



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Architectural design of Recreation Facilities [S1Arch1E>PAObR]

Course

Field of study
Architecture

Year/Semester
3/6

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
English

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
15

Laboratory classes
0

Other (e.g. online)
0

Tutorials
0

Projects/seminars
60

Number of credit points

3,00

Coordinators

dr inż. arch. Xia Wei
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Lecturers

Prerequisites

The student has basic knowledge of the history of architecture and urban planning, the basics of architectural and urban design and landscape architecture; has basic knowledge necessary to understand social, economic, legal and other non-technical conditions of architectural and urban design; is able to obtain information from literature, databases and other, properly selected sources, also in English, can integrate and interpret information, as well as draw conclusions and formulate and justify opinions, is able - in accordance with the given specification - to design an architectural object with a small cubature and degree of complexity, understands the need for lifelong learning, can work on a designated task independently and work in a team, assuming various roles in it

Course objective

1. Obtaining knowledge in the field of historical development of recreational functions and contemporary trends in the design of recreational development and architectural objects for sport and recreation. 2. Knowledge and ability to analyze the structure of recreational development of a region, agglomeration, city, housing estate and the principles of planning and programming elements of recreational development and designing various types of facilities and recreational areas in cities, suburban and rural areas. 3. Acquisition of knowledge and skills in the field of methods of analysis, synthesis, programming and design of medium-sized recreational and sports facilities, as well as responsible use of the recreational values of the cultural and natural environment. 4. Getting to know the formal and legal conditions of designing various sports and recreation facilities (including the principles of universal design, safety and visibility) and applying them in the design of a selected type of recreation facility. 5. Preparation of architectural and construction documentation in appropriate scales in relation to the conceptual design of a selected type of sports and recreation architecture facility.

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.W2. urban design in the scope of implementation of simple tasks, in particular: small building complexes, local spatial development plans, taking into account local conditions and connections, as well as forecasting transformation processes in the settlement structure of towns and villages;
- A.W3. records of local spatial development plans to the extent necessary for architectural design;
- 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.U3. prepare planning studies concerning spatial development and interpret them to the extent necessary for designing in an urban and architectural scale;
- A.U4. make a critical analysis of the conditions, including the valorization of the land development and building conditions;
- 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:

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A series of lectures provides a theoretical basis for design exercises. Lectures and exercises end with an independent credit. Students receive a course program with a list of applicable issues and required project studies. For each type of classes, there are two deadlines for passing the course, with the second term

being the resit term.

Lectures:

formative assessment: activity in class

Summative assessment: a multiple-choice test checking knowledge of the topics covered in the lectures

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:

Formative assessment: active participation in classes, group discussion and involvement in project work, timeliness and quality of partial tasks, assessment of partial reviews

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: final review, which is a summary of the knowledge and skills acquired during the implementation of all tasks, presentation in the group forum or at a collective review in the presence of other tutors.

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70-80% - 4.0 (good); 80-90% - 4.5 (good plus); 90-100% - 5.0 (very good).

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

Programme content

Lectures on Theory of Recreational Architecture provide a theoretical foundation for the design of recreational facilities and include the following topics: Structure of recreational development of agglomerations. Typology and layout of recreational areas and facilities in the city. Everyday recreation facilities and facilities. Legal requirements and principles of designing sports halls and recreational and sports facilities of various types. Designing stands in accordance with the principles of safety and visibility. Recreational architecture in non-urbanized areas. Recreational development of urban waterside areas. Recreational functions in architecture and urban planning - an outline of historical development.

Course topics

Lectures:

1. The structure of the agglomeration's recreational development. Systematization of concepts: recreation, leisure, tourism. Social characteristics of recreation. Daily, weekend and seasonal rest zones.

Attractiveness, accessibility and capacity of recreational areas. Typology and distribution of recreational areas and facilities in the city (housing estate, district, general city).

2. Facilities and devices for everyday recreation. Functional complexes of recreation centers. Legal requirements and rules for designing sports halls, including safety and visibility rules. Types of game fields. Forms and structures of stands. Structural systems of sports halls. Standards for the spatial organization and equipment of multifunctional sports halls.

3. Principles of designing facilities for water recreation. Indoor swimming pools: zones, functional and technological schemes, FINA requirements, examples of implementation.

4. Weekend and holiday recreation centers. Recreational architecture in non-urbanized areas. Models of location and functional and spatial layouts of equestrian recreation centers. Designing indoor riding arenas.

5. Recreational development of urban waterside areas, taking into account landscape and natural values and flood hazards. Principles of designing marinas, river harbours, rowing tracks, tourist infrastructure. Functional, landscape, eco-hydrological, communication (waterways) and legal conditions for the development of river valleys.

6. Recreational functions in architecture and urban planning - an outline of historical development. Evolution of sports and recreation assumptions from antiquity to the present day. The genesis of recreational functions in the city.

Project:

The exercise program includes the development of a recreational area development project and an architectural concept of a recreational and sports facility (e.g. a multifunctional sports hall, indoor swimming pool, water sports center, equestrian center, recreation center, hotel, guest house, etc.) with parking, sanitary and catering facilities, and audience for 200 people. The program is implemented in 3 stages:

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Stage 1 - inventory and urban and landscape analyzes of the location area in order to define problems and formulate design guidelines. Stage 1 is a simulation of work in multi-sector teams (2-3 people), whose members are tasked with collecting and analyzing the conditions in the field of: the quality of the natural environment and landscape attractiveness, social and cultural conditions, the functions of the areas and the structure of recreational development, types and quality of buildings, technical and transport infrastructure (scale 1: 25,000, 1: 10,000, 1: 2,000). The stage ends with the SWOT analysis, presentation of conclusions, formulation of problems, guidelines and design constraints.

Stage 2 - land development concept. Individual work (possibly in teams of 2-3 people) consisting in developing a functional program and alternative concepts for the development of the plot (scale 1: 1000, 1: 500). The project should include: a. Zoning: division of the area into functional zones, b. Transport and communication: functional and technological connections, c. Greenery: spatial arrangement and functions of green areas; d. Buildings: spatial arrangement and functions of objects; e. Landscape context: compositional and cultural relations. The stage ends with a review of variant concepts, which are subject to multi-criteria analysis in order to select the optimal version of the land development design.

3rd stage - architectural concept of a recreational and sports facility. An individual task (possibly in teams of 2) consisting in developing an architectural concept of the facility according to established specification, selection of appropriate functional, structural and formal solutions integrated with the site development design and landscape context (scale 1: 200, 1: 100 - plans, sections, elevations, visualizations, working model).

Teaching methods

1. Lecture with multimedia presentation.
2. Project.
3. ekursy.put.poznan.pl (a system supporting the teaching process and distance learning).

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- Mielczarek Z., Nowoczesne konstrukcje w budownictwie ogólnym. Arkady. Warszawa 2005
- Mokrzyński J., Architektura wolnego czasu. Arkady, Warszawa 1973.
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Additional:

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Zabłocki W., Architektura Architecture, Wydawnictwo: Bosz, 2007.

Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,00
Classes requiring direct contact with the teacher	75	3,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	50	2,00