# General Informations:

**Curriculum:** Architecture Bsc, Architecture OTM

**Name of Course: Design Studio 4.**

**Course Code:** EPE314AN

**Semester:** 4th

**Number of Credits:** 8

**Allotment of Hours per Week:** 1/0/8

**Evaluation:** mid-term grade

**Prerequisites: Completed Design studio 3, and Building Constructions 3.**

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## General Course Description

The Design Studio 4. Course is studio work in the Architecture one-tier master program, and is carried out as an individual design project during the mid - term of the programme. The course focuses on the design procedure of a new multi-storey residential building, students have to define the client, establish the program, propose and develop the design, schedule the work.

The finished and accepted project is shown and presented at the end of the semester at the front of a Lecturer’s Group for demonstrate the acquired architectural knowledge and abilities.

## Learning Outcomes

The course will focus on:

- Developing the ability to think intuitively and creatively

- Examine and exploring of meaning and rules of multi-storey residential architecture

- Bring questions and examine aspects of planning, human resources and legal concerns,

all in direct relation to the specifics of design.

- Clear architectural communication at the presence of Professor’s Group

- Carrying out within a specified time.

## Subject content

Students are required to complete design work relating to a new multi-storey residential building and an actual building site. Students are required to submit all their plans documenting their work on the design and are assessed on the following aspects: architectural design, development concept, functionality, volume forming and space composition. For the preliminary and final plans only free-hand graphics can be used. Students are also required to complete a model of the final plan in a material of their choice. The following aspects of multi-storey residential building design are covered: design work of specified types of a multi-storey residential buildings, content programmes, optimal layout of the designed content on the floor plan, external appearance of the building (deviation from single-family buildings and emphasis on the differences), volume design practice, methods of representation, and preparation of colour designs. This subject includes an architectural design project in the practical part (marked with a P) where students can practice and further develop the content of the lectures (marked with an L).

The Course includes:

* Regular (weekly) supervisions by teacher of the Architectural Institute. There are generating feedback by Main Supervisor after consultations and exams.

‘Project Documentation’ for planning permission of the designed building, as the summary of the engineering working drawings documentation (ground plans, sections, elevations 1:100), and paper models (1:200). The drawing tasks must be ssubmitted also digitally.

* Examinations in two stages (after the Schedule of the Course).

**Examination and evaluation system**

*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://international.pte.hu/sites/international.pte.hu/files/doc/TVSZ%202022\_06\_23\_ENG.pdf*](https://international.pte.hu/sites/international.pte.hu/files/doc/TVSZ%202022_06_23_ENG.pdf)

**Attendance**

By the Code of Studies and Examinations of the University of Pécs, Article 45 (2) and Annex 9. (Article 3) a student may be refused a grade or qualification in the given full-time course if the number of class absences exceeds 30% of the contact hours stipulated in the course description.

Attending is required for all classes and will impact the grade (max. 10%). Unexcused absences will adversely affect the grade, and in case of absence from more than 30% of the total number of the lesson (it is max. 4 lessons) will be grounds for failing the class. To be in class at the beginning time and stay until the scheduled end of the lesson is required, tardiness of more than 20 minutes will be counted as an absence. In the case of an illness or family emergency, the student must present a valid excuse, such as a doctor's note.

Method for monitoring attendance: attendance sheet.

**Assessment**

*Course resulting in mid-term grade*

**Mid-term assessments, performance evaluation, and their ratio in the final grade**

|  |  |  |
| --- | --- | --- |
| **Type** | **Assessment** | **Ratio in the final grade** |
| *Stage ’1’* |  |  |
| *developing concept* | *Max 20 p* | *20%* |
| *Stage ’2’* |  |  |
| *Finalised plans* | *Max 50 p* | *50%* |
| *Papermodel for final plans* | *Max 20 p* | *20%* |
| *Semester Acivity* | *Max 10 p* | *10 %* |
| *summa* | *Max 100 p* | *100%* |

The highest possible grade on the late project (after Study Period before Exam Period) is ‘2’.

**Opportunity and procedure for re-takes (PTE TVSz 47§(4))**

All task’s retake or late-submission according to detailed program.

**Requirements for the end-of-semester signature**

By giving end-of semester signatures, the instructor certifies that the student has fulfilled his/her mid-semester obligations:

-attended classes (prepared for classes according to the syllabus/timetable)

-completed the course or showing will to complete, to correct or late submit the tasks

-complied with formal/content requirements (all parts of work completed and/or corrected, made up)

If these are fulfilled, the signature will be given

-for an examination subject, the candidate may be admitted to the examination,

-will be graded for a mid-term subject with a mark.

Signatures are only required to certify the above, the assessment of the professional content is based on a grade of 5 (1,2,3,4,5). So, you may have fulfilled all your obligations and therefore receive a signature, but you will receive an unsatisfactory grade due to the lack of professional content. If this happens at the end of the semester (week 15), you may attempt to improve your grade 1 time during the exam period.

Week 15 timetable date - end of semester or end-of-semester correction or make-up

-if passed, signature and mid-semester mark! (by 12.00 noon on Friday of week 15)

Mid-semester grades are 5 grades (1,2,3,4,5)

-if not passed then NEPTUN recording (by Friday 15th week 12.00) - signature denied then->

-or if signature is given but grade is unsatisfactory NEPTUN recording (by 12.00 noon Friday of the 15th week) then ->

week 16-17 exam period correction make-up - all exams 1x

-if passed then signature and midterm grade!

Midterm grade is 5 grades (1,2,3,4,5)

-if you pass and have a signature, but the midterm grade is unsatisfactory(1) then NEPTUN recording you can retake the course in the next academic year!

-if not passed then signature denied - NEPTUN recording you may retake the course in the next academic year)

***Re-takes for the end-of-semester signature*** *(PTE TVSz 50§(2))*

All task’s retake or late-submission according to detailed program.

**Grade calculation as a percentage**

based on the aggregate performance according to the following table.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Grade: | 5 | 4 | 3 | 2 | 1 |
|  | A, jeles | B, jó | C, közepes | D, elégséges | F, elégtelen |
| Performance in % | 85%-100% | 70%-84% | 55%-69% | 40%-55% | 0-39% |

## Readings and Reference Materials

In order of relevance. (In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature))

Required:

[1.] [Bitó J, Sales O. Pandula A., Novak A. (2013). Lakóépületek tervezése *Design of residential buildings.* Budapest: BME Department of Residential Building Design](https://dtk.tankonyvtar.hu/xmlui/bitstream/handle/123456789/12105/2011-0055_housing_design.zip?sequence=4&isAllowed=y)

[2.] [Ching, F. (1996). Architecture: form, space, & order (2nd ed). New York: Van Nostrand Reinhold](http://joom.ag/mLhb)

[3.] [Francis D. K. Ching (2002) Architectural Graphics Fourth (4th) Edition. JOHN WILEY & SONS, INC.](http://joom.ag/DLhb)

[4.] [E.Neufert, P. Neufert (2011). Neufert Architects' Data](http://joom.ag/0Lhb), John Wiley & Sons Inc

Recommended:

[5.] Julia McMorrough (2014). Drawing for Architects: How to Explore Concepts, Define Elements, and Create Effective Built Design through Illustration

[6.] Pressman, A. (1993). Architecture 101: a guide to the design studio. New York: Wiley.

[7.] Unwin, S. (2003). Analysing architecture (2nd ed). New York: Routledge.

[8.] Clark, R.H. and Pause M. (1996). Precedents in architecture (2nd ed). New York: Van Nostrand Reinhold.

## Methodology

The course is based on through collaboration, participation and discussions trough lessons. This is an interaction between Students and Faculty; used the teaching methods like ‘Problem-based learning’ and ‘learning-by-doing’. The communication and work should be reflect a respect for fellow students and their desire to work with regard to noise levels, noxious fumes, etc – from each site of participants. (You will need: sketch paperroll, Rulerscale, sketchbook, pencils, pens, rulers, carton paper for modelling, notebook, internet.)

*"The students' method of problem solving models the real design process (complex problem approach = parallel study of function-structure-form), but also reflects the academic nature of university-level education (research-analysis work).**The aim is to strengthen teamwork and to exploit its advantages (more eyes see more), with particular attention to ensure that individual responsibility (to make one's own plan) does not become team responsibility. Teamwork therefore means, in the case of phases 1 to 2 of the cycle, discussing the work of the individual together.* *During the processing of the semester's planning tasks, the students have to go through the next two phases together with their consultants:*

***Stage******’****1****’*** *- analysis and conceptual phase*

*During the first half of the semester, in practical classes supported by theoretical lessons and lectures, students analyse the types of dwellings in multi-family buildings and their spatial relationship systems. In the framework of experimental design and modelling, they will construct modern living spaces, the empirical conclusion of which will be the basis for the development of a concrete design concept. By the end of the conceptual design phase, the analysis of the environmental conditions (location, spatial structure, built environment, density - built-up area analysis, etc.), the interpretation of the site characteristics (site geometry, orientation), the massing, the definition of the main directions, the main groups of functions, the layout of the floor plan should be completed. Design guidelines should also be presented, through various diagrams, drawings, and working model photographs. Documenting the creative thinking process is essential for successful communication.*

## *Stage '2' - Design phase*

## *The second half of the semester is a time for unfolding and concretizing the design. By the end of the semester, the building is crystallized, where mapping evolves in close connection with the exploration of exterior connections. The system of interior architecture and the structural system are worked out. The documentation will include drawings at M:1:100 scale, a site plan showing the installation, perspective views, and a model. Non-completion of any part of the work will be considered as a failure of the task and will therefore not be evaluated and the task will not be considered as completed. The assignment also includes the presentation of revised installation drawings and a mock-up, with a visual and clearly understandable demonstration of the development.*

## *Each phase should be discussed at team level (students + the consultants) during the class:- joint discussion - presentation and discussion of the work done at home, raising any problems that have not yet been identified, analysis of possible answers to the problems identified- independent reflection on the task- joint discussion - presenting and discussing the work done in class, raising any problems that have not yet been identified, analyzing possible answers to the problems identified*

## 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.

*Detailed requirements and schedule of the Course*

**Tasks and minimum requirements**

The semester is divided into two principle periods and attendant exercises.

The rough outline of the schedule is as follows:

Week 1-6: Draft Plan (concept)

Week 7: Midterm Jury. REVIEW 01. – CONCEPT DESIGN

* Required contain presented with printed posters:
	+ Analyses of the Chosen Function (inspirations, examples, conditions, relationships in space, needs requirements, etc.)
	+ Architectural Program (type, scale, use, form ideas, architectural ideas, materials, primer structures, functioning)
	+ Site Plan with Building’s Surrounding (1:500) (with built and natural environment)
	+ Plans of Each Different Levels (1:200) (with openings, names and measures of spaces, and main structural measures)
	+ Plot and Building’s Surrounding Paper Modell (1:1000)

Week 8-14: Project (developing, completing)

Week 9: Spring Holiday

Week 15: Final Jury. REVIEW 02. – FINAL DESIGN PROJECT

* Required contain presented with printed posters:
	+ Site Plan (1:500,1:250,1:200) a./ the building site’s boundaries, fences, gates, parking places b./ the contour lines of the slope, the main level heights c./ the connecting road system inside and outside the plot d./ the cardinal points e./ the planned buildings and objects of the plot with their names, main measures, and height dates f./ the sign and names of roads, covered and green areas, the main level heights g./ the height of ledge and ridge, the number of storeys h./ tracks of the public utilities i./ the circulation of vehicles, transportation, people with different signs j./ eventual possible extension
	+ Plans of Each Different Levels (1:200,1:100,1:50) a./ beyond the main dimensions contain the measures of each room b./ doors with opening direction, windows with subdivisions c./ marking the functional necessary installation d./ the names, measures and coverings of the rooms e./ marking the close surroundings
	+ Sections (1:200,1:100,1:50, in necessary number for understanding) a./ the typical height measures and the plan measures of the axis b./ the level heights c./ the names of the structures and materials, the order of layers d./ the main equipment with greater need of space
	+ Elevations of Each Different Side (1:200,1:100,1:50)
	+ Views (in necessary number for understanding, min. 3 about the inner and 3 about the outer spaces), in high quality design and graphic
	+ Plot and Building’s Surrounding Paper Modell (1:1000,1:500), and Final Modell of Project (1:200)
* Week 16: Re-Review of unaccepted projects (without verbal presentation)

## Schedule

|  |
| --- |
| Lecture  |
| week | **Topic** | **Compulsory reading; page number****(from … to …)** |
| 1. | Intoduction, Introduction for project.History of apartment buldings. (120 min) | Bitó J, Sales O. Pandula A., Novak A. (2013). Lakóépületek tervezése Design of residential buildings. Budapest: BME Department of Residential Building Design p.53-111. |
| 2. | Spatial connections, circulation systems, loadbearing systems in Multiunit houses (150 min) | Bitó J, Sales O. Pandula A., Novak A. (2013). Lakóépületek tervezése Design of residential buildings. Budapest: BME Department of Residential Building Design p. 112-125 |
| 3. | Parking and storage spaces (90 min) | Bitó J, Sales O. Pandula A., Novak A. (2013). Lakóépületek tervezése Design of residential buildings. Budapest: BME Department of Residential Building Design p.130-134 |
| 4. | Additional spaces (90 min) | Bitó J, Sales O. Pandula A., Novak A. (2013). Lakóépületek tervezése Design of residential buildings. Budapest: BME Department of Residential Building Design p.126-135 |
| 5. | Spatial connections / in/out (90 min) | Bitó J, Sales O. Pandula A., Novak A. (2013). Lakóépületek tervezése Design of residential buildings. Budapest: BME Department of Residential Building Design p.13-36 |
| 6. | - |  |
| 7. | MIDTERM PRESENTATION  |  |
| 8. | Interiors (90 min) | Bitó J, Sales O. Pandula A., Novak A. (2013). Lakóépületek tervezése Design of residential buildings. Budapest: BME Department of Residential Building Design p.13-36 |

|  |
| --- |
| Practice/Laboratory Practice |
| week | **Topic** | **Compulsory reading; page number****(from … to …)** | **Required tasks (assignments, tests, etc.)** | **Completion date, due date** |
| 1. | Introduction of project. Sites. |  |  |  |
| 2. | Placing multiunit house, site analysis, concept for siteplan, experimenting, developing concept | E.Neufert, P. Neufert (2011). Neufert Architects' Data, John Wiley & Sons Inc | Consultation and independant work |  |
| 3. | Placing multiunit house, site analysis, concept for siteplan, experimenting, developing concept, drfat papermodell | E.Neufert, P. Neufert (2011). Neufert Architects' Data, John Wiley & Sons Inc | Consultation and independant work |  |
| 4. | Placing multiunit house, site analysis, concept for siteplan, experimenting, developing concept, drfat papermodell | E.Neufert, P. Neufert (2011). Neufert Architects' Data, John Wiley & Sons Inc | Consultation and independant work |  |
| 5. | Placing multiunit house, site analysis, concept for siteplan, experimenting, developing concept, drfat papermodell | E.Neufert, P. Neufert (2011). Neufert Architects' Data, John Wiley & Sons Inc | Consultation and independant work |  |
| 6. |  Stage 1 ending - Placing multiunit house, site analysis, concept for siteplan, experimenting, developing concept, drfat papermodell | E.Neufert, P. Neufert (2011). Neufert Architects' Data, John Wiley & Sons Inc | Consultation and independant work |  |
| 7. | Stage 1 presentation / MIDTERM PRESENTATION |  | SUBMISSION OF THE CONCEPT PLAN AND MODEL |
| 8. | Consultation, developing plans | E.Neufert, P. Neufert (2011). Neufert Architects' Data, John Wiley & Sons Inc | Consultation and independant work |  |
| 9. |  |  |  |  |
| 10. | Consultation, developing plans | E.Neufert, P. Neufert (2011). Neufert Architects' Data, John Wiley & Sons Inc | Consultation and independant work |  |
| 11. | Consultation, developing plans | E.Neufert, P. Neufert (2011). Neufert Architects' Data, John Wiley & Sons Inc | Consultation and independant work |  |
| 12. | Consultation, developing plans | E.Neufert, P. Neufert (2011). Neufert Architects' Data, John Wiley & Sons Inc | Consultation and independant work |  |
| 13. | Consultation, developing plans | E.Neufert, P. Neufert (2011). Neufert Architects' Data, John Wiley & Sons Inc | Consultation and independant work |  |
| 14. | LAST CONSULTATION, developing final plans |  | Consultation and independant work |  |
| 15. | PRESENTATION, EXHIBITION | THIS IS THE DEADLINE OF SUBMITTING THE FINALISED PLANS AND MODELS. GIVING SIGNATURE AND MIDTERM GRADE |
| 16. | Late presentation, re-presentation | Retake for signature, retake/ late submit of plans and models |

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 dr. Rétfalvi Donát

 course director

Pécs,01.02.2022