COURSE DESCRIPTION CARD - SYLLABUS

Course name

Architectural Design of Residential Buildings_2

Course

Field of study	Year/Semester
Architecture	III / 5
Area of study (specialization)	Profile of study
	general academic
Level of study	Course offered in
First-cycle studies	English
Form of study	Requirements
full-time	

Number of hours

Lecture	Laboratory classes	Other (e.g. online)
30		
Tutorials	Projects/seminars	

Number of credit points

1

Lecturers

Responsible for the course/lecturer:

dr hab. inż. arch. Mieczysław KOZACZKO

Wydział Architektury

ul. Jacka Rychlewskiego 2, 61-131 Poznań

tel. 61 665 33 01

Responsible for the course/lecturer:

dr inż. arch. Adam SINIECKI

Prerequisites

The student should have basic knowledge of the basics of architectural design, residential building design (Architectural Design of Residential Buildings_1), service facilities design, theory of composition in architectural design, basic technologies and materials used in construction (civil engineering and materials).

Course objective

- knowledge of issues, contemporary tendencies and trends in architectural designing of housing,
- improving the ability toidentify the formal and legal location conditions, interpretation of project higher row (so-called “excerpt and map extract” or administrative decisionconcerning terms of construction and land management),
- improving the ability to identifypotentialof localization: analysis of different connections, the values of existing and surroundings conditionssuch as: cultural context, existing functional problems and social

and economic aspects
- improving the ability to using the tools and techniques of quantitative and qualitative analyses in design practice, improving the ability to obtaining the functional and metric parameters to designing the architectural facility in specific location,
- improving the ability to constructthe usable program of facility withcomplex function, improving the ability to functional integration of facility and environment,
- improving the ability to methodical and creative thinking in designing process of architectural facility with residential function, the immediate environment devices and the parcel territory development,
- improving the ability to processing and use the geometry principles and technical methods to forming the complex composition and masses tectonics, usingthis principles forfusionof functions, form and construction and embed thecomposition in specific building technology,
- improving the ability tosimulation and multi-variant designing the architectural conception, improving the ability toparametric designing,
- knowledge of modern method of searching the innovative architectural solutions,
- obtaining the ability tocreative look at form, function and building construction in the spatial and cultural context.

Course-related learning outcomes

Knowledge

-architectural design for the implementation of simple tasks, in particular: simple facilities taking into account the basic needs of users, single- and multi-family housing, service facilities in residential complexes, public facilities in an open landscape or in an urban environment;

-principles of universal design, including the idea of designing spaces and buildings accessible to all users, in particular for people with disabilities, in architecture, urban planning and spatial planning, and ergonomic principles, including ergonomic parameters necessary to ensure full functionality of the designed space and facilities for all users, especially for people with disabilities.

Skills

- make a critical analysis of the conditions, including the valorization of the land development and building conditions;

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Social competences

-taking responsibility for shaping the natural environment and cultural landscape, including the preservation of the heritage of the region, country and Europe.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

A series of lectures of “Architectural Design of Residential Buildings_2” ends with the exam. The basis for participation in exam is credit of classes within the learning module. The condition of credit is to obtain a positive assessment of the final exam.

Programme content

Course of “Architectural Design of Residential Buildings_2” covers a series of lectures:

Lecture no. 1: Introduction - The lecture introducing to issues related to design of housing, issues of residential environment and specifics of conditions.

Lecture no. 2: The role of analyzes in the multi-family residential bulding design process. - Overview of the pre-design study (basic analyzes related to the design process of a multi-family house). How do the conclusions of the analyzes - design guidelines affect the project?

Lecture no. 3: Types of Multi-Family Houses. Overview of types of multi-family buildings - Features, advantages and disadvantages of individual functional and spatial solutions.

Lecture no. 4: Functions of apartment – and technical specifications. The lecture develops and details the issues related to basic functions, which should be fulfilled by apartment, house in the light of knowledge about forming the functions, ergonomics, social relations etc. and in the context of current building legislation and technical specifications, which should be fulfilled the buildings and their location.

Lecture no. 5: Technical installations and material solutions - Influence of the applied installations on the functioning and exploitation of the house.

Lecture no. 6: The residential environment - During the lecture are presented issues consisting on concept of “residential environment” including social, spatial, functional and infrastructural components in apartment, apartment building and its environment, as well as in the urban planning context.

Lecture no. 7: Hybrid Houses - Overview of multi-functional buildings. Genesis and contemporary examples.

Lecture no. 8: Adaptations and reconstructions - During the lecture are presented the adaptations of facilities with primal function different than residential (industrial, military function) to housing functions (e.g. lofts) and reconstructions of existing apartment and adaptation their functional layout to current housing needs.

Lecture no. 9: Security on the estate - discussion of solutions improving the safety of residents.

Lecture no. 10: Polish Modernism on the example of Polish housing estates.

Lecture no. 11: How do others do it? Examples of interesting residential architecture in the world.

Lecture no. 12: How do we do it? Examples of interesting residential architecture in Poland.

Lecture no. 13: The architecture of residential environment designing with support of public funds - During lecture are presented the issues of experiences related to designing the residential environment created with support of public funds.

Lecture no. 14: Social housing - Criteria and features of distinguish in the context of sustainable development idea

Lecture no. 15: The principles of designing housing architecture - Summary and evaluation. During the lecture will be summed the series of lectures and will be carried out the evaluation of assimilation process of information from lectures, including the assessment of value of absorption level of issues presented in the scope of theory and principles of designing the housing architecture.

Teaching methods

Course of “Theory And Principles Designing Housing Architecture (1)” covers a series of lectures. During the lectures, discussions with students are also conducted.

Bibliography

Basic

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Breakdown of average student's workload

	Hours	ECTS
Total workload	75	1,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) [1]	45	

[1] delete or add other activities as appropriate