



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Basics of architectural design with elements of universal design 2 [S1Arch1>PPAzEPU2]

### Course

Field of study  
Architecture

Year/Semester  
1/2

Area of study (specialization)  
–

Profile of study  
general academic

Level of study  
first-cycle

Course offered in  
Polish

Form of study  
full-time

Requirements  
compulsory

### Number of hours

Lecture  
0

Laboratory classes  
0

Other  
0

Tutorials  
0

Projects/seminars  
0

### Number of credit points

5,00

### Coordinators

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### Lecturers

### 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. - learning about issues related to shaping architectural space and interiors - learning about types of apartments and their functional blocks and individual rooms - learning about types of permanent, mobile and flexible structures, - developing skills in conducting analyses of individual needs of residents, - mastering the use of the functional schemes learned in various configurations, - acquiring skills in simultaneously shaping the functional layout and equipment, - developing skills in graphically presenting an architectural concept (projections, sections), - developing freehand drawing skills that facilitate variant solutions, - developing skills in building models (working and final), - deepening knowledge and skills in making conceptual drawings (projections, sections, layouts) based on construction knowledge.

## Course-related learning outcomes

### Knowledge

Student knows and understands:

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

Student can:

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.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

Student is capable of:

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:

Lecture:

the form of credit is a multiple-choice test consisting of 20 questions, placed in the e-moodle system. The basis for obtaining credits is obtaining credits from exercises within the education module. Summative assessment: adopted grading scale: 2.0; 3.0; 3.5; 4.0; 4.5; 5.0.

Formative assessment:

periodic control of learning progress, active participation in classes

Accepted grading scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0.

Percentage of grades: 0–50% - 2.0 (insufficient); 50-60% - 3.0 (sufficient); 60-70% - 3.5 (sufficient plus); 70-80% - 4.0 (good); 80-90% - 4.5 (good plus); 90-100% - 5.0 (very good).

Summative assessment:

a final test or (if an exam is included in the curriculum) a written exam

Accepted grading scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0.

Percentage of grades: 0–50% - 2.0 (insufficient); 50-60% - 3.0 (sufficient); 60-70% - 3.5 (sufficient plus); 70-80% - 4.0 (good); 80-90% - 4.5 (good plus); 90-100% - 5.0 (very good).

Design:

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, architectural context,
- shaping an abstract architectural composition based on the principles resulting from theoretical studies,
- shaping an abstract architectural composition that evokes specific planned reactions, emotions, associations and moods,
- representation of spatial composition in the form of layouts (projections, sections, perspective views, axonometrics, etc.), axonometrics, sketches and perspectives,
- representation of spatial composition in the form of models,
- analysis of the architectural and urban context,
- the use of basic tools and materials to help present the solutions achieved in the field of architectural composition,
- presentation of design solutions in the form of composed boards,
- presentation of design solutions with handwritten text,
- presentation of design solutions made in an aesthetic and legible way.

Formative assessment:

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

Accepted grading 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 at the group forum or at a collective review in the presence of other tutors,

- The condition for passing the course is obtaining positive grades from all reviews.

Accepted grading scale: 2.0; 3.0; 3.5; 4.0; 4.5; 5.0

Obtaining a positive grade from the module depends on the student's achievement of all learning outcomes listed in the syllabus.

## Programme content

Presentation of basic concepts (historical and contemporary) related to housing and living, as well as various types and functional schemes of contemporary apartments.

Teaching the process of designing an apartment in a multi-family housing development, whose functional layout, equipment and furniture meet the requirements and needs of specific residents. Teaching the principles of selecting appropriate spatial, functional (based on the rules of universal design), material and colour solutions used in a contemporary apartment. Familiarising students with tools for a clear presentation of the architectural concept at every stage of its implementation.

## Course topics

Lecture 1. An abbreviated history of the apartment - selected issues; functional diagrams of various types of apartments, universal design

Lecture 2. This year's laureate / laureates of the Pritzker Prize

Lecture 3. Apartment\_ living room and balcony, terrace, loggia

Lecture 4. Apartment\_ kitchen

Lecture 5. Apartment\_ bathroom

Lecture 6. Apartment\_ Bedroom and storage

Lecture 7. Summary. Apartment architecture - an attempt to synthesize current issues. Summary of issues related to universal design.

DESIGN:

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

Analytical part:

- analysis of initial materials (plans of various types of apartments without partition walls),
- analysis of the provisions of technical conditions regarding housing development
- analysis of 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: meeting the primary and secondary needs of users,
- form: shaping a complex human habitation environment whose expression corresponds to the individual needs of the inhabitants and at the same time fulfills the need for social dialogue.
- Material: selection of materials, textures and equipment

Required design elements: analytical part, projections of all storeys, cross-sections (at least 2), layouts of selected rooms (suggested: kitchen or bathroom) taking into account the materials used and colors, perspectives and axonometrics, descriptive part: area and volume ratios, area summary, architectural model (scale 1:20).

## Teaching methods

1. Lecture with multimedia presentation with elements of conversation.
2. Case study, conceptual design.
3. e-Kursy (a system supporting the teaching process and distance learning).

## Bibliography

Basic:

1. Alexander Ch. Język wzorców, translation: A. Kaczanowska, K. Maliszewska, M. Trzebiatowska, wyd. GWP, Gdańsk, 2008
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, translation: J. Olkiewicz, PWN, Warsaw, 1968
4. Har Ye Kan, Urban intencities. Contemporary Housing types and territories, Birkhauser, Basel, 2014.
5. E-skrypt dla przedmiotu "Teoria podstaw projektowania architektonicznego i Podstawy projektowania"

Additional:

1. Adamczewska-Wejchert H., Kształtowanie zespołów mieszkaniowych, Arkady, Warsaw 1985 + new edition
2. Neufert E., Podręcznik projektowania architektoniczno-budowlanego, Arkady, Warsaw, 1980 + new edition
3. Rasmunssen S.E., Odczuwanie architektury, translation: B. Gadomska, Murator, Warsaw, 1999
4. Periodicals: architectural journals

## Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,00
Classes requiring direct contact with the teacher	60	2,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	65	2,50