



COURSE DESCRIPTION CARD - SYLLABUS

Course name

PLANNING AND MANAGEMENT OF SUSTAINABLE DEVELOPMENT OF TOWNS

Course

Field of study

ARCHITECTURE

Area of study (specialization)

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Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

I/1

Profile of study

general academic

Course offered in

Polish/English

Requirements

compulsory

Number of hours

Lecture

30

Laboratory classes

30

Other (e.g. online)

Tutorials

Projects/seminars

Number of credit points

4

Lecturers

Responsible for the course/lecturer:

dr hab. inż. arch. Robert Ast, prof. PP

Responsible for the course/lecturer:

prof. arch. Dimitrije Mladenović

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Prerequisites

- student has explicit, theoretically based knowledge including the key issues of sustainable development management of cities
- student has knowledge of development trends in contemporary theories of urban planning and spatial planning including strategic management as well as marketing and urban monitoring
- 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 and regions
- student has basic knowledge in the scope of fields of studies related to his/her field of study
- knows basic methods, techniques, tools and materials applied in the solving the designing and planning tasks in the scope of urban planning and spatial planning



- student can acquire information from field specific literature, data bases and other properly selected sources in Polish and English, can integrate and interpret the acquired information, as well as draw conclusions and come up with opinions supported with satisfactory reasons
- student can carry out critical analysis of the manner of operation and assess the existing solutions as regards the urban planning and spatial planning
- student can design the complex structures of urban complexes with centre forming and cultural nature
- student can carry out critical analysis of the manner of operation and assess - especially in relation to his/her field of study– the existing technical solutions, especially devices, facilities, systems, processes and services
- student can identify a design problem and on the basis thereof, can draw up specification of practical tasks in the scope of urban planning and spatial planning
- can work and cooperate in a team, assuming a number of different roles therein
- correctly identifies and solves dilemmas in the scope of various spatial solutions on the scale of various urban complexes
- student understands the need for lifelong learning; can inspire and organize process of learning other people
- student is aware of the importance of non-technical aspects and effects of design activities, in this impact upon the cultural environment and liability for environment affecting decisions

Course objective

The main objective of preparing the development program of selected city (complex spatial structure) is familiarize with determinants and problems related to development processes in spatial, social, economic and environmental aspect, but first of all to get the ability to realization of program and design works of urban complexes development with substantial degree of complexity.

The program is realized in the scope of urban planning, social and economic analyses and defining the program and spatial assumptions and creating the optimal conception of management and building development of area, including the principles of urban planning composition and forming optimal image of city as a competitiveness factor and public relation.

The program concerns the development conception of contaminated areas, postindustrial areas and spatial management of selected area in the space of city or commune, as multifunctional urban complex with various functional dominant: trade, business, culture, sport, entertainment, science, education etc.

The general conception is developed on the scale 1:1000 or 1:2000, with balance, sections, visualization, presenting the connections with urban context (basic board).



Detailed conception – of management and arrangement of selected crucial fragment of public space is developed on the scale 1:500 with visualization, perspective views, sections, facades and urban planning detail. Written program of development with social and economic substantiation is complementary element

Moreover the objective of the classes is:

- learning the contemporary issues and elements of sustainable development theory of urban planning complexes in various scales in the aspect of creating the design and planning documentation,
- practical knowing the issues of balancing the cities development on various levels, with particular emphasis of local level in the context of commune,
- learning the formal and legal procedure of implementation determinants of projects of cities and regions sustainable development in Poland,
- learning the basic instruments and tools using in procedure of sustainable development management of cities in the aspect of strategic management
- learning the tools and techniques of preparing the programs and projects of sustainable development management of cities including the techniques of social negotiation, urban marketing, social participation and public-private partnership,
- learning the practical methods of sustainable development management of cities in ecological and social approach to management of community area,
- learning the methods of preparing the documents supporting the city development - Local Program of Development and Revitalization, Program of Investment Tasks, Revitalization Program, Environmental report, Water use report, Feasibility Study, Study of Investment Absorption of area, Analysis of city investment climate and others.

Course-related learning outcomes

Knowledge

A.W2. urban design in terms of the development of tasks of various scale and complexity, in particular: building complexes, local spatial development plans, taking into account local conditions and connections;

A.W3. spatial planning and spatial policy tools;

A.W4. records of local spatial development plans to the extent necessary for architectural design;

Skills

A.U2. design a simple and complex urban complex;

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. formulate a critical analysis of the conditions, including the valorization of the land development and building conditions formulate conclusions for design and spatial planning, forecast the processes of transformations in the settlement structure of towns and villages, and predict social effects of these transformations

A.U5. evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks, typical for architecture, urban planning and spatial planning, and select and apply appropriate methods and tools in design;

A.U8. think creatively and act, taking into account the complex and multi-faceted conditions of design activity, as well as expressing own artistic concepts in architectural and urban design;

A.U9. integrate information obtained from various sources, formulate their interpretation and critical, detailed analysis and draw conclusions from them, as well as formulate and justify opinions and demonstrate their relationship with the design process, based on the available scientific achievements in the discipline;

A.U10. communicate with the use of various techniques and tools in a professional and interdisciplinary environment in the scope appropriate for architectural and urban design and spatial planning;

A.U11. work individually and in a team, including with specialists from other industries, and take a leading role in such teams;

A.U12. estimate the time needed to complete a complex project task;

A.U13. formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning;

A.U14. prepare architectural and construction documentation in appropriate scales in relation to the conceptual architectural design;

Social competences

A.S1. effectively use imagination, intuition, creative attitude and independent thinking in order to solve complex design problems;

A.S2. speak and presentat publicly;

A.S3. take the role of a coordinator of activities in the project process, manage work in a team and use interpersonal skills (resolving conflicts, negotiating skills, delegating tasks), comply with the rules of working in a team and take responsibility for joint tasks and projects;

A.S4. take 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:

Lecture:



Conditions for credit and evaluation method of project.

- Formative assessment:

text and drawing elaboration (homework for students) describing the selected issues of sustainable development management of cities; presentation of definition of basic concepts and process elements and structure of development management of city (assess skills of knowledge synthesis, use the professional terms and phrases, legibility of drawings, ideological schemas, proper selection of examples, illustrations and photos), A4 format, 3 pages.

- formative assessment: author's multimedia presentation on given topic (homework for students team consisting of several people) – selected elements of sustainable development management of city (on the CD).

- summative assessment: is an average of forming evaluations for text and drawing elaboration and author's multimedia presentation, including attendance at lectures and involvement assessment.

Classes:

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

Partial reviews checking the progress of student work – positive assessment for review is necessary to credit the course.

REVIEW:

Closing the stage of analyses. Analyses on scales corresponding to the topic.

Review of work progress on program conception of development strategy of selected city. Presentation of works progress in the drawing and text form (description on the board).

FINAL REVIEW:

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

Formative assessment:

Partial reviews checking the progress of student work – presentation in the group, joint discussion; 1 review during semester; positive assessment from these parts is necessary to credit the course.

Summative assessment:



Final review at the last classes – projects exhibition and presentation, which authors present the adopted program and design solutions in the 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 number of absences may not exceed 30 % per semester,
- must be obtained the positive assessments for all reviews,
- design work must be developed graphically in readable, aesthetic and innovative manner,
- final assessment is a sum of grades for reviews, substantive and graphic value of project and activity during classes.

Programme content

Lecture:

- Contemporary issues and elements of theory of sustainable development of urban complexes in the district, city and region scale,
- Selected issues of urbanization in the context of globalization and local policy,
- Competitiveness as a strategic potential of urban space and institutions,
- Strategic planning and management in the aspect of administration in architecture, urban planning and spatial planning,
- Organisation of investment processes according to public-private projects,
- The issues of balancing the cities development on the national, regional and local level,
- Formal and legal determinants of sustainable development of cities and regions in Poland and European Union,
- Basic instruments and tools of management of sustainable development of cities in aspect of strategic management,
- Tools and techniques of management of sustainable development of cities, including the techniques of urban marketing, social participation and public-private partnership,
- Modern methods of management of sustainable development of cities in the ecological and social approach to management of commune area,
- Learning the contemporary examples of cities development, which are managed with using the methods of sustainable development,



- Planning documents supporting the city development – Local Programs of Development and Revitalization, Investment Works Programs and others.

Classes:

Analyses of planning and development documents of city / commune:

Feasibility study of the local area urban planning, local area plans, Local Program of Development and Revitalization, Program of Investment Tasks, Revitalization Program, Environmental report, Water use report, Feasibility Study, Study of Investment Absorption of area, Analysis of city investment climate, Budget of city and commune, Multiannual Investment Plan and others.

Study part

Analyses of selected area on the scale 1:1000 or 1:2000, including:

- connections and communication availability
- functional inventory with indication of main functions and more important architectural facilities
- cultural values – monuments
- natural values – greenery with various functions

compositional and landscape values of place with surrounding: points, axes and scenic lines, dominants, accents, specific positive and negative characters

-crystallization and integration of area with main public spaces (squares, streets) of city

Valorization of selected strategic area – assessment of existing resources, identification of leading factors of development, drawing up conclusions and determine the main assumptions of city and commune development.

Determination of general goals of project:

- improvement of spatial order
- improvement of living quality of residents thanks to creation of new, attractive spatial form with multifunctional nature, which will help to meet the diverse needs of users and residents of the city.

Design part

Work on the design conception of urban planning and architectural complex on the analyzed area, creating the functional and spatial program of urban complex with center forming nature or culture forming nature or recreational and sports nature.



Determination of dominant function of complex (trade, business, services, culture, education, recreation, sport etc.) and complementary functions (e.g. gastronomy).

Creating the program of transformations or renovation of studied area, taking into account the existing determinants as well as functional and spatial connections with environment. Designing and creating conception based on principle of sustainable development, which including: spatial, social and economic aspects.

Basic board:

- location conception of complex function on the scale 1:1000 or 1:2000
- proportional surface balance of designed function
- relations between built spaces and unbuilt spaces – attractiveness degree of public spaces,
- building development project of area: architectural facilities, spaces of squares and streets, green areas
- axonometric view of whole complex structure
- perspective views of specific place of complex from the position of man (entry, climax, output) in respect to “architectural road” of man, moving around the center.

Urban planning project of realization on the scale 1:500 of selected fragment of developed complex with marking:

- presentation of conception in the third dimension in the form of: model, axonometry, visualization,
- presentation of manual design sketches with written commentary, documenting the development of conception,
- types of greenery (trees, shrubbery, grass, flowers),
- urban planning detail and elements of small architecture (benches, waste-paper baskets, pergolas, fountains).

Teaching methods

1. Lecture / problem session / lecture with a multimedia presentation.
2. Design classes

Bibliography

Basic

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Additional

Albrow M.: The Global Age. Stanford 1997.

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Breakdown of average student's workload

	Hours	ECTS
Total workload	90	3,0
Classes requiring direct contact with the teacher	60	2,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) ¹	30	1,0

¹ delete or add other activities as appropriate