



COURSE DESCRIPTION CARD - SYLLABUS

Course name

FUNDAMENTALS OF ARCHITECTURAL DESIGN 2

Course

Field of study

Architecture

Area of study (specialization)

-

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

I/2

Profile of study

general academic

Course offered in

English

Requirements

elective

Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

45

Number of credit points

5

Lecturers

Responsible for the course/lecturer:

dr hab. inż. arch. Ewa Pruszeicz-Sipińska, prof.

PP

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Wydział Architektury

ul. Jacka Rychlewskiego 2, 61-131 Poznań

Responsible for the course/lecturer:

dr hab. inż. arch. Maciej Janowski

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Wydział Architektury

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Prerequisites

- the student has an orderly, theoretically founded general knowledge covering key issues in the field of shaping the architectural and urban composition,
- the student has a basic knowledge of development trends in the field of shaping the architectural and urban form,
- the student knows the basic methods used in solving design tasks in the field of shaping the architectural and urban composition,
- the student has the basic knowledge necessary to understand the social conditions of activities related to the proper shaping of space.



- the student is able to obtain information from literature, databases and other properly selected sources, also in English or another foreign language recognized as the language of international communication in the field of study being studied; is able to integrate the obtained information, interpret it, as well as draw conclusions and formulate and justify opinions,
- the student is able to prepare a well-documented study on issues related to the main trends and directions of architecture and urban planning in Polish (and a foreign language), considered as basic for the fields of science and scientific disciplines,
- the student has the ability to self-study,
- the student is able to make a critical general analysis and assess the importance of design solutions in the field of architectural and urban composition,
- the student is able to use information and communication techniques including artistic means appropriate to the implementation of tasks typical for shaping an architectural composition.
- the student understands the need for lifelong learning, is able to inspire and organize the learning process of other people,
- the student is aware of the importance and understands the non-technical aspects and effects of architectural activities, including its impact on the environment and on the spatial context, and the associated responsibility for decisions related to the correct shaping of space
- the student correctly identifies the dilemmas related to the profession of an architect and town planner,
- the student is aware of the social role of a technical university graduate, and especially understands the need to formulate and convey to the society, in particular through the mass media, information and opinions on technological achievements and other aspects of engineering activities; makes efforts to provide such information and opinions in a commonly understandable manner,
- the student is able to interact and work in a group, assuming various functions in it.

Course objective

- presenting students with the design process, taking into account the basic tools of the architect's work and basic issues related to shaping the architectural and urban form,
- presenting students with psychophysical relations between man and architecture, and design principles in line with ergonomics,
- presenting students with the basic principles of architectural composition,
- familiarizing students with the development of various, often contradictory, directions and tendencies of contemporary architecture and urban planning, taking into account its origins, sources of inspiration, program assumptions and directions of development,



- presentation of the continuity and evolutionary nature of changes in architecture,
- familiarizing students with the changes in architecture resulting from the development of culture and societies (transition from an industrial society to an information society) that took place in the 20th century and are still ongoing today.

Course-related learning outcomes

Knowledge

A.W1. 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;

A.W4. 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

A.U1. design an architectural object by creating and transforming space so as to give it new value - in accordance with a given program that takes into account the requirements and needs of all users;

A.U4. make a critical analysis of the conditions, including the valorization of the land development and building conditions;

A.U5. think and act creatively, using the workshop skills necessary to maintain and expand the ability to implement artistic concepts in architectural and urban design;

A.U6. integrate information obtained from various sources, formulate their interpretation and critical analysis;

A.U7. communicate using various techniques and tools in a professional environment appropriate for architectural and urban design;

A.U8. prepare architectural and construction documentation in appropriate scales in relation to the conceptual architectural design;

A.U9. implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.

Social competences

A.S1. independent thinking to solve simple design problems;

A.S2. 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:



Exercises: An important criterion for project evaluation will be the approach to the following issues, including:

- knowledge of the proportions of the human body and elements of ergonomics,
- the ability to perceive and analyze the human figure in the context of the environment, everyday objects, and architectural context,
- shaping an abstract architectural composition based on the principles resulting from theoretical studies,
- shaping an abstract architectural composition evoking specific planned reactions, emotions, associations and moods,
- mapping the spatial composition in the form of examples (projections, sections, perspective views, axonometries, etc.), axonometry, sketches and perspectives,
- mapping the spatial composition in the form of mock-ups,
analysis of the architectural and urban context,
- the use of basic tools and materials helpful in the presentation of the achieved solutions in the field of architectural composition,
- presentation of design solutions in the form of composed charts,
- presentation of design solutions with hand-made text,
- presentation of design solutions made in an aesthetic and legible way.

Formative assessment

- partial reviews, including individual project tasks, checking the level of advancement of the student's work, presented in the forum of the group, joint discussion,

Assessment scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0

Summative assessment:

- final review, including the last project task, which is a summary of the knowledge and skills acquired during the implementation of previous projects, presentation in the forum of a group or at a collective review in the presence of other leaders,
- The condition for passing the course is obtaining positive grades from all reviews.

Assessment scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0

Obtaining a positive grade for the module depends on the student achieving all the learning outcomes listed in the syllabus.



Programme content

DESIGN EXERCISES:

Conceptual design of an apartment for the residents specified in the task within the outline of the walls.

Analytical part:

- analysis of starting materials (projections of various types of apartments without partition walls),
- analysis of the provisions of technical conditions relating to housing development
- analysis of the residents' needs

Design part: Individual work on the project:

- development of individual variant functional diagrams
- entering an individual functional program into the outline of internal and external walls,
- function: realization of primary and secondary needs of users,
- form: shaping the complex environment of human habitation, the expression of which corresponds to the individual needs of residents and at the same time fulfills the need for social dialogue.
- Material: selection of materials, textures and equipment

Required elements of the project: analytical part, projections of all floors, sections (min. 2), layouts of selected rooms (proposed: kitchen or bathroom), taking into account the materials used and colors, perspectives and axonometries, descriptive part: area and cubature indicators, a summary of areas, architectural model (scale 1:20).

Teaching methods

1. Consultations and discussions with the tutor, case studies, conceptual design.
2. e-Kursy (a system supporting the teaching process and distance learning).

Bibliography

Basic

1. Alexander Ch. A Pattern Language: Towns, Buildings, Construction, Oxford, 1977,
2. Fikus M., Cechy procesu projektowego w działalności twórczej i projektowej, Wydawnictwo P.P., Poznań, 1992,
3. Giedion Siegfried, Przestrzeń, czas, architektura – narodziny nowej tradycji, PWN, Warszawa, 1968,
4. Har Ye Kan, Urban intencities. Contemporary Housing types and territories, Birkhauser, Bazylea, 2014,
5. E-script for the subject: Teoria podstaw projektowania architektonicznego i Podstawy projektowania



Additional

Architectural Magazines and websites

Breakdown of average student's workload

	Hours	ECTS
Total workload	110	5,0
Classes requiring direct contact with the teacher	45	1,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) ¹	105	3,5

¹ delete or add other activities as appropriate