



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

ARCHITECTURAL DESIGN OF SERVICE FACILITIES\_1

### Course

Field of study

ARCHITECTURE

Area of study (specialization)

-

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

I/4

Profile of study

general academic

Course offered in

polish/english

Requirements

compulsory

### Number of hours

Lecture

30

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

0

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

dr inż. arch. Mieczysław Kozaczko

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Wydział Architektury

ul. Jacka Rychlewskiego 2, 61-131 Poznań

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Responsible for the course/lecturer:

dr hab. inż. arch. Ewa Pruszewicz-Sipińska, prof. nadzw.

dr hab. inż. arch. Sławomir Rosolski, prof. nadzw.

prof. dr hab. inż. arch. Agata Bonenberg

dr hab. inż. arch. Radosław Barek prof. nadzw.

dr inż. arch. Agata Gawlak

dr inż. arch. Agnieszka Janowska

mgr inż. arch. Tomasz Mielczyński

mgr inż. arch. Piotr Bartosik

mgr inż. arch. Agnieszka Ośmielak-Stankiewicz

mgr inż. arch. Krzysztof Frąckowiak



## Prerequisites

### Prerequisites

- the student has detailed knowledge of technical construction drawing necessary for the presentation of architectural concepts;
- the student has a basic knowledge of development trends in the field of architectural design;
- the student has basic knowledge necessary to understand social, economic, legal and non-technical determinants of architectural design;
- the student has knowledge of art, mathematics useful for formulating simple tasks in the field of shaping an architectural composition;
- the student has detailed knowledge of technical drawing construction necessary for the presentation of architectural concepts;
- the student knows the basic methods, techniques, tools and materials used in solving simple tasks in the field of shaping an architectural composition.
- the ability to obtain information from literature, databases and other properly selected sources, also in English, integrate information, aggregate and interpret it, draw conclusions, and formulate and justify opinions,
- the ability to self-study,
- the ability to evaluate simple architectural solutions on a small scale,
- the ability to identify and formulate practical tasks in the field of architectural design of simple objects,
- the ability to design simple architectural objects on a small scale,
- the ability to make spatial models (mock-ups) allowing for simulations and experiments with the use of various materials, and to see non-technical aspects on their basis, including, inter alia, perceptual processes,
- the ability to use the techniques of hand drawing in the process of shaping a simple, small-scale architectural form, the ability to interpret and draw conclusions based on them.
- understanding the need for lifelong learning, the ability to inspire and organize the learning process of others,
- awareness of the importance and understanding of the non-technical aspects and effects of engineering activities including at this stage the shaping of small-scale architectural forms, e.g. a single-family house, including its impact on the environment and the related responsibility for decisions made,



- the ability to resolve dilemmas in the field of shaping simple functional systems and skills helpful in choosing the optimal solution,
- the ability to think and act in an entrepreneurial, creative and innovative way at the stage of preparing an architectural concept (creativity in the search for means of expression in the preparation of an architectural concept and obtaining materials helpful for their implementation).

### Course objective

- learning methods of analysis and obtaining information in the design of simple functional and spatial structures,
- learning about the location conditions of a service facility: accessibility and location attractiveness issues, social and economic aspects,
- exploring multidirectional connections between design issues of service architecture with other fields: environmental psychology, proxemics, ergonomics of large groups,
- basics of the methodology of parametric design of service facilities,
- acquiring basic knowledge about the compositional principles of locating a service facility in a tissue cities; the basics of shaping negative and positive compositions, static and dynamic human scale,
- learning about the issues related to the setting of service space: archetype, elements of semiotics, the specificity of an architectural detail,
- learning the ability to creatively look at the form, function and structure of a building in a broad context,
- deepening the knowledge of the basic technical conditions that should be met by rooms in service facilities, deepening the knowledge of modern elements of technical equipment,
- broadening the knowledge of contemporary tendencies and trends in architectural design public utility buildings and their complexes,
- developing the ability to prepare multidirectional critical analyzes and technical assessments,
- training the ability to prepare a presentation on selected, detailed issues in the field of designing service buildings.

### 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;

- integrate information obtained from various sources, formulate their interpretation and critical analysis;

#### Social competences

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

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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Assessment method:

The student receives a credit for the series of lectures with a grade.

Completion of the course is subject to independent problem studies on selected topics related to the content of the lecture. The condition for obtaining a credit is to submit own studies (in the amount of 1-3), in electronic form (archived on a CD (Microsoft Word format) or sent by e-mail;

A single study is considered completed if it consists of min. 3 drawings (sketches), and comments to drawings (min. 300 words) formulated synthetically: slogans or sentence equivalents.

At the end of the study, you can include your own conclusions and expectations as to the content of a specific lecture (in one-sentence form).

Drawing development technique - any. Archiving in Microsoft Word format.

#### Programme content

Principles of architectural design of service facilities; elementary compositional issues, functional and technical;

Elements of the architectural design of the service facility;

Elementary interdependencies between the design of service facilities and other areas of shaping space. Basic tasks and the role of a designer of service buildings; Technical equipment of public utility buildings, basic principles;

The form of the service facility:



- service facility in the vicinity;
- human scale;
- basic concepts of the iconosphere;
- basic issues related to shaping the form in service architecture;
- service facility in the city space;
- attractive space;
- communication service of service facilities,
- basic concepts and principles of constructing service space, space, place,
- ergonomics of middle-range human communities,
- service object technology: basic concepts related to service programming.
- basic concepts of parametric design,
- basic technical conditions for service facilities,
- basic technical equipment of public utility buildings.

### Teaching methods

#### Learning methods

1. Problem lecture with an open structure, consisting of permanent parts: introduction to the subject, formulation of the student's expectations as to the current content, discussion of definitions and conceptual scopes, then a multimedia presentation and short instructional videos illustrating the issues discussed. the lecture ends with a short 10-minute discussion block. The studies carried out as part of completing the course are a pretext for active participation in the lecture and a synthetic presentation of one's own view on the issues discussed in the lectures.
2. e-Learning Moodle (a system supporting the learning process and distance learning).

### Bibliography

#### Basic

1. Alexander Ch., Ishikawa S., Silverstein M. et al., Język wzorców. Miasta, budynki, konstrukcja, Gdańskie Wydawnictwo Psychologiczne, Gdańsk 2008.
2. Bańka A., Społeczna psychologia środowiskowa, Wydawnictwo Naukowe Scholar, Warszawa 2002
3. Bielecki Cz., Gra w miasto, Warszawa 1996



4. Korzeniewski W., Warunki techniczne dla budynków i ich usytuowanie-poradnik z komentarzem, (wydanie 8 i późniejsze) Polcen, Warszawa 2009.
5. Pallasmaa J., Oczy skóry: architektura i zmysły, Instytut Architektury, Kraków 2012.
6. Sipińska E., Architektura mieszkaniowa i usługowa w programach nauczania. Tom 1., Wydawnictwo Politechniki Poznańskiej, Poznań, 2011.
7. Sipińska E., Architektura mieszkaniowa i usługowa w programach nauczania. Tom 2., Wydawnictwo Politechniki Poznańskiej, Poznań, 2012.
8. Zumthor P., Myślenie architekturą, Karakter, Kraków 2010.
9. E-skrypt dla przedmiotu „Teoria podstaw projektowania zabudowy usługowej 1 i Projektowanie zabudowy usługowej 1”.

#### Additional

1. Gehl J., Życie między budynkami. Użytkowanie przestrzeni publicznych, Wydawnictwo RAM, Kraków 2009.
2. Giedion S., Przestrzeń, czas, architektura. Narodziny nowej tradycji, PWN, Warszawa 1968.
3. Hall E. T., Poza kulturą, PWN, 2001.
4. Hall E.T., Ukryty wymiar, Warszawskie Wydawnictwo Literackie MUZA SA, Warszawa 2005.
5. Ingarden R., Książeczka o człowieku, PWN, 1987.
6. Jencks Ch., Architektura postmodernistyczna, Arkady, Warszawa 1987
7. Jencks C., Architektura późnego modernizmu i inne eseje, Arkady, 1989.
8. Porębski M., Ikonosfera, PIW, 1987.
9. Rasmussen S.E., Odczuwanie architektury, Wydawnictwo Murator, Warszawa 1999.
10. Wejchert K., Elementy kompozycji urbanistycznej, Arkady, Warszawa 1974.
11. Witruwiusz, Dziesięć ksiąg o architekturze, PWN, 1956.
12. Yi - Fu Tuan, Przestrzeń i miejsce, PIW, 1987.
13. Żórawski J., O budowie formy architektonicznej, Arkady, Warszawa 1962..



### Breakdown of average student's workload

	Hours	ECTS
Total workload	84	
Classes requiring direct contact with the teacher	84	2,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>		

<sup>1</sup> delete or add other activities as appropriate