation in points:	85P-100P	71P-84P	60P-70P	50P-59P	0-49

Students with Special Needs:

Students with a disability and needs to request special accommodations, please, notify the Deans Office. Proper documentation of disability will be required. All attempts to provide an equal learning environment for all will be made.





Readings and Reference Materials: Teams/Moodle

Required:

Ernst Neufert- Architects Data

Planning Architecture: Bert Bielefeld Publisher: Birkhäuser

Designing Cities: Leonhard Schenk: Birkhauser Planning landscape: Astrid Zimmerman: Birkhauser

Planning Architecture: Bert Bielefeld Publisher: Birkhäuser

Floor plan manual: Oliver Heckmann: Birkhauser

Luxury for All – Milestones in European Stepped Terrace Housing: Birkhauser

The ideal city - Exploring Urban Futures : SPACE 10 : Gestalten

More:

https://architizer.com/blog/inspiration/collections/nursing-home-collection/https://www.archdaily.com/category/retirement

https://www.dezeen.com/tag/retirement-homes/

https://www.sciencedirect.com/science/article/pii/S2095263517300079