



KARTA OPISU PRZEDMIOTU - SYLABUS

Nazwa przedmiotu

The theory of urban design

Przedmiot

Kierunek studiów

ARCHITECTURE

Studia w zakresie (specjalność)

–

Poziom studiów

first-cycle

Forma studiów

full-time

Rok/semestr

II/4

Profil studiów

general academic

Język oferowanego przedmiotu

Polish/English

Wymagalność

obligatory

Liczba godzin

Wykład

30

Laboratoria

0

Inne (np. online)

Ćwiczenia

0

Projekty/seminaria

0

Liczba punktów ECTS

2

Wykładowcy

Odpowiedzialny za przedmiot/wykładowca:

Doctor Habilitated of Architectural Engineering

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Odpowiedzialny za przedmiot/wykładowca:

Doctor of Architectural Engineering Krzysztof

Borowski

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Wymagania wstępne

- the student has well-ordered general knowledge, with theoretical foundations, of the key concepts from the field of urban and composition and the foundations of urban design;
- the student has basic knowledge about the development trends in urban design;
- the student has the basic knowledge necessary for understanding the social, economic, legal, and non-technical conditions of urban development;
- the student has basic knowledge about the courses of study related to the studied course of study;
- the student knows the basic methods, techniques, tools, and materials used for solving simple tasks in the area of basic urban design;



- the student can obtain information from literature, databases, and properly selected sources, integrate information, interpret it, and draw conclusions, as well as form and justify opinions;
- the student can critically analyze the way in which the current spatial solutions pertaining to the basics of urban design function and to evaluate them;
- the student can design selected elements of simple urban complexes in the form of small local spaces with basic functions;
- the student can critically analyze the functioning of and analyze the existing technical solutions – especially in connection with the studied subject, in particular, the devices, objects, systems, and services;
- the student can identify and formulate the specification of practical tasks in the area of the foundations of urban design;
- the student can design a residential urban complex with residential and service elements;
- the student can cooperate and work in a group, taking various roles in it;
- the student correctly identifies and solves dilemmas concerning various spatial situations in the scale of a small urban complex and in the architectural scale; T1A_K05
- the student understands the need for lifelong learning, the student can inspire and organize other people's learning process;
- the student is aware of and understands the non-technical aspects and outcomes of engineering activity, including its influence on the natural environment and the associated responsibility for the decisions made.

Cel przedmiotu

1. Learning about the genesis and development of the basic elements which crystallize the urban space: a square, a street, an urban quarter, and the basic factors creating a city.
2. Learning about the contemporary issues and elements of the theory of urban design and related to the future visions of the development of urban complexes in various scales.
3. Learning about the formal and legal conditions of urban design in cities and gminas.
4. Learning about the basic instruments and tools of urban design, urban standards and indicators and their role in shaping urban complexes.
5. Learning about the tools and techniques for analyzing urban space – taking inventory of urban space, including the valuation – used in urban design (urban indaganda)
6. Learning about modern methods of urban design in a creative approach to gmina spatial development.



7. Learning about contemporary urban planning doctrines, from the Athens Charter, through the New Athens Charter, to the Charter of the New Urbanism.
8. Learning about the conditions and principles of dimensioning urban space.
9. Learning about the characteristics, variety, and dependencies of functions in a city – living, trade and services, sports and recreation, work, transport.
10. Recognizing the basic elements of the technical infrastructure of a city.
11. Learning about the systems of ecology and communication engineering in a city – a classification of systems.
12. The aim of the creation of a design of a housing development is to learn about the conditions and problems related to urban and planning processes.
13. Within the framework of this subject, students will learn how to use the principles of urban design in regard to the shaping of simple spatial structures – a small residential complex with services.
14. Learning how to make urban analyses for urban complex design, define the program and spatial assumptions, and create an optimal concept of land development, taking into account the principles of urban composition and of the shaping of an optimal city landscape.
15. The design encompasses a descriptive part (a report on the place) and a graphic part: a description of the functions and the development manner of the area with a visualization. There are two phases of the project: the study phase and the conceptual phase with a functional balance of the area surface (percentages). The aim of the classes is to create a conceptual design of the development of a selected area, in the 1:1,000 scale, for a small residential complex with services, public space, green areas, and transportation. The area of the complex is to be about 10 ha, with about 1,000 inhabitants. Various types of single-family development with low density: single-family houses, multi-family houses, semi-detached houses, terraced houses, atrial houses, 'carpet' houses (Polish: zabudowa dywanowa), quarter developments, and various types of basic services: trade, gastronomy, schools, kindergartens, health centers, etc. A detailed concept of the development and arrangement of a selected fragment of public space, for example, a square with the surrounding development is prepared in the 1:200, 1:,250 scale (urban implementation), with a visualization, perspective views, and urban detail.

Przedmiotowe efekty uczenia się

Wiedza

- A.W2. doing simple tasks in the area of urban design, in particular: small urban units, local spatial management plans – taking into account the local conditions and connections, and prognosticating the processes of the transformation of the settlement structure of cities, towns, and villages;
- A.W3. records of local spatial management plans in the scope necessary for architectural design;
- A.W4. the principles of universal design, including the design of space and buildings accessible to all users, in particular, to people with disabilities, in architecture, urban planning, and spatial planning, and



the principles of ergonomics, including the ergonomic parameters necessary for ensuring the functionality of the designed space and objects for all users, in particular, for people with disabilities.

Umiejętności

A.U4. carrying out a critical analysis of the conditions, including a valorization of the site development;

A.U6. integrating information obtained from various sources, interpreting them and analyzing them critically;

Kompetencje społeczne

A.S1. thinking independently in order to solve simple design problems;

A.S2. taking responsibility for the shaping of the environment and the cultural landscape, including the preservation of the heritage of the region, country, and Europe.

Metody weryfikacji efektów uczenia się i kryteria oceny

Efekty uczenia się przedstawione wyżej weryfikowane są w następujący sposób:

grade for the passing of the subject, equivalent to a grade for an examination

Treści programowe

1. The genesis and development of the basic elements which crystallize the urban space: a square, a street, an urban quarter, and the basic factors creating a city.
2. The contemporary issues and elements of the theory of urban design and related to the future visions of the development of urban complexes in various scales.
3. The formal and legal conditions of urban design in cities and gminas.
4. The basic instruments and tools of urban design, urban standards and indicators and their role in shaping urban complexes.
5. The tools and techniques for analyzing urban space – urban indaganda as a method for taking inventory of and valuing urban structures.
6. Modern methods of urban design in a creative approach to urban spatial development.
7. Contemporary urban planning doctrines, from the Athens Charter, through the New Athens Charter, to the Charter of the New Urbanism.
8. The conditions and principles of dimensioning urban space.
9. The characteristics, variety, and dependencies of functions in a city – living, trade and services, sports and recreation, work, transport.
10. The basic elements of the technical infrastructure of a city.



11. Green area systems in a city in the context of ecology.

12. The engineering of urban transportation systems.

Metody dydaktyczne

1. A course lecture with a multimedia presentation.

2. e-Learning Moodle (system for supporting the learning process and for distance learning).

Literatura

Podstawowa

1. Borowski, K.: 2001, Śródmiejskie transurbacje technologiczne, Wydawnictwo Politechniki Poznańskiej, Poznań, p. 144

2. Borowski, K.: 2003, "Urządzanie przestrzeni jako zagadnienie urbanistyczne, inwestycyjne i legislacyjne. Stan prawny na dzień 31 grudnia 2002 r." Politechnika Poznańska, dissertation no. 375, Wydawnictwo Politechniki Poznańskiej, p. 344

3. Borowski K.: Indaganda i wskaźniki urbanistyczne. Z badań nad zbudową w kwartałach miasta Poznania. In: Planowanie przestrzenne miast i regionów, edited by L.Zimowski. Ośrodek Wydawnictw Naukowych PAN, Poznań 1999.

4. Ast R.: Kształtowanie przestrzeni regionów i miast. Wybrane zagadnienia. Wydawnictwo Politechniki Poznańskiej, Poznań 2001.

5. Ast R.: Rozważania dotyczące teorii i fizjonomii układów przestrzennych. Postrzeganie przestrzeni przez architekta. In: Urbanistyczne instrumenty promocji inwestycji. Materiały międzynarodowych seminariów naukowych we Wrocławiu, Rokosowie, Poznaniu 1993-1995. Studioteka "ZARYSY," Politechnika Poznańska, Poznań 1996.

6. Bańka A.: Psychologiczna struktura projektowa środowiska, PP, Poznań 1985.

7. Chmielewski J.M.: Teoria urbanistyki w projektowaniu i planowaniu miast. Oficyna Wydawnicza Politechniki Warszawskiej, Warsaw 2001.

8. Cichy-Pazder E.: Humanistyczne podstawy kompozycji miast. Wybrane aspekty percepcyjne i behawioralne. Ośrodek Kształcenia Urbanistów, Politechnika Krakowska, Kraków 1998.

9. Czarnecki W.: Planowanie miast i osiedli, volumes 1–6. PWN, Warsaw – Poznań 1964–1970.

10. Fikus M.: Cechy procesu projektowego w działalności twórczej i realizacyjnej. Powiązanie praktyki architektonicznej z teorią i dydaktyką. Rozprawy nr 267, Wydawnictwo Politechniki Poznańskiej, Poznań 1992.

11. Jastrzab T.: Przestrzenie publiczne we współczesnej urbanistyce i architekturze. Wydawnictwo Politechniki Poznańskiej, dissertation no. 381, Poznań 2004.



12. Malisz B.: Zarys teorii kształtowania układów osadniczych. Arkady, Warsaw 1981.
13. Ostrowski W.: Urbanistyka współczesna. Arkady, Warsaw 1975.
14. Tołwiński T.: Urbanistyka, volume 1 ("Budowa miasta w przeszłości"), volume 2 ("Budowa miasta współczesnego"), Wydawnictwo Ministerstwa Odbudowy No. 11, Warsaw 1948.
15. Zimowski L.: Modelowanie w teorii urbanizacji. Wydział Architektury Politechniki Poznańskiej, Poznań 2000.
16. E-scripts for the subject "Theory of urban design and urban planning."

Uzupełniająca

1. Bogdanowski J.: Krajobraz miasta jako problem tożsamości i jakości życia. In: "Człowiek i środowisko," Kraków 1987.
2. Borowski K.: Przemiany urbanistyczne miast i regionów z szczególnym uwzględnieniem czynników prawno-organizacyjnych. In: Zeszyty Naukowe Politechniki Poznańskiej "Architektura i Urbanistyka," No. 3, Wyd. Poznań 2002.
3. Borowski K.: Przedmiejskie transurbacje komunikacyjne. In: The Third Science and Technology Conference of the Association of Polish Urban Communication Mechanical "Problemy komunikacyjne miast w warunkach zatłoczenia motoryzacyjnego" ["Urban communication problems in the conditions of traffic congestion"]. Poznań 2001.
4. Buszkiewicz J.: Nowe tendencje w kształtowaniu przestrzeni miasta. In: Zeszyty Naukowe Politechniki Poznańskiej, Budownictwo Lądowe, No. 33, Prace Instytutu Architektury i Planowania Przestrzennego, Poznań 1990.
5. Domański R.: Miasto innowacyjne. Studia KPZK PAN, Tom CIX, Warsaw 2000.
6. Fikus M.: Przestrzeń w zapisach architekta. Wydział Architektury Politechniki Poznańskiej, Agencja Wydawnicza Zebra, Poznań – Kraków 1999.
7. Jastrząb T.: Place i rynki jako zagadnienie urbanistyczne. Wydawnictwo Politechniki Poznańskiej, Poznań 2002.
8. Ostrowski W.: Wprowadzenie do historii budowy miast. Ludzie i środowisko. Oficyna Wydawnicza Politechniki Warszawskiej, Warsaw 1996 (second edition, 2001).
9. Wallis A.: Miasto i przestrzeń. Warsaw 1977.



Bilans nakładu pracy przeciętnego studenta

| | Hours | ECTS |
|---|-------|------|
| Total labor input | 60 | 2,0 |
| these classes require direct contact with the instructor. | 30 | 1,0 |
| student's own work (study of literature, preparing for laboratory classes / classes, preparing for tests/exams, doing a project) ¹ | 30 | 1,0 |

¹ Delete as appropriate, or add other actions.