

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

**O. M. BEKETOV NATIONAL UNIVERSITY
of URBAN ECONOMY in KHARKIV**

METHODOLOGICAL RECOMMENDATIONS

for independent work on the discipline

«FUNDAMENTALS OF URBAN PLANNING»

*(for 2-nd year foreign students of full-time education,
educational specialty 191 – Architecture and urban-planning)*



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Methodological recommendations for independent work on the discipline «Fundamentals of urban planning» (for 2–nd year foreign students of full-time education, educational specialty 191 – Architecture and urban planning) / O. M. Beketov National University of Urban Economy in Kharkiv ; L. Martyshova. – Kharkiv : O. M. Beketov NUUE, 2021.– 15 p.

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CONTENT

| | |
|---|----|
| INTRODUCTION..... | 3 |
| 1 INFORMATION SCOPE OF THE COURSE..... | 5 |
| 2 REQUIREMENTS FOR COMPLETION OF TASKS..... | 7 |
| 2.1 Independent work | 7 |
| 3 GRAPHIC TASKS FOR INDEPENDENT WORK..... | 14 |
| 3.1 Distribution of points received by students | 10 |
| LIST OF RECOMMENDED SOURCES..... | 11 |

INTRODUCTION

Purpose, subject and place of the course

The purpose is to form a theoretical foundation of general training of a student-architect, which is based on the formation of a systematic idea of the basics of urban planning, presenting urban planning as a form of artistic and practical creativity, introducing aesthetic and regulatory and technical criteria for urban development.

Tasks of studying the discipline:

- determining the place of urban art in urban development and awareness of it in the historical perspective;
- understanding the relationship between urban planning and the development of civilization in different historical periods;
- acquaintance with the most important ideas of town-planning and to explain their origin;
- acquaintance with the thinking of historians and explain the need for historical research in the design process;
- to understand urban planning not only as a planning activity, but also as a set of various problems that are solved by the joint efforts of designers, entrepreneurs, government and citizens.

As a result of mastering the discipline the student must:

- be able to: work with materials on the history of the city; operate with the terminological apparatus of the basics of urban planning, sufficient to understand the processes of urban development; see the relationship between urban planning, economics, politics, city government and other issues related to them;
- have an idea of: the most important artistic ideas and the basic set of aesthetic means of urban planning; stylistic and artistic features of architectural monuments and urban planning of epochs and regions;
- be aware of the need for an interdisciplinary approach and teamwork with specialists in related fields;
- know: regulatory requirements and design features of urban development facilities; the most famous and significant projects and urban ensembles, important

for understanding the peculiarities of the formation of the environment and the image of the city, as well as its perception in different periods and in different cultures; key urban concepts and theories of different eras.

The form of final control of academic success is an exam

Means of diagnostics of learning success – Graphic tasks for independent work: execution of drawings, schemes, text part (annotation).

Teaching methods. Verbal, visual, practical. Analytical and synthetic. Productive (research) and reproductive (explanatory-illustrative). Summarizing lectures, asking questions, independent work.

Control methods. Monitoring student activities. Oral interview (individual). Written control (text part to graphic works (abstract)), execution of KKR. Graphic tasks (drawings, diagrams, plans). Final control – exam.

1 INFORMATION SCOPE OF THE COURSE

MODULE 1. Fundamentals of urban planning

Content module 1. Settlement and development of settlement systems.

Theme 1.1 Introduction to urban planning. Basic concepts, goals and objectives of the course.

Theme 1.2. Settlement systems. Features of urban design.

Theme 1.3. General plan of the city. Typology of cities.

Theme 1.4 Transport infrastructure and city-forming systems.

Content module 2 Functional and planning organization of the city.

Theme 2.1. Architectural and spatial composition and planning structure of the city.

Theme 2.2. Functional structure of the city.

Theme 2.3. The residential territory of the city.

Theme 2.4. Industrial area of the city.

Theme 2.5. The system of the public city spaces.

Theme 2.6. Landscape and recreational areas of the city.

Content module 3. Planning and development of residential areas.

Theme 3.1. District planning is a means of urban planning.

Theme 3.2. Residential district.

Theme 3.3. Microdistrict.

Theme 3.4. Residential group.

Theme 3.5. Residential complex and residential section.

2 REQUIREMENTS FOR COMPLETION OF TASKS

Graphic tasks on the topics of lectures should be performed manually carefully and precisely on the structure of questions, clearly, on a large scale and accurately.

The main component of graphic works is the analysis and conscious reflection of urban objects and their elements, landscape features and spatial elements of the structure of urban complexes and ensembles with a certain generalization or schematic.

It is important to have a text part (annotation), which reveals and complements the work theoretically, reveals the student's understanding of the essence of the task. All text inscriptions are executed accurately, manually, in an architectural font. Compositionally, the text should be consistent with the drawings.

The work is performed by the student on A3 format papers in a graphic manner (ink and pen, liner or felt-tip pen, gel or ballpoint pen). Each work must have a number and a formulated theme of the task, be signed by the student, indicating the group and name.

2.1 Independent work

Table 1 Organization structure of tasks for independent work

| № | Theme names | Number of hours |
|--|--|-----------------|
| Content module 1 Settlement and development of settlement systems | | 7 |
| 1 | Introduction to urban planning. Basic concepts, goals and objectives. | 1 |
| 2 | Settlement systems. Features of urban design. | 2 |
| 3 | General plan of the city. Typology of cities. | 2 |
| 4 | Transport infrastructure and city-forming systems. | 2 |
| Content module 2 Functional and planning organization of the city | | 18 |
| 5 | Architectural and spatial composition in planning structure of the city | 3 |
| 6 | Functional structure of the city. | 3 |
| 7 | The residential area of the city. | 3 |
| 8 | Industrial area of the city | 3 |
| 9 | The system of the public city spaces. | 3 |
| 10 | Landscape and recreational areas of the city | 3 |
| Content module 3 Planning and development of residential areas | | 20 |
| 11 | District planning is a means of urban planning. | 4 |
| 12 | Residential district. | 4 |
| 13 | Microdistrict | 4 |
| 14 | Residential group | 4 |
| 15 | Residential complex and residential section | 4 |
| Final control | | 15 |
| Total | | 60 |

3 GRAPHIC TASKS FOR INDEPENDENT WORK

Task 1.

Draw: examples of group and regional settlement system.

Graphically identify the main elements (schematically, conditionally).

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper.

Task 2.

Draw: two examples of city general plans.

Graphically mark the reserve areas for the long-term development of the city.

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Task 3.

Draw: two examples of urban transport infrastructure.

Graphically identify elements of the service system and the main engineering elements of the city's infrastructure.

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Task 4.

Draw: two examples of architectural and spatial structure of cities.

Graphically identify the main nodes and connections of the elements of the architectural-spatial structure.

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Task 5.

Draw: examples of functional zoning of the city.

Graphically indicate the requirements for the location of functional areas of the city (schematically, conditionally).

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Task 6.

Draw: two examples of the city residential territory decision with designation.

Graphically identify functional areas and main planning elements.

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format pap.

Task 7.

Draw: two examples of the cities industrial zone solution.

Graphically identify urban planning requirements and required distances.

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Task 8.

Draw: three examples of different types of community centers (public, transport and communication, multifunctional).

Graphically identify urban and spatial elements (schematically, conditionally).

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Task 9.

Draw: two examples of landscape "green" framework of cities.

Graphically identify the types and categories of territories.

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Task 10.

Draw: an example of a residential area.

Graphically identify service areas and radii of possible service.

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Task 11.

Draw: an example of a residential district.

Graphically identify functional areas, elements of the compositional structure and traffic-pedestrian scheme.

In the annotation to reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Task 12.

Draw: an example of a microdistrict.

Graphically identify functional areas, elements of the compositional structure and traffic-pedestrian scheme.

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Task 13.

Draw: an example of a residential group.

Graphically identify functional areas, elements of the compositional structure and traffic-pedestrian scheme.

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

Виконання: На аркушах формату А3 архітектурною графікою

Task 14.

Draw: examples of a residential complex and two different types of residential sections.

Graphically identify the characteristic specific elements that characterize the difference between them.

In the annotation reveal the characteristic features of the object.

Execution: Architectural graphics, on A3 format paper

3.1 Distribution of points received by students

| Current and semester certification and independent work | | | Final control (exam) | Sum (of points for all types of educational activities) |
|--|---------------------|------------------|-------------------------|--|
| Content module 1 | Content module 2 | Content module 3 | | |
| 20 | 25 | 25 | 30 | 100 |

LIST OF RECOMMENDED SOURCES

Material and technical and information support

Methodical support

1. Microsoft Teams command «Lectures of the discipline Fundamentals of Urban planning» on Distance site of NUUE [Electronic resource]. – Access mode: <https://teams.microsoft.com/l/meetup-join/19%3a43da4e1bc27a4d3dafce529567e77089%40thread.tacv2/1611608078421?context=%7b%22Tid%22%3a%22b4e18cf3-2cc0-446f-afb7-f3c65cf9d6d8%22%2c%22Oid%22%3a%22dbea4458-be49-44d0-ab89-97e5b8c47a6e%22%7d>

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Recommended literature and information resources

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