POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Architectural design of Recreation Facilities/project [S1Arch1E>PAOR]

Course			
Field of study Architecture		Year/Semester 3/6	
Area of study (specialization)		Profile of study general academic	c
Level of study first-cycle		Course offered in English	1
Form of study full-time		Requirements compulsory	
Number of hours			
Lecture 15	Laboratory class 0	es	Other (e.g. online) 0
Tutorials 0	Projects/seminar 60	S	
Number of credit points 5,00			
Coordinators		Lecturers	
prof. dr hab. inż. arch. Anna Jan anna.januchta-szostak@put.poz			

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; - the student 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, - the student is able - in accordance with the given specification - to design an architectural object with a small cubature and degree of complexity, - the student 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. Knowledge and the ability to analyze the structure of recreational development in a region, agglomeration, city, housing estate and the principles of planning and programming elements of recreational development 2. Acquisition of knowledge and skills in the field of methods of analysis, synthesis, programming and designing medium-sized recreational and sports facilities, as well as responsible use of recreational values of the cultural and natural environment 3. Understanding 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 recreational facility 4. Preparation of architectural and construction documentation in appropriate scales in relation to the conceptual design of the selected sports and recreation architecture facility

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:

The course on the Theory of Recreational Architecture is the theoretical foundation for the design of recreational facilities. Lectures and design exercises end with an independent credit. Students receive a subject program with a list of applicable issues and required design studies. There are two credit deadlines for each type of course. The second term is a correction term.

1. Formative assessment

Architectural design of recreational facilities - forming assessment includes:

Assessment of active participation in classes, discussion in the group forum and involvement in project work,

Assessment of the timeliness and quality of the performance of tasks during the periodic and final review,

Assessment of the group by selecting the best three final studies.

Assessment scale: 2.0; 3.0; 3.5; 4.0; 4.5; 5.0

2. Summative assessment:

Architectural design of recreational facilities - summary assessment consists of the assessments given by

the teacher during the periodic and final review, assessment of the student's activity and involvement, and the assessment given by the group.

Assessment scale: 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

Theory of recreational architecture: The structure of recreational development in agglomerations. Typology and distribution of recreational areas and facilities in the city (housing estates, districts, citywide). Facilities and devices for everyday recreation. Legal requirements and rules for designing sports halls and various types of recreational and sports facilities. Designing stands in accordance with safety and visibility principles.

Recreational architecture in non-urbanized areas. Recreational development of urban waterside areas. Recreational functions in architecture and urban planning - an outline of historical development.

The program of classes includes the site plan of recreational areas and an architectural concept for a medium-sized recreational and sports facility.

Course topics

Lectures: Theory of recreational architecture

1. The structure of recreational development in the agglomeration. Taxonomy of concepts: recreation, leisure, tourism. Social characteristics of recreation. Daily, Saturday-Sunday and seasonal relaxation zones. Attractiveness, accessibility and absorption capacity of recreational areas. Typology and distribution of recreational areas and facilities in the city (housing estates, districts, citywide).

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

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

4. Saturday-Sunday and holiday recreation centers. Recreational architecture in non-urbanized areas. Location models and functional and spatial systems of horse recreation centers.

Design of indoor riding arenas.

5. Recreational development of urban waterside areas, taking into account landscape and natural values and flood risks. Principles of designing marinas, river marinas, rowing tracks, tourist infrastructure. Functional, landscape, ecohydrological, 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 origins of recreational functions in the city.

Classes- Architectural design of recreational facilities

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

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-disciplinary teams (2-3 people), whose members are responsible for collecting and analyzing conditions in the field of: quality of the natural environment and attractiveness of the landscape, social and cultural conditions, functions of areas and the structure of recreational development, types and quality of development , technical and communication infrastructure (scale 1:25,000, 1:10,000, 1:2,000). The stage ends with a SWOT analysis, presentation of conclusions to the group, formulation of problems, guidelines and project limitations.

Stage 2 - development of the land development concept (site plan). Individual work (possibly in teams of 2-3 people) consisting in developing a functional program and alternative concepts of site plan (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 layout and functions of green areas; d. Development: spatial layout and functions of facilities; e. Landscape context:

compositional and cultural connections. The stage ends with a review of variant concepts, which are subjected to a multi-criteria analysis in order to select the optimal version of the site plan. Stage 3 - architectural concept of a recreational and sports facility. An individual task (possibly in teams of 2 people) consisting in developing an architectural concept of the facility according to: established specification, selection of appropriate functional, structural and formal solutions integrated with the land development design and landscape context (scale: 1:1000 or 1:500 - PZT, 1:200, 1:100, projections, sections, elevations) + model or mock-up and visualizations.

Teaching methods

1. Lecture with multimedia presentation.

2. Project.

3. eLearning Moodle (a system supporting the teaching process and distance learning).

Bibliography

Basic

Due to the different subject matter of sports and recreation projects carried out in individual groups, the literature for the subject is determined on an ongoing basis by the teacher conducting the exercises. 1. Regulation of the Minister of Infrastructure of April 12, 2002 on technical conditions to be met by buildings and their location.

2. E-script for the subject "Theory of Recreational Architecture and Architectural Design of Recreational Objects".

Additional

Błądek Z., Hotele. Palladium, Wągrowiec 2001

Susan L. Hutchinson, Erica Brooks, Physical Activity, Recreation, Leisure, and Sport: Essential Pieces of the Mental Health and Well-being Puzzle, Report for The Nova Scotia Mental Health Strategy

Consultation, June 2011, http://www.recreationns.ns.ca/wp-

content/uploadhere/2012/05/MentalHealthLit.pdf

Januchta-Szostak A., Poznań Waterfront – Warta Valley. Revitalisation of the relationship with the river, monografia, Wyd. Politechniki Poznańskiej, Poznań 2011.

Mieczkowski, Z., Environmental issues of tourism and recreation. University Press of America, Lanham 1995

McLean DD, Hurd AR, Rogers NB, Kraus" Recreation and Leisure in Modern Society, 7th Edition. Jones and Bartlett. p. 1ff, 2005

Mokrzyński J., Architektura wolnego czasu. Arkady, Warszawa. 1973

Neufert P., Podręcznik projektowania architektoniczno-budowlanego, Arkady, Warszawa 1998

Perrin G.A., Sport halls & swimming pools. A design and briefing gide. E.&F.N. Spon Ltd. London New York 1980

Sturzebecher P., Ulrich S., Architecture for sport. Wiley-Academy, Great Britain 2002

Wirszyłło R., Urządzenia Sportowe. Arkady, Warszawa 1966

Wimmer M., Stadium Buildings: Construction and Design Manual. DOM Publishers 2015

Thomas S. Yukic. Fundamentals of Recreation, 2nd edition. Harpers & Row, 1970, Library of Congress 70-88646. p. 1f

Breakdown of average student's workload

	Hours	ECTS
Total workload	90	3,00
Classes requiring direct contact with the teacher	45	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	45	1,50