THE CARD OF DESCRIPTION THE EDUCATION MODULE

Name of course/module **URBAN PLANNING II** **THOEORY OF URBAN PLANNING** **URBAN PLANNING**			Code **AU_K_1.4_003**
Main field of study **ARCHITECTURE AND URBAN PLANNING**		Education profile (general academic, practical) **general academic**	Year / Semester **II/4**
Specjalization **-**		Language of course: **Polish**	Course (core, elective) **core**
Hours: Lectures:: **30** Classes: **45** Laboratory classes: Projects / seminars:			Number of points **6**
Level of qualification: **I**	**Form of studies** (full-time studies/part-time studies) **Full-time studies**	**Education area(s)** **Technical Sciences**	**ECTS division (number and %)** **6 100%**
Course status in the study program (basic, directional, other) **directional**		(general academic, from other field of study)	

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Prerequisites of knowledge, skills, social competences:

1	**Knowledge:**	• student has explicit, theoretically based knowledge including the key issues of urban planning composition and fundamentals of urban planning, T1A_W03, • student has basic knowledge of development trends in the scope of theory of urban planning, T1A_W05, • student has knowledge required for the understanding of social, economic, legal and other determinants outside the engineering field of the urban planning development of cities, • student has basic knowledge in the scope of fields of study related to field of study being studied, T1A_W02, • knows the basic methods, techniques, tools and materials used at solving simple engineering tasks of fundamentals of urban planning, T1A_W07,
2	**Skills:**	• student can acquire information from field specific literature, data bases and other properly selected sources in Polish and English, can integrate the acquired information, interpret the said information, as well as draw conclusions and come up with opinions supported with satisfactory reasons, T1A_U01 • student can carry out critical analysis of the manner of operation and assess the existing spatial solutions as regards the fundamentals of urban planning, • student can design selected elements of simple urban complexes with nature of small local spaces with basic functions, • student can carry out critical analysis of the manner of operation and assess – especially in relation to field of study being studied - the existing technical solutions, especially devices, facilities, systems, processes, services, T1A_U013,

		• student can identify and can draw up specification of practical tasks as regards the fundamentals of urban planning, T1A_U014, • student can design urban complex with residential and service functions, T1A_U016,
3	**Social competences:**	• can work and cooperate in a team, assuming a number of different roles therein, T1A_K03, • correctly identifies and solves dilemmas in the scope of various spatial situations in the scale of small urban complex and in the architectural scale, T1A_K05, • student understands the need for lifelong learning; can inspire and organize process of learning other people, T1A_K01, • student is aware of the importance of non-technical aspects and effects of engineering activities, in this impact upon the environment and liability for environment affecting decisions, T1A_K02

Objective of the course:

- learning the genesis and development of basic elements crystallizing the urban space – square, street, urban planning quarter and basic city forming factors,
- learning the contemporary issues and elements of urban planning theory and future visions of urban complexes development in various scales,
- learning the formal and legal determinants of urban planning in the cities and communities,
- learning the basic instruments and tools of urban planning, urban standards and indicators and their role in designing the urban complexes,
- learning the tools and techniques of analyzing the urbanized space – urban inventory with valorization, used in urban planning (Urban survey),
- learning the modern methods of urban planning in creative approach to management of communities spaces,
- learning the contemporary urban planning doctrines from Athens Charter, by the New Charter of Athens to the Charter of New Urbanism,
- learning the determinants and principles of dimensioning the urbanized space,
- learning the features, diversity and dependencies of functions in the city – living, trade and services, sport and recreation, work, transport,
- identification of basic elements of city engineering infrastructure,
- learning the ecology systems and engineering of communication systems in the city – classification of systems,
- the development objective of housing estate project, is familiarize with determinants and problems related to urban and planning processes,
- the course allows to know and obtain the skills of use the urban planning principles in the scope of designing the simple spatial structures – small housing complex with services,
- obtain skills of designing the urban complex in the scope of urban analyses, defining the programmatic and spatial assumptions and creation of optimal conception of land management and building development, taking into account the principles of urban composition and forming the optimal city image,
- project consists of descriptive part (report about place) and graphics part: functions report and method of building development of area with visualization. Project includes two stages – studies and conceptual with functional balance of area surface in percentage terms
- The classes objective is implementation of conceptual project of selected area building development on the scale 1:1000 with designation for small housing complex with services, public space, greenery and communication. Predicted complex has to have surface about 10 ha and about 1000 residents. There are predicted various types of single family building development with low intensity: single

family building development, multi-family building development, twin residential building development, terraced houses, single family building development with atrium, and block development principle as well as various types of basic services: trade, gastronomy, schools, kindergartens, health service centre etc. Detailed conception – of management and arrangement of selected fragment of public space e.g. square with surrounding building development is developed on the scale 1:200, 1:250 with visualization, perspective views and urban detail.		
Learning outcomes		
Knowledge:		
number (symbol)	Having completed the course, student can:	Reference to the outcomes of the learning process in the area of technical sciences
W01	has basic knowledge on modern trends in architectural designing in the scope of architectural designing and town planning and arts - drawing, painting and sculpture	**AU1_W02**
W02	knows the principles of descriptive geometry and technical drawing and can use the software supporting architectural designing and town planning	**AU1_W05**
W03	has basic knowledge in the field of mathematics, descriptive geometry, theory of structures and construction physics	**AU1_W05**
W04	knows the basic methods, techniques, tools and materials used at solving engineering tasks in the scope of architectural designing of residential and commercial facilities, of designing offices and other work places, of designing recreational space and in the scope of landscape designing	**AU1_W09**
Skills:		
number (symbol)	Having completed the course, student can:	Reference to the outcomes of the learning process in the area of technical sciences
U01	has self-education skills	**AU1_U02**
U02	can work individually and in a team, in this can organise his/her time properly as well as can undertake liabilities and meet the deadlines	**AU1_U05**
U03	can draw and dimension the basic structural and construction elements in an architectural concept and in the building plans and designs	**AU1_U06**
U04	can use selected computer programs supporting design decisions, can design selected components of complex engineering structures	**AU1_U08**
U05	can carry out initial economic analysis and assess the labour expenditure of the engineering works	**AU1_U11**
U06	can identify the existing functional and spatial resources, can evaluate these resources and come up with respective conclusions on possible transformations in architecture and town planning	**AU1_U13**
U07	can design an architectural facility serving a number of functions, a simple urban complex with residential functions and a complex of facilities with specified functions of the defined urban context	**AU1_U14**
U08	can, when formulating engineering tasks and solving them, notice their social, historical, economic and legal aspects	**AU1_U16**
Social competences:		
number (symbol)	Having completed the course, student can:	Reference to the outcomes

		of the learning process in the area of technical sciences
K01	can work over a set task independently and can cooperate in a team, assuming a number of different roles therein; demonstrates responsibility in the work performance	**AU1_K01**
K02	understands the need of continuous self-education (1st and 2nd degree studies, post-graduate studies) - improvement of professional, personal and social competences	**AU1_K03**
K03	is aware of the importance of non-technical aspects and effects of engineering activities, in this impact upon the environment and liability for environment affecting decisions	**AU1_K05**
K04	can respectively determine priorities for the execution of goals set by himself/herself or by others; is fully aware of the importance of professional conduct; is aware of the liability for tasks performed jointly with others within the team work	**AU1_K06**

Methods of check the learning outcomes

Conditions for passing and method of project evaluation.

- forming evaluation: text and drawing elaboration (homework for students) describing the selected issues of theory of urban planning; presentation of definition of basic concepts and elements of spatial and functional city structure (skills assessment of knowledge synthesis, use the professional terms and phrases, legibility of urban planning drawings, proper selection of examples, illustrations and photos), A4 format, 3 pages.

- forming evaluation: author's multimedia presentation on given topic (homework for students team consisting of several people) – selected elements of spatial and functional city structure, e.g. systems of municipal transport service, cities zoning, systems of city engineering infrastructure, systems urban greenery, public spaces and services, colouring of urban spaces, dimensioning the urban spaces, urban planning detail, dominants of city spatial layouts, zones of commercial services, roads and passages, sculpture in the urban planning, decoration and elements of urban information, zones of services, sport and recreation in the city, water in the city landscape, city cleaning and waste management, the image of urban space (on the CD).

- summary score: is an average of forming evaluations for text and drawing elaboration and author's

Conditions for passing and method of project evaluation. An important criterion for the projects evaluation is an approach method to the following issues:

Partial reviews checking the progress of student work – positive assessments from reviews are necessary to credit the course.

Review 1.

Closing the stage of analyses: analyses on the scale corresponding to the topic.

Review 2.

Review of works progress on the design conception. Presentation of works progress in the drawing and text form (description on the board).

Review 3.

Review of works progress and/or defense in the groups. Design conception 1:1000, presented in the drawing and text form (description on the board).

Forming evaluation:

Partial reviews checking the progress of student work – presentation in the forum of group, joint discussion 2 reviews during semester; positive assessment from reviews is necessary to credit the course.

Summary score: final review at the last classes – projects exhibition and presentation of design solutions in the forum of group.

To get positive grade from course, student should meet the following conditions:

- design work has to be implemented according to above mentioned scope of development,
- the amount of absences may not exceed 30 % per semester,
- must be obtained the positive assessments from all reviews,
- final assessment is sum of grades from reviews, substantive and graphic value of project and activity during classes.

Final grading scale: 3,0; 3,5; 4,0; 4,5; 5,0

Course contents

- Genesis and development of basic elements crystallizing the urban space – square, street, urban planning quarter and basic city forming factors,
- Contemporary issues and elements of urban planning theory and future visions of urban complexes development in various scales,
- Formal and legal determinants of urban planning in the cities and communities,
- Basic instruments and tools of urban planning, urban standards and indicators and their role in designing the urban complexes,
- Tools and techniques of analyzing the urbanized space – Urban survey as a method of urban inventory of urban structures with their valorization,
- Modern methods of urban planning in creative approach to management of city space,
- Contemporary urban planning doctrines from Athens Charter, by the New Charter of Athens to the Charter of New Urbanism,
- Determinants and principles of dimensioning the urbanized space,
- Features, diversity and dependencies of functions in the city – living, trade and services, sport and recreation, work, transport,
- Basic elements of city engineering infrastructure,
- Greenery systems in the city in the ecology context,
- Engineering of communication systems in the city

Conceptual project of building development of selected area on the scale 1:1000 with designation for small housing complex with services, public space, greenery and communication.

Stage 1

Discussion of classes topics and selection of topic,
Functional inventory of area and locational orientation of selected project area,
Detailed analyses of selected city area. Compositional analysis, including: views analysis, dominants analysis. Analysis of areas with buildings and areas without buildings, greenery analysis, communication analysis, analysis of cultural values, economic analysis.

Stage 2

Development of graphics part in the form of project of residential complex with services:
View on the scale 1:1000 of project area taking into account the nearest spatial context, lot partition, contour of architectural facilities – view of roofs, existing and designing greenery: trees, shrubbery, squares, parks, wheel roads with parking spaces, pavements and foot-paths, disabled the traffic, foot and traffic lines, squares, places of services concentration, public spaces, manual drawing presenting

the development of conception and more important places in designing complex, computer visualization. Preparation of area balance. Graphical development of necessary elements of urban project, which specifically define adopted conception.

Stage 3
Graphical development any selected urban detail of interior with public nature, development of descriptive part showing main project assumptions.

Basic bibliography:

Borowski, K.: 2001, *Śródmiejskie transurbacje technologiczne*, Wydawnictwo Politechniki Poznańskiej, Poznań, ss. 144
Borowski, K.: 2003, „Urządzanie przestrzeni jako zagadnienie urbanistyczne, inwestycyjne i legislacyjne. Stan prawny na dzień 31 grudnia 2002 r." Politechnika Poznańska, Rozprawa Nr 375, Wydawnictwo Politechniki Poznańskiej, ss. 344, il.
Borowski K.: Indaganda i wskaźniki urbanistyczne. Z badań nad zbudową w kwartałach miasta Poznania. W: Planowanie przestrzenne miast i regionów, red. L.Zimowski. Ośrodek Wydawnictw Naukowych PAN, Poznań 1999.
Ast R.: Kształtowanie przestrzeni regionów i miast. Wybrane zagadnienia. Wydawnictwo Politechniki Poznańskiej, Poznań 2001.
Ast R.: Rozważania dotyczące teorii i fizjonomii układów przestrzennych. Postrzeganie przestrzeni przez architekta. W: Urbanistyczne instrumenty promocji inwestycji. Materiały międzynarodowych seminariów naukowych we Wrocławiu, Rokosowie, Poznaniu 1993-1995. Studioteka „ZARYSY", Politechnika Poznańska, Poznań 1996.
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Jastrząb T.: Przestrzenie publiczne we współczesnej urbanistyce i architekturze. Wydawnictwo Politechniki Poznańskiej, Rozprawa nr 381, Poznań 2004.
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Tołwiński T.: Urbanistyka, Tom I ("Budowa miasta w przeszłości"), Tom II ("Budowa miasta współczesnego"), Wydawnictwo Ministerstwa Odbudowy Nr 11, Warszawa 1948.
Zimowski L.: Modelowanie w teorii urbanizacji. Wydział Architektury Politechniki Poznańskiej, Poznań 2000.

Complementary bibliography:

Bogdanowski J.: Krajobraz miasta jako problem tożsamości i jakości życia. W: „Człowiek i środowisko", Kraków 1987.
Borowski K.: Przemiany urbanistyczne miast i regionów z szczególnym uwzględnieniem czynników prawno - organizacyjnych. W: Zeszyty Naukowe Politechniki Poznańskiej „Architektura i Urbanistyka", Zeszyt 3, Wyd. PP, Poznań 2002.
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Ostrowski W.: Wprowadzenie do historii budowy miast. Ludzie i środowisko. Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 1996, (wyd. 2, 2001).
Wallis A.: Miasto i przestrzeń. Warszawa 1977.

The workload of student		
Form of activity	**Hours**	**ECTS**
Total workload	143	6
Activities that require individual contact with the teacher	80	3
Activities of practical	63	3

Balance the workload of the average student

Form of activity	Number of hours
participation in lectures	30 h
participation in classes/ laboratory classes (projects)	45 h
preparation for classes/ laboratory classes	15 x 2 h = 30 h
preparation to colloquium/review	9 h
participation in consultation related to realization of learning process	6 x 0,5 h = 3 h
preparation to the exam	24 h
attendance at exam	2 h

Total workload of student: **6 ECTS credits** **143 h**

As part of this specified student workload:

- activities that require direct participation of teachers:

30 h + 45 h + 3 h + 2h = 80 h 3,3 ≈ 3 ECTS credits