

CHAIR OF HOUSING ENVIRONMENT
CHAIR OF SPATIAL PLANNING, RURAL AND URBAN DESIGN
FACULTY OF ARCHITECTURE, CRACOW UNIVERSITY OF TECHNOLOGY

MAJOR ARCHITECTURE
3RD SEMESTER – 2ND YEAR
BACHELOR IN ENGLISH

ARCHITECTURAL AND URBAN DESIGN OF SINGLE FAMILY HOUSING

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INTERIOR DESIGN

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**RURAL DESIGN, SPECIALIST DESIGN - REVITALIZATION OF RURAL
AREAS**

COURSE LEADERS

dr hab. inż. arch. Patrycja Haupt, prof. PK

VISITING PROFESSOR

Dr Elena Douvlou

DipArch, MAArch, PhD, PgCertHE, FHEA, ARB

GROUP LEADERS

dr inż. arch. Małgorzata Petelenz

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WINTER SEMESTER

2022/2023

DESIGN STUDIO:

MONDAY

9:00-12:30 ARCH.URB. DESIGN, INTERIOR DESIGN, BUILDING STRUCTURE

WEDNESDAY

**9:00-12:00 ARCH.URB. DESIGN, INTERIOR DESIGN,
12:00-12:45 THEORY OF ARCH.URB DESIGN**

OBJECTIVE OF THE COURSE ARCHITECTURAL AND URBAN DESIGN OF SINGLE-FAMILY BUILDINGS

The aim of the course is to develop students' skills in the following areas:

- single-family housing design
- knowledge of the principles of architectural and urban composition in the design of residential buildings
- knowledge of technical and communication infrastructure
- analysis of the architectural and urban context and user needs
- creating an architectural and urban concept through a creative interpretation of the context
- the ability to present the form of a project in accordance with its content and meaning,
- development of an architectural and urban design by improving the professional skills of an architect, and especially strengthening the skills of shaping proper relations between the buildings - the rural landscape and the natural environment,
- respecting local cultural, natural and landscape values, in accordance with the principles of sustainable development.

OBJECTIVE OF THE COURSE INTERIOR DESIGN

The aim of the course is to develop students' skills in the following areas:

- interior design
- rules for the composition of the architectural interior
- using finishing materials and interior design elements
- analysis of the individual needs of the interior user
- creating a concept of interior architecture by introducing a desired mood
- the ability to present the form of a project in accordance with its content and meaning,
- developing an interior design project by improving the professional skills of an architect, and especially strengthening the skills of shaping the right relations between interior and the surroundings

CREDIT CONDITIONS

Participation in classes understood by:

- independent preparation for classes, participation in corrections, listening to colleagues' corrections and critiques, maximum 2 unexcused absences,
- participation in reviews understood as: submission of the work for evaluation, presentation of the work in the forum of the group, listening to the presentation of the work, participation in the discussion.

FILE FORMAT DURING REVIEWS AND RELEASE

Composed boards in uniform B2 format (vertical or horizontal, file resolution 200 dpi = 3937x5567px saved in a PDF file) with a title board containing information: student's name and surname, project name, subject, group (here initials of the lecturer), degree of study, semester, academic year, teaching the subject. We hand over the boards using the Teams application. In addition to large boards, you should prepare boards reduced to the size of 2004px x 1417px and saved as __. Jpg.

INTEGRATION

The project will be implemented as integrated between the subjects:

- PROJEKT 03 A – **PROJEKTOWANIE ARCH.-URB. I - ARCHITECTURAL & URBAN DESIGN I**
- PROJEKT 03 B – **PROJEKTOWANIE WNĘTRZ - INTERIOR DESIGN**
- PROJEKT 04 - **PROJEKTOWANIE RURALISTYCZNE I PROJEKTOWANIE SPECJALISTYCZNE - REWITALIZACJA OBSZARÓW WIEJSKICH / RURAL DESIGN, SPECIALIST DESIGN – REVIATLIZATION OF RURAL AREAS. [ZINTEGR. PROJEKT 03]**
- **PROJEKTOWANIE ARCHITEKTONICZNO-BUDOWLANE – MODUŁ: BUDOWNICTWO OGÓLNE – I [ZINTEGR. PROJEKT 03] / ARCH. & URBAN DESIGN, MODULE: GENERAL BUILDING CONSTRUCTION I**
- **PROJEKTOWANIE ARCHITEKTONICZNO-BUDOWLANE – MODUŁ: KONSTRUKCJE BUDOWLANE [ZINTEGR. PROJEKT 03] / ARCH. & URBAN DESIGN, MODULE: BUILDING STRUCTURE I**
- **TECHNIKI KOMPUTEROWE BIM W PROJEKTOWANIU (3) COMPUTER TECHNIQS, BIM IN DESIGN**
- **TECHNIKI WARSZTATOWE ZINTEGROWANE (RYSUNEK) ART. WORKSHOP TECHNIQUES: FREEHAND DRAWING**

Requirements for integrated subjects taught by other teams will be given in other classes. The subject of the assessment within the subjects DESIGN ARCH.-URB. I, INTERIOR DESIGN are included in this document.

COURSE DESCRIPTION SEMESTER 03

The topic of the design exercise will be:
House in the rural landscape

Both architecture and nature are equal elements of the landscape. It is particularly visible in the rural landscape, the charm of which lies in the frames of a harmonious one, where the terrain processed by man for generations has been permanently connected with architecture. This relationship seems to be the essence of designing in a rural environment - a combination of a building with its surroundings, an interior with an open space, a transitional one - somewhere between what is the result of human activity and nature.

LOCATION

The plots are located in Krakow's "belt" villages : Piekary, Giebułtów and Tomaszowice. One of the plots should be chosen as the one to work with. As part of this subject, a pre-project analysis will be carried out in the class od Rural Design, which will be the starting point for the project. The studies of the spatial and cultural context of the selected location will determine the character of the development, intensity, spatial dimensions, the arrangement of the plot and its connection with the garden.

ARCH.-URB DESIGN

The subject of the task is the design of a detached house in a rural landscape. It is not allowed to adapt existing buildings. It is not allowed to locate the building on the plot boundary. The area of the house should not exceed 400 m².

A home is more than a building. "I am the essence of my home. Not architecture." The form that hides the life of the inhabitants, which is their most intimate secret, on the other hand, however, is a manifestation of their individuality. The house is at the same time a synonym of security, associated with a place where tradition is cultivated, and the need to demonstrate one's own views and aesthetic beliefs.

The ambiguity present in the understanding of the meaning of the concept of the house, occurring on many levels, allows for a diverse, free interpretation of the topic, where the guiding idea is the implementation of your own vision of space corresponding to the needs of residents combined with the environment - a vision

consisting of an image resulting from the inseparable unity created by the body of the building, development of the surroundings and interior composition.

When working on the project, attention should be paid in particular to contemporary connections in the house-surroundings relations - compositional relations in shaping the body of the building, functional connections between the spaces inside the residential unit, between the interior and the surroundings (with the entrance zone and the garden), visual connections between the interior and the garden. surroundings (frames, openings, perspective closures), intimacy zones - the space of integration of the household members - guests, the living space of the household members, private zones (with the possibility of isolation).

Dimensions

Plot size depends on location choice.

Architectural and urban composition

The composition of the house and its surroundings should be characterized by:

- originality of the concept,
- the coherence of the building design with the surroundings (garden, neighbouring buildings, landscape),
- using the values of the environment (topography, flora, water elements, the cultural context of the place),
- harmonious insertion into the context (on the basis of the intended effect - similarity or contrast)
- careful shaping of the building's body and composing its facade in line with the original idea of creating a rural landscape.

Functional layout of the house

The house should be intended for the complex owners, whose individual needs should be met by the functional and spatial program of the whole complex and garden (it should be prepared in writing). The program should specify:

- number of inhabitants and their needs
- the lifestyle of the family for whom the building will be intended,
- way of getting home (parking spaces for vehicles),
- parking spaces for visitors
- the purpose of its individual zones (recreation, work, preparation of meals, hobbies)
- use of the area around the building (as above)
- adaptation possibilities (changes that will be necessary to introduce in the building layout for adaptation to the needs of users for the next 10 years)

Home commercial services are not allowed.

PROPOSED FUNCTIONAL SCHEME OF THE HOUSE

1. MAIN LIVING AREA
 - entrance zone (hallway + staircase)
 - kitchen
 - dining room
 - living room / living space
 - restroom
2. SPECIAL SUPPLEMENTAL FUNCTION / guest suite
according to the chosen functional programme
3. Private zone INDIVIDUAL USE AREA
 - parents bedroom + bathroom + wardrobe
 - 2 or 3 children rooms
 - At least 1 bathroom with toilet

4. Obligatory additional rooms
 - Technical equipment room (p.ex. boiler, hvac infrastructure)
 - Storage (at least 1 room)
 - Laundry room
5. Garage (min. 2 cars and 2 bicycles) + alternatively workshop
6. Garden
 - Recreational area
 - Small scale production area
 - Water features
 - Other activity ideas

If some other rooms / spaces are needed, can be added freely.

Recreational garden

The garden is to be an integral part of the house and to be properly connected to it (economic and representative and recreational connections). The composition of the garden should be consistent in expression with the building. The garden can be designed as integrated with the building, internal, external, etc.

Technical solutions

A clear structural layout of the house should be proposed, the sources of utilities should be specified from the existing networks or the building should be designed as self-sufficient (also in terms of water management). The house should meet the rules provided for installations for 2021 (i.e. appropriate parameters of partitions, heat sources and the use of renewable sources)

INTERIOR DESIGN

The subject of the task is the design of the interior of a detached house in a rural landscape, with particular emphasis on the functional connections between the spaces inside the residential unit, between the interior and the surroundings (with the entrance zone and the garden), as well as visual connections between the interior and the surroundings (frames, openings, perspective closures). The chosen interior has to address one of the problems mentioned below:

- aging in place,
- inclusion for people with disabilities,
- connect cultures,
- support child development

by spatial solutions, work with texture and colour, enabling contact with nature, choice of materials, the use of day and artificial light.

Interior selection

The aim of the exercise is to design the interior of the part of the designed house, i.e.:

- the family room with the dining room and kitchen*,
- playroom or wintergarden with adjacent kitchen or bathroom,
- bedroom unit (bedroom, study, living + bathroom).

Architectural composition of the interior

The composition of the architectural interior should be characterized by:

- originality of the concept,
- taking into account the connection of the interior with the surroundings - the garden, neighbouring buildings, landscape),
- correct use of stylistic means used in the interior - focal points, element composition against the background,
- well-thought-out colours based on the colour schemes used
- proper interior lighting, but also compositional effects resulting from the use of light as one of the building blocks of the interior in terms of daylight and artificial light

Mood

The student should demonstrate the ability to create the mood of the interior and write it down in the form of a moodboard. This word may be constant or changeable, but always consistent with the intention of the designer and the needs resulting from the use of the room / group of rooms.

Equipment

Finishing materials, interior fittings, lighting fixtures should be selected from the elements available on the market. Architectural glass from AGC, Weber wall finishes and Fagerhult lighting are recommended.

Technical solutions

Propose and describe the surface finish, assembly of fixed elements, suggest the location of lighting points and plug-in sockets or other power connections, suggest the location of other connections to the media.

INTEGRATED DESIGN - GRADING

ARCH.&URB. DESIGN

Project will be the subject for evaluation under condition of complete submission of the following drawings with the project description:

- ideological board - showing the idea of the design as the poster or collage,
- a draft physical model showing the building's shape and its composition and its relation to the terrain in a scale 1: 200, shown in the photos included in the description,
- land development plan in the selected location - scale 1: 500, land development plan according to the regulation (building service in the media). (outline)
- land development plan in a selected location - scale 1: 200 (roofs)
- house and its surrounding architectural-urban design, scale 1:50 including all floors plans, characteristic sections, facades - scale 1:50,
- perspective sketches and / or visualizations of the body and interior of the building,
- a hand drawing made in a permanent technique showing the idea of the project, size 70x50cm,
- technical detail - characteristic external wall cross-section (from foundations to the roof) - scale 1:20.

Grades will be granted for:

- original concept,
- correctness of compositional, functional and technical solutions,
- presentation quality.

INTERIOR DESIGN

Project will be the subject for evaluation under condition of complete submission of the following drawings with the project description:

- moodboard - introductory board presenting the interior mood, presenting materials, colors, lighting effects
- selected rooms set design - 1:25 - detailed arrangement with the floors layout, furniture, lighting point arrangement, switches (lights, blinds, etc.),
- reflected ceiling plan - 1:25 - substructure layout, lighting point arrangement,
- walls views - 1:25 - showing finishing materials of the walls in a projection view and flooring/ceiling layers in section
- building and its interior perspective sketches and / or isometric view or visualizations (showing 4-5 interior planes at the same time).

Grades will be granted for:

- original concept,
- correctness of compositional, functional and technical solutions,
- presentation quality.

Reviews:

For each review, the boards should be delivered on time, on time, via the Teams application. All materials, including sketches, are to be prepared on B2 size boards (they can be glued and photographed).

Sketchbook:

During all stages, the student is obliged to collect sketches, A3-format printouts documenting the course work, and to keep the boards from the reviews. The collected materials will constitute a sketchbook necessary for the final evaluation of the project.

Final completion of the project

Composed boards in B2 size (vertical or horizontal, file resolution 200 dpi = 3937x5567px, saved in a pdf file) with a title board containing the information: student's name and surname, project name, course name, group (teacher's initials), degree of study, semester , academic year, course leader. The boards have to be submitted via the Teams application. In addition to large boards, student should prepare boards reduced to the size of 2004px x 1417px and saved as __. jpg. In addition – as the requirement for the final submission the boards have to be printed out.

SEMESTER 03

October - work on the preliminary concept on the draft model, concept / idea presentation - 1st review

Requirements:

- general analysis,
- site / plot analysis,
- project assumptions (in particular - the functional program)
- plot development concept in a selected location - scale 1: 500 (roofs),
- development concept in a selected location - scale 1: 200 (roofs),
- draft of physical model showing the compositional relations of the building body and its relation to the terrain in an appropriate scale,
- building plan sketches and perspective sketches of the building and of the most important spaces interiors.

Effect: Acceptance or change of concept.

SCHEDULE

05.10.2022 W Beginning of classes

Beginning of classes, presentation of the sites and project topics, initial assumptions, presentation of project evaluation criteria.

10.10.2022 M Site visit

outdoor studio - visit of the chosen site, taking pictures, making sketches, preparation for site and context analysis

12.10.2022 W Context analysis - first results presentation

Terrain analyzes (functional, circulation, compositional connections, physiognomy with green and blue infrastructure) made on project maps with a description and photographic material. Usage scenarios - family types, 2D home functional diagram, zone size overview, Concept sketch stage, home and garden functional zones

17.10.2022 M Case and context study

Case study of min. 3 pieces on A4, a description containing the names of designers, location, size, year of execution and a text description.
Final choice of the design plot.
The stage of concept sketches, functional zones of the house and garden.

19.10.2022 W Work on the project

Form - working with a model.

24.10.2022 W Work on the project

Form - working with a model. Land development plan 1: 200 (or 1: 250) plans, sections, perspectives

26.10.2022 M Work on the project

Land development plan 1: 200 (or 1: 250) plans, sections, perspectives

31.10.2022 - 02.11.2022 - All Saints' Day break

26.10.2022 W Work on the project

Land development plan 1: 200 (or 1: 250) plans, sections, perspectives.

07.11.2022 M Review I - submission (concept - model, projection, development, prospects - effect acceptance or rejection of the concept)

integration with Structure construction commencement

09.11.2022 W Review based corrections

Working on the model - final correction, land development design and plans corrections.

14.11.2022 M Work on the project

Structure, plans, sections, facades (1: 100), land development plan 1: 200 (1: 250)

integration with Interior design commencement

16.11.2022 W Work on the project

Structure, plans, sections, facades (1: 100), land development plan 1: 200 (1: 250) Interior design - interior selection

21.11.2022 M Work on the project

Structure, plans, sections, facades (1: 100), land development plan 1: 200 (1: 250) Interior design – functional design

23.11.2022 W Work on the project

Sections with building physics information, floor plans, sections, facades (1: 100), land development plan 1: 200 (1: 250) Interior design – moodboard

28.11.2022 M Work on the project

Installations, floor plans, sections, facades (1: 100), land development plan 1: 200 (1: 250), boards layout (1: 100), ideological board, perspectives Interior design – moodboard

30.11.2022 W Work on the project

Installations, floor plans, sections, facades (1: 100), land development plan 1: 200 (1: 250), boards layout (1: 100), ideological board, perspectives Interior design – concept

5.12.2022 M Review 2 – review submission

7.12.2022 W Review 2 – review overview

integration with General construction commencement

12.12.2022 M Work on the project

2nd review based corrections
Interior design - interior design, concept (1:50)

Adaptation of the building architectural drawings (1:50), technical plan for the land development plan with connection to the infrastructure (1: 500)
Interior design – finishing material concept (1:25)

14.12.2022 W Work on the project

Interior design - interior selection, concept (1:50)

Adaptation of the building architectural drawings (1:50), technical plan for the land development plan with connection to the infrastructure (1: 500)
Interior design – finishing concept (1:25)

19.12.2022 M Work on the project

Work on the building architectural drawings (1:25), interior design drawings - materials

21.12.2022 W Work on the project

Work on the building architectural drawings (1:25), interior design drawings materials

23.12.2022 -02.01.2023 Christmas break

04.01.2023 W Work on the project

interior design drawings, interior design detail (1:25)

09.01. 2023 M Work on the project

interior design drawings, interior design detail (1:25)

11.01.2023 W Review 3 - in the studio (A3 printouts)

16.01. 2023 M Work on the project

Floor plans, sections, facades (1:50), land development design 1: 200 (1: 250), interior architecture, perspectives, essay topics, board composition

18.01. 2023 W Works on the project, final corrections

Floor plans, sections, elevations (1:50), land development plan 1: 200 (1: 250), technical board, interior design, perspectives, work on composed boards

23.01.2023 M Project submission

Final evaluation

25.01.2023 W Semester summary and projects defense