



## Architecture of Workspaces 2 1<sup>st</sup> semester 2021/2022

### COURSE DESCRIPTION

#### THE AIM OF THE COURSE

is to summarize the acquired architectural-technical knowledge, to prepare for the complex architectural thinking before the Complex Design course, to develop independent thinking, capability of decision and cooperation in team work.

#### GENERAL FORMAL REQUIREMENTS, TECHNICAL PRESENTATION – FORMAL REQUIREMENTS

During the semester the plans should be presented in a compact way, with aesthetic architectural elaboration, essential technical information suiting the scale of each design phase. All drawings (mid-term presentation and final project) can be traditional hand- or CAD drawings or any other optional official scaled printed technique. The clear and correct technical presentation is important.

**In case of all design phases the name of the task should be marked uniformly:**

**„Architecture of Workspaces 2 1<sup>st</sup> semester 2021/2022”**

Furthermore **the actual design phase, date and the name of the author** (and the consultant) has to be marked in the heading on each plan.

The design diary helps a lot while designing and thinking. Research and examination of architectural, structural, references, examples, case studies, connected to the program, is enlightening. Furthermore it is very important collecting and getting familiar with materials fitting the architectural concept, and sorting sketches of the site and the building. There is no obligatory presentation of the design diary, therefore there is no formal requirement for it.

#### TEAMWORK

Teamwork of 2 students is obligatory the marks of the team members are the same.

#### EVALUATION

During the semester, we evaluate 3 work phases with a grade (concept design, preliminary design, final design).

Weighting of the three phases:

concept design: 10%

preliminary design: 20%

final design: 70%

The final grade is given by the sum of the three partial results:

$\text{grade} \times 0,1 + \text{grade} \times 0,2 + \text{grade} \times 0,7$

**Additional presentation is possible only if the first presentation has taken place on time and the course leader orders the additional presentation! The first presentation can not be missed, it is not an option! If anyone feels that there is a compelling reason to request an exemption from the presentation, the course leader always have to be notified in advance and the presentation should be held at the individual discretion of the course leader. Exemption must be requested in advance!**

## WORKSHOP

Right at the beginning of the semester each group makes a research on the specific location and function. The two member teams are given separate sub-themes, the processing of these themes makes easier to understand the extreme landscapes and functions. The results of the research will be presented in short student lectures.

The exact topics will be finalized by the head of the group and the consultants.

Topic suggestions:

- the history of the given country
- the contemporary history of the given country
- history of the given settlement
- climate of the given settlement
- structure of the given settlement
- historical architecture of the given country
- contemporary architecture of the given country
- description of hydroponics technology
- description of aquaponics technology
- description of aeropony technology
- description of the technical need of the vertical farm
- description of the architectural character of a vertical farm
- etc...

## CONTENT AND FORMAL REQUIREMENTS

During the semester, planning takes place under the direction and control of the consultants. The method of the concept design and preliminary design presentation are determined by the consultants, the dates of presentation and the dates of submissions are included in the schedule.

There are three phases of the design task. The 1st phase is the completion of a documentation in scale 1:200, that is the preliminary design. After successful presentation of preliminary design the remaining part of the task is for development, specification of the project with the help of consultations.

### 1<sup>st</sup> Phase, CONCEPT DESIGN

- The aim of the presentation of the concept design plan is to generate intensive feedback at the beginning of the planning process
- An important part of the concept is the detailed presentation of the built-in situation and the presentation of the architectural vision
- **Presenting the concept design it is important that the teams also look at different versions for the same function. So each team must be presented 3 different concept design variations. From the variants the most exciting one is selected together with the consultants, on which the team will work later.**
- The concept plan will be presented at the time specified in the schedule, in printed/hand-drawn form. Recommended format is A3 size.

#### a) SITE PLAN m=1:500

you can find an aid on the department's website  
(<http://www.ipar.bme.hu/letoltesek.php>)

#### b) DISPOSITIONAL FLOOR PLAN(S) m=1:500, (m=1:200) of each different floor, with the representation of:

- the main functional units
- spatial connections

- entrance positions
  - connection with the immediate surrounding
- c) VOLUME SECTION(S) m=1:500, (m=1:200), at least 1 longitudinal section. In case of a more complicated building volume at least 2 sections perpendicular to each other are necessary. This should be a section of building and terrain together.**
- d) AXONOMETRIC, PERSPECTIVE VIEW**
- sketch, model photo, or drawings representing the architectural character, can be traditional hand- or CAD drawings
- e.) SCALE MODEL m=1:500**
- the base of the model should fit the building site. The scale model should be submitted in a stable cover due to the dimensions of the model. The name of the author has to be marked on the cover / box

**The concept design should be presented with the content above with a uniform graphical concept, due to formal requirements (title, name(s) of the author(s), format etc.).**

**The concept design must be presented in printed/ hand-drawn form during the class on 4th October 2021.**

The design phase must be submitted/ presented on time due to the time schedule. Failed concept design must be replaced / repeated until the delayed submission due to the time schedule. **In case of missing the repeated submission deadline the credits of the subject cannot be obtained!**

## **2<sup>nd</sup> Phase, PRELIMINARY DESIGN**

- The purpose of presenting the preliminary design plan is to provide detailed feedback before processing the final plan, the consideration of which may help to complete the plan.
- The preliminary design will be presented at the time specified in the schedule, in printed/ hand-drawn form.

### **a) SITE PLAN m=1:500**

you can find an aid on the department's website  
(<http://www.ipar.bme.hu/letoltesek.php>)

### **b) FLOOR PLAN(S) m=1:200 of each different floor, with the representation of:**

- the names and measures of the rooms
- the structural system
- the load bearing structures and walls
- the staircases, vertical communication cores
- the doors, windows, gates, skylights
- constant fixtures and installations necessary for understanding (built-in equipment, shelves, dressing room equipment)
- the inner circulation of people and transportation
- elements around the building
- all other textual information.

Only the main structural dimensions should be indicated on the floor plans.

**c) SECTION(S) m=1:200** - at least 1 longitudinal section. In case of a more complicated building volume at least 2 sections perpendicular to each other are necessary, with an elaboration corresponding with the plans necessary for understanding, containing:

- marking the bearing structures and space separating structures
- the structural system
- the typical height measures
- all other textual information.

Only the main structural dimensions and heights should be indicated on the sections.

**d) ELEVATIONS m=1:200** - at least 4 elevations, with the representation of:

- the characteristic articulation of the elevation
- the plasticity of the elevation
- the colour of the elevation
- the position and character of the doors, windows, gates, skylights
- the names of the materials
- all other textual information.

Two of the elevations should be prepared with colour graphic in order to represent the chosen materials, colours.

**e) AXONOMETRIC, PERSPECTIVE VIEW**

- model photo, or drawings representing the architectural character, can be traditional hand-drawn or CAD drawings

**f.) SCALE MODEL m=1:200, 1:250**

- The base of the model should fit the building site. The scale model should be submitted in a stable cover due to the dimensions of the model. The name of the author has to be marked on the cover / box

**g.) LANDSCAPE ASSOCIATION**

Moodboard, collage-style, visual elements / layers overlapping, merge, but important insights stand out graphically and/or textually

- aerial photos (remote and close), with distance indicator
- panoramic images, but rather drawing, showing the terrain
- shape of rivers / road network highlighted
- the line system – what is the view? what kind? what can we conclude from this?
- typical cultivation methods in more detail, indicating the different methods
- typical geological formations, section or view of the landscape
- typical colors, color lines
- character and characteristics of typical vegetation – drawing of the typical animal species
- it can contain an old postcard, a country specific stamp, icon etc.

**The preliminary design should be presented with the content above with a uniform graphical concept, due to formal requirements (title, name(s) of the author(s), format etc.).**

**The preliminary design must be presented in printed/ hand-drawn form during the class on 8th November 2021.**

The design phase must be submitted/ presented on time due to the time schedule. Failed preliminary design must be replaced / repeated until the delayed submission due to the time schedule. **In case of missing the repeated submission deadline the credits of the subject cannot be obtained!**

### 3<sup>rd</sup> Phase, FINAL DESIGN

On the base of the preliminary design's evaluation the task must be improved, modified. The final architectural and technical solutions will be elaborated. By the final submission all previous preliminary presentations must be handed in.

- a) SITE PLAN m=1:500** with the representation of:
- the immediate surroundings of the plot, with the neighbouring buildings
  - the height relations, contour lines
  - the allocation of the designed establishments with names, number of floors, height, main dimensions and top view
  - roof heights, levels of entrances, connecting floors and terrain
  - the allocation of the subsidiary establishments
  - road network, the circulation of vehicles, transportation, people with different signs, with parking, loading ramps, the proposal for outer road connections of the plot
  - the inner roads for the personal and clients
  - marking the entrances, gates
  - the boundaries
  - the cardinal points
  - the green surfaces
  - the regulations of the site and the parameters of the building in a comparative table on the site plan.
- b) FLOOR PLAN(S) m=1:100** of each different floor, with the representation of:
- the names, measures and floor finishes of the rooms
  - the structural system
  - the load bearing structures and walls
  - beyond the main dimensions contain the measures of each room
  - the doors, windows, gates, skylights (doors with opening direction, windows with parapet heights, subdivisions)
  - constant fixtures and installations necessary for understanding (built-in equipment, shelves, dressing room equipment)
  - marking the functional necessary installation of offices, meeting rooms, kitchenettes...
  - the inner circulation of people and transportation
  - elements around the building
  - the name of used materials and colours
  - all other textual information.
- c) SECTION(S) m=1:100** with an elaboration corresponding with the plans necessary for understanding – at least 2 sections perpendicular to each other are necessary, it is recommended across the stairs, containing:
- marking the bearing structures and space separating structures with layers and the order of layers
  - the structural system
  - the typical height measures
  - the forming of walls of the rooms in the section
  - the names of the structures and materials
  - the main equipment with greater need of space
  - the connecting outer constructions, levels, sidewalks, retaining walls...
  - the name of used materials and colours
  - all other textual information.

Only the main structural dimensions and heights should be indicated on the sections.

- d) ELEVATIONS m=1:100** at least 4 sides, with the representation of:
- the characteristic articulation of the elevation
  - the plasticity of the elevation
  - the colour of the elevation
  - the position and character of the doors, windows, gates, skylights
  - all elements, constructions mounted on the elevation
  - the names of the materials
  - all other textual information.

Two of the elevations should be prepared with colour graphic in order to represent the chosen materials, colours.

**e) PERSPECTIVE VIEW**

The perspective view should be a compiled, or freehand drawing representing the appearance and surroundings of the building. It can be a hand or CAD drawing.

**f.) SCALE MODEL m=1:200, 1:250**

The base of the model should fit the building site. The scale model should be submitted in a stable cover due to the dimensions of the model. The name of the author has to be marked on the cover / box.

**g./ DIGITAL FORM**

The final design must be submitted in PDF form. Hand drawings should be digitalized as well! The files should be indicated with the year, the name of the student(s), course and design program.

eg.: ENG\_John Small\_2021\_AOW2\_Laboratory.pdf

The final project must be submitted in digital form, bound pdf file, uploaded to Moodle system folder.

**Deadline for digital submission: Friday, 10th December 2021 12:00 o'clock**

**Maximum file size 25 Mb!**

**h./ POSTER**

Beside the detailed documentation a compressed sheet of A1 size containing all main elements of the project must be submitted as well. The poster must be submitted in printed form. Submission is fulfilled with Moodle upload, presentation is highly recommended, but not compulsory!

**The final design should be presented with the above content with a uniform graphical concept, due to formal requirements (title, format etc.). The content and elaboration of the final project must fit the 1:100 scale. The final project must be submitted in digital form. The poster must be submitted in printed form A1 size.**

**The project must be submitted in digital form, bound pdf file, uploaded to Moodle system.**

**Deadline for the final submission: Friday, 10th December 2021 12:00 o'clock.**

**In case there is distance learning system by the time of submission, the presentation is online in MS Teams.**

**Name of the file: group\_name of authors\_2021\_AOW2\_function**

**Maximum file size: 25 MB**

**Please, consider that only, exclusively submissions uploaded as a bound pdf file to Moodle system will be accepted as fulfilment! No downloading from drive, no separate files!**

30<sup>th</sup> August 2021.

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