

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

**O. M. BEKETOV NATIONAL UNIVERSITY
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Methodological recommendations
for conducting practical classes and organizing independent work
on an academic discipline

**«ARCHITECTURAL DESIGN OF BUILDINGS AND STRUCTURES:
CAFE FOR 75–100 SEATS»**

*(for students first (bachelor's) level of higher education
specialties G17 – Architecture and town planning)*

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INTRODUCTION

The purpose of the discipline is to develop the students' skills of practical application of the methodology of architectural design of catering establishments, in particular cafes with 75-100 seats; mastering the skills of compositional thinking in shape formation, which are based on modern aesthetic and technological trends of sustainable development, regulatory documentation, mastering the skills of working with architectural structures, materials, furniture and engineering equipment; as well as understanding the role and responsibility of the architect in creating an artificial architectural environment for people's lives in the context of urban life.

During the work on the course project, students develop and master the skills necessary for the development of architectural projects in practice, in particular:

- general typological and structural spatial analysis of the object being designed with its characteristic typological and geographically determined features;
- analysis of the design situation with the creation of graphical analytical schemes and models for displaying its individual characteristics (transport and pedestrian traffic, functional organization of the territory, architectural and compositional characteristics, urban planning restrictions, etc.);
- synthesis of information about the features of the typology and situational context of the object to create a structure and develop a creative idea for a spatial planning solution for a cafe with 75–100 seats;
- development of consistent and comprehensive architectural solutions for the functional, structural and aesthetic formation of a catering establishment with the creation of relevant drawings of plans, sections, and facades;
- presentation of design solutions.

1 ORGANIZATIONAL AND METHODOLOGICAL RECOMMENDATIONS

The teaching methodology of the “Architectural design of buildings and structures: Cafe for 75–100 seats” academic discipline involves working in dialogue between the teacher and the students and is designed for 48 hours of practical classes, and 72 hours of independent work.

To help students understand the structure of the academic discipline and the connection between practical classes and independent work, the following section is presented in the form of structural and content table, which includes information about the content, structure and distribution of hours by topics and types of classes. The following sections provide general information on the design of catering establishments and practical recommendations for completing and presenting tasks on the design of cafe for 75–100 seats according to the modules of the academic discipline.

2 STRUCTURE AND CONTENT OF PRACTICAL CLASSES

The organization of practical and independent work is meant to create conditions for students to gradually acquire knowledge, skills, techniques, and methods for developing an architectural design object. For each topic, the teacher conducts practical classes (Table 1), in which he develops the skills and abilities of students to practically apply certain theoretical provisions of the academic discipline through individual completion of grapho-analytical tasks.

Table 1 – Organizational structure and content of practical classes

Theme	Topics, content and methodological guidelines for conducting practical classes	Number of hours
1	2	3
Content module 1 Pre-project analysis of the design site		
Theme 1 Methodology for designing catering establishments	The methodology for designing catering establishments is determined. Analogues of the design object – a cafe for 75–100 seats – are analyzed	5

Continuation of table 1

1	2	3
Independent work	Study of literature, information resources and regulatory documents on a given topic. Search and processing of materials for the assigned essay. Preparing the «Café for 75–100 seats» essay (written control)	5
Theme 2 Architectural and landscape design of the territory of a catering establishment	The main factors influencing the formation of catering establishments are being studied. A pre-project analysis of the site for design is being carried out	5
Independent work	Development of analytical schemes regarding urban planning restrictions and features of the selected design site. Design of the album of graphic works № 1 based on the results of the practical class, taking into account the teacher's comments – A3, A4 format, pdf (graphic control)	4
Theme 3 Development of a master plan of a cafe for 75–100 seats	Regulatory requirements for master plans of the design site, transport and pedestrian connections, functional zoning and subject content of the territory are being studied. A master plan for the territory of a cafe for 75-100 seats is being developed	6
Independent work	Analysis of literature on the topic; design of a schematic master plan based on the results of the practical class, taking into account the teacher's comments (graphic control) Design of the album of graphic works № 1 based on the results of the practical class, taking into account the teacher's comments – A3, A4 format, pdf (graphic control)	5
Content module 2 Functional-planning and spatial solution of the cafe for 75–100 seats		
Theme 4 Spatial solution of a cafe for 75–100 seats	The features of the formation are analyzed and a spatial solution of a cafe for 75–100 seats is developed	5
Independent work	Analysis of literature on the topic; design of the album of graphic works № 2 based on the results of the practical class, taking into account the teacher's comments – A3, A4 format, pdf (graphic control)	5

Continuation of table 1

1	2	3
Theme 5 Functional and structural solution of a cafe for 75–100 seats	The peculiarities of the technology of functioning of catering establishments are studied. The structural system of the designed establishment is determined. Plans of a cafe for 75–100 seats are developed	6
Independent work	Analysis of literature on the topic; design of the album of graphic works № 2 based on the results of the practical class, taking into account the teacher's comments – A3, A4 format, pdf (graphic control)	5
Theme 6 Compositional techniques for designing a cafe for 75–100 seats	Compositional design techniques to create a distinct artistic image of a catering establishment are studied. Facades of cafe for 75–100 seats are developed	5
Independent work	Analysis of literature on the topic; design of the album of graphic works № 2 based on the results of the practical class, taking into account the teacher's comments – A3, A4 format, pdf (graphic control)	4
Content module 3 Development of the interior space of the cafe		
Theme 7 Spatial interior design of the dining hall of a cafe	Methods and techniques of organizing interior space in accordance with the requirements of function, design, ergonomics and creating a barrier-free environment are studied. Sections of a cafe for 75–100 seats are developed	8
Independent work	Analysis of literature on the topic; design of the album of graphic works № 3 based on the results of the practical class, taking into account the teacher's comments – A3, A4 format, pdf (graphic control)	14
Theme 8 Compositional techniques for designing the interior of a cafe for 75–100 seats	Study and application of compositional techniques for interior design to create a distinct artistic image of the interior of a cafe for 75–100 seats	8
Independent work	Analysis of literature on the topic; design of the album of graphic works № 3 based on the results of the practical class, taking into account the teacher's comments – A3, A4 format, pdf (graphic control)	15

Conclusion of table 1

1	2	3
	Design of the graphic exposition of the project – 1–2 A1 sheets or a whole sheet of equivalent area (graphic control)	
Final semester control		15
Total hours		120

3 GENERAL RECOMMENDATION FOR THE DESIGN OF CATERING ESTABLISHMENTS

3.1 Types of catering establishments and their characteristics

Catering establishments are the most important element of the system of commercial services for the population. They are located in places of work and education, in residential areas and recreational areas.

Such enterprises can be designed as part of public and commercial centers, built-in or attached to buildings of other purposes, or as separate objects. The current task involves mainly the last option.

Different types of catering establishments – canteens, cafes, restaurants, diners – differ primarily in terms of the organization of catering, that is, in terms of the diet, the range of dishes and the system of serving visitors.

Canteens are the most widespread type of catering establishments, producing mainly mass-market dishes. Canteens can be of general type or specialized, including diet, children's, etc. They provide visitors with a full ration – breakfast, lunch and dinner. As a rule, they use a self-service system.

Cafes can be of general type or specialized. The assortment of cafe includes a variety of hot and cold drinks, dairy products, confectionery, as well as broths, as well as hot and cold snacks of simple preparation. Evening cafes present a special

variant with an expanded assortment of dishes, which include fruits, dessert drinks, wines and dishes of more complex preparation.

Restaurants differ from other catering establishments by a higher level of comfort. Visitors to restaurants are served a wide range of lunches and dinners, including dishes prepared by visitors' requests, as well as culinary or confectionery products. The restaurant's assortment includes a wide range of wines and other alcohol products, fruits, dessert drinks, ice cream and tobacco products. Service and payment in restaurants are carried out by waiters.

Diners are designed to quickly serve visitors, mainly with cold and hot snacks, as well as lunches consisting of two or three dishes of first and second courses. The menu of specialized diners also includes confectionery and drinks (the latter in a smaller assortment than in cafes).

Bars are similar in assortment to diners or cafes, but differ in the method of service.

Buffets are branches of canteens and restaurants that sell ready-made products: sandwiches, bakery and confectionery products, hot and cold drinks.

Canteens, cafes, restaurants and buffets can be independently located, or placed as an important part of larger buildings for various public purposes. Differing primarily in the range of dishes, service system and level of comfort provided, each of the main types of enterprises (restaurant, canteen, cafe, etc.) differs in its location. It determines the goals and nature of visiting the establishment.

According to their place in the system of serving the city's population, catering establishments can be divided into:

- closed-chain canteens, cafes and buffets at higher educational institutions, business or administrative institutions, industrial enterprises, which are designed for daily visits by a permanent contingent of visitors;
- open-chain cafes, diners, restaurants and bars in city centers, recreation areas, sports complexes, train stations, hotels, etc. – in or near the large places of gathering of people, the interest and visits of which the establishments should attract.

3.2 Spatial planning solutions of catering establishments

According to the methods of their placement, catering establishments are divided into separately situated, blocked, cooperative or built-in.

A characteristic feature of the architecture of public catering establishments (as well as other public buildings) is their complex utilitarian, aesthetic and socio-cultural significance. Their architectural, compositional and spatial planning solutions must correspond to their functional purpose, location and urban planning significance in the system of urban development and natural environment, as well as the social significance of these structures in the life and leisure of people. They must take an active part in the formation of urban ensembles or commercial centers. Location options for catering establishments in recreational areas and residential areas require special attention to the attractiveness of their environment for people to stay – which determines special requirements for the expressiveness and character of their image. The approach to the architecture of public catering establishments as a tool for forming spaces for people to live in in the context of their urban life reflects modern trends and views on the formation of public buildings as an environment of urban life. As such, they are understood as a product of the mutual influence of a person and their environment, an attractive «place» both for its main function and for socialization and other types of human activity.

The basis of the composition is determined by the chosen method of mutual arrangement of public and non-public groups of premises, as well as the number of storeys of the building. In this case, the placement of the main groups of premises and their constituent elements is determined by the functional purpose of each of them in accordance with the adopted spatial scheme of the building, its number of storeys, configuration of plan, etc.

The spatial and planning composition of catering buildings is primarily determined by the conditions of rational interconnection of the dining hall of the cafe with the kitchen block and utility rooms.

The following general requirements are imposed on architectural and planning solutions for catering establishments of all types:

- placement of public and non-public groups of premises in accordance with the adopted spatial and planning structure of the building (single-story or multi-story) and also taking into account the technological features of each group;
- mutual arrangement of the main groups of premises should provide the shortest interconnections and a clear solution without crossing the flows of visitors and personnel, clean and unwashed dishes, semi-finished products, raw materials and waste;
- creation of a compact structure of the building with isolation (without capital partitions) of public and non-public premises, as well as with the possible transformation of the building in line with changes in production technology.

Compositional schemes of public catering establishments:

The centric scheme has a shape close to a square or round in plan, with the location of non-public premises in the center of the building, and dining halls with distribution rooms placed around the production premises. According to this scheme, catering establishments with several halls (general type, dietetic, diner, etc.) can be organized. This scheme provides the greatest economic effect with a dining hall capacity of 200 or more seats.

The frontal scheme is characterized by the location of public premises along the longitudinal axis of the building parallel to non-public premises. The building is distinguished by an elongated shape of the hall and a longer chain of the technological process.

The deep scheme is characterized by placing the kitchen group at the end of the dining hall.

The corner scheme is characterized by placing the kitchen group at the corner of the plan so that its two sides adjoin the dining area. This layout is suitable for establishments with 200 or more seats with several separate dining halls.

3.3 Functional zoning and requirements for the design of individual groups of premises in catering establishments

The functional scheme of a catering establishment should be formed with a clear structural logic and not allow the intersection between the flows of visitors and staff, clean and used dishes, as well as the movement of raw materials, semi-finished products, finished products and waste. At the same time, the layout of the main groups should be solved compactly, ensuring the necessary isolation of public and non-public premises. This allows to avoid the penetration of kitchen odors into the dining rooms, maintain the appropriate temperature and humidity regime in each group of premises and meet the requirements for the comfort of both visitors and employees.

The composition of the production premises of the kitchens depends on the nature of production (based on raw materials or semi-finished products). The composition of the premises for visitors depends on the type of enterprise and the form of service provided.

The following main groups of premises can be distinguished by their functional purpose:

- premises for visitors – retail premises (dining halls, buffet, lobby with a cloakroom/wardrobe, bathrooms, premises for delivering meals to home and cooking shop);
- production premises – kitchens (hot and cold shops, product processing shops (vegetable, meat and fish, confectionery, pie), bread slicing room, tableware washing room and kitchenware washing room);
- storage premises – loading room, pantries for dry products, vegetables, inventory, linen and containers, cooling chambers;
- administrative and general staff premises – accounting office, director's office, staff room, restrooms, showers, sanitary facilities;
- technical premises – ventilation chambers, switchboard, heating unit, air conditioners.

3.4 Requirements for the organization of the territory of catering establishments

In general, the area of the catering establishment is divided into two zones: a zone for visitors and a utility zone, with access roads and unloading areas.

The features of the surrounding area are of great importance for the design, construction and operation of the catering establishment. They can be situated on residential streets, within the territories of microdistricts, at intersections of highways, near transport stops, as well as in recreation areas and on the routes of pedestrian traffic.

For establishments located on the perimeter of the city block, corner plots and in the depths of the development, the organization of the site is divided based on functional zoning into two parts: the zone of the establishment building with the territory intended for additional seasonal outdoor seating (if necessary), and the zone of utilitarian purpose with auxiliary and technical structures. The main building is placed on the best part of the site in terms of sanitary and hygienic conditions, microclimatic conditions, insolation, aeration and protection from external conditions, as well as with green spaces, which is especially important in the southern regions.

For the placement of utility structures, a section of the utility zone with a utility yard is allocated. For catering establishments located on plots free from development, internal utility yards should be organized. This solution ensures the visibility of all facades of the building with isolation of the utility zone of the plot.

It is advisable to arrange the entrance to the territory of the utility yard from a secondary street. The plot may have a dead-end entrance or a through passage. In the case of a dead-end entrance, roads with loop detours or with platforms that provide a turn for cars are arranged near the utility yard. In the case of a through passage, separate entrances to the territory and exits from the territory are provided.

The land plot should be clearly zoned with the allocation of following zones: a zone for visitors, with a platform for seasonal placement of additional tables in the open air if necessary; a utility zone, which may include a utility yard with access

roads for trucks, an unloading area adjacent to the group of storage premises of the building, a garbage collector, a recreation area for personnel; parking area for individual transport. When designing built-in and attached premises of catering establishments, it is necessary to separate the adjacent territory of a residential building and the territory of the establishment.

The site of the catering establishment should include driveways, walkways, artificial lighting, and landscaping. The overall master plan should emphasize the accessibility and attractiveness of the proposed public spaces, as well as support and emphasize the architectural and artistic image of the catering establishment.

4 PRACTICAL RECOMMENDATIONS FOR COMPLETING AND PRESENTING THE TASKS ON THE PROJECT OF CAFE FOR 75-100 SEATS

4.1 Pre-project analysis of the design site

Analysis of a site provides basic information on the spatial and architectural context of the situation, along with its design limitations, a basic set of information that, together with the typological features of the structure, greatly assists in finding a future design solution.

Situational scheme. This scheme highlights the location of the design site in the structure of a city or district in a distinct color. This allows the viewer to get a preliminary idea of the general context of the location of the project, its placement in relation to existing urban districts and highways, and its connection with the urban environment.

Functional analysis scheme. On this and the following schemes, the design site should be highlighted by marking its boundaries with a contrasting color (e.g., red). This scheme, in particular, indicates the main functional zones of the surrounding development, denoted with a transparent fill of different colors that correspond to specific functions (residential, public, cultural, educational, utility and warehouse,

etc.). This helps in understanding the use of the surrounding territories and the validity of the functional logic of placing the design object in these surroundings.

Transport and pedestrian traffic analysis scheme. It should highlight the main roads in the surrounding areas with an indication of the traffic intensity (for this, different shades of the same color can be used, corresponding to different hierarchic levels of roads – urban highways, streets, thoroughfares, etc.) The scheme should also reflect the nature of pedestrian traffic, indicating its more and less intense routes utilizing a different color and its shades. Additionally, the main public transport stops (bus, tram, metro, etc.) are indicated on the diagram using the appropriate symbols.

Urban morphology analysis scheme. It primarily highlights the main architectural volumes of the surrounding development, indicating their number of floors via different colors (with a corresponding explanation in the symbols). Additionally, prominent architectural examples of the surrounding development may be indicated, if available and with an expected impact on the architectural solution of the designed object (accompanied with the photo-fixation of their exteriors in the urban development).

Compositional analysis scheme. It reflects the main features and patterns of the surrounding development, which can influence the formation of the designed object – information that forms the basis for developing a compositional solution for the object. Usually, such patterns can be conveyed through the main directions of perception of the site and the designed object, compositional axes determined by the morphology of the natural and built environment, as well as design restrictions of the territory (e.g., the sanitary protection zone of the river, if present). The features of the perception of a site can be schematically indicated using the main points of perception, directions of perception, fronts of perception (highlighting the sides of the site with special visual significance) or fields of perception (zones from which the site and object can be perceived). One or more of these ways can be chosen to show the features of the perception of a site, based on the specifics of its visual disclosure.

The schemes are accompanied by **photo fixation** – several photographs of the existing state of the natural and built environment at the design site and adjacent territories, which also reflect the main angles of its perception.

Master plan. Based on the analysis of the territory, the compositional scheme in particular, the basic concept of the placement of the volumes and use of the territory of the cafe is formed, which is recorded as the preliminary master plan solution.

Additionally, in the course of the work on the first module, an analysis of prototypes of cafe solutions selected by the student as relevant to the task is performed. Its results are presented as a «**Cafe for 75–100 seats**» essay.

The structure of the essay should correspond to the contents and provide for the sequential disclosure of the following content blocks:

- an introduction containing general typological information about public catering establishments, along with a general justification of the relevance of the cafe as a design object;
- an analysis of 2–3 prototypes illustrating the modern experience of cafe design, which allows identifying the main approaches to the formation of the object, clarifying its functional composition, distinguishing the main and additional functions and determining their impact on the organization of the architectural object;
- a reference list, which should be drawn up in accordance with DSTU 8302:2015 in the language of each original source, and presented in the form of a numbered list;
- graphic materials (schemes, figures, tables), which should be numbered, have descriptions and be placed after the first reference to them in the text or included in separate appendices (Appendix A, Appendix B etc.). Descriptions are given in Times New Roman font, 14 pt.

Presentation of results for the first module.

The main result of the work on the first module is an **album of situation analysis schemes**. It consists of a situational scheme, a functional analysis scheme, a transport and pedestrian traffic analysis scheme, an urban morphology analysis

scheme scheme and a compositional analysis scheme of the design site. This album ends with a schematic solution of the master plan of the designed object at the present stage, which shows its spatial concept of the placement of volumes and use of the territory.

The album of graphic tasks (clauses) consists of sheets of A4 album format. The title page indicates the name of the album and the name of the author. On the sheets of the album, the name of the image and the page number must be indicated at the top. Each individual scheme, drawing and image must have a title in accordance with the content of the graphic task. The schemes must be accompanied by an explanation (legend) of the symbols used.

The volume of the «**Cafe for 75–100 seats**» essay should include at least 5–10 printed sheets of A4 format, using Times New Roman font, with 14 pt. size and interval of 1,5. The sheets should be numbered at the bottom in the center of the page. The title page should be designed according to the example shown in the Appendices (Appendix A). The main text should correspond to the table of contents. The table of contents of the essay should indicate the initial pages of all its sections. The essay should include illustrative material on the topic of its sections – images, drawings, schemes, tables, etc.

4.2 Functional-planning and spatial solution of the cafe for 75–100 seats

The main task when developing the planning solution of a cafe is the rational distribution and mutual arrangement of two large functional groups – premises for visitors and the production area of kitchens, storerooms and personnel premises. These two groups need to be arranged in such a way as to simultaneously ensure the necessary isolation of processes and traffic flows through them, provide the continuity of internal technological chains of the premises, as well as support the general architectural and spatial aesthetic design of the exterior and interior of the cafe. The main options for the relationship between public (commercial) and technological production (non-commercial) premises are presented in Section 3.2,

while the general logic of the functional solution of the cafe is described in Section 3.3. Accordingly, this section will provide the practical recommendations for organizing the layout and combinations of premises according to the main functional groups.

The premises for visitors provide the most representative part of the internal spaces and external volumes of the cafe – they will become the basis for the further task of developing an interior solution. Accordingly, their planning and spatial characteristics are designed with necessary compositional expressiveness, which will ensure the formation of expressive interiors. The premises for visitors are publicly accessible and contain the most spacious rooms with the most freedom in the design of their forms (dining halls). These premises create the main aesthetic impression for visitors – forming their perception of the atmosphere of being in the cafe and general impression of a visit to a catering establishment. In addition to the main dining hall, the premises for visitors provide an adjacent group of bathrooms, including special bathrooms for people with limited mobility, and may also contain a lobby, a cloakroom, a separate banquet hall and adjacent external open-air dining areas.

The production premises of the kitchens contain the most important technological chains for the function of the cafe. The entire group should be organized in such a way that the production flows inside would not intersect with the flows of visitors in the public (commercial) area, nor with the flows of personnel from the service entrance to the showers and cloakroom, as well as the movement of goods from unloading area to the storerooms, thus forming its own “clean” zone. Inside the production block, the main kitchen premises (hot and cold shops, as well as additional specialized shops if available) should be provided with external lighting via windows and a compact spatial grouping, together with the direct access to the kitchenware washing area. They also need to be provided with a convenient and quick delivery of products from the storage area and the transfer of the dishes to the distribution group of premises.

The distribution group of premises consists of a preparatory shop, a bread slicing area, a plate serving room and a dish distribution room. It should be located

next to the dining premises (specifically, the dish distribution room should have a convenient exit to the dining hall), often next to the bar counter inside the hall. This group should also have direct access to the tableware washing room (next to the plate serving and dining rooms). Tableware and kitchenware washing rooms should be located nearby, if possible, to ensure convenient use of water supply and drainage systems, but the need for proximity to the corresponding functional groups of kitchens and dish distribution may require their separate location - in this case, they are spatially grouped with other rooms that use water supply (bathrooms or showers).

The storage premises are usually placed at the opposite side of the building volume relative to premises for visitors. They are situated closest to the utility yard, next to which the unloading of products is organized through a separate entrance into a corresponding area inside. The products are then distributed to specialized storage rooms, such as a dry goods pantry, freezer chambers, etc., using a service corridor or corridors. Storerooms should be located in such a way that they border, but do not intersect, with the area of the kitchen production premises. In this case, the corridors should be designed as compact as possible, focusing on the minimum need for access to the doors of the relevant rooms, no longer than necessary for the relevant connections. The freezer chamber for waste is also located in this area, close to the exit to the utility yard.

The staff premises should be located near the service entrance, which can be located next to the utility yard, or on the side facade, away from the main entrance (preferably with a convenient connection to the staff parking area in the adjacent territory). This functional group consists of a staff wardrobe (which can be used as a rest room), adjacent showers, as well as bathrooms, linen and inventory room. This zone actually serves as a barrier between the “clean” zone of the production premises and the external entrance, so it should be adjacent to the kitchens, but not intersect with them, except for the possibility of access inside by personnel after showers in a clean change of special clothes. The production manager’s office, in particular, should be located with convenient access to the kitchen area. The staff premises can also contain a service staircase and an elevator for access to other floors, if the cafe

solution involves more than one floor. It is worth highlighting the administration premises separately – they also use the service entrance (but may have their own), but are functionally connected to the premises of the public area, the access from which must be specifically organized. This group includes the offices of the accountant and the director, which must be provided with external lighting.

Technical premises, such as electrical equipment room and ventilation chambers, are located outside of public access, next to the storage area or personnel area, and do not require external lighting.

It is especially worth emphasizing the modern requirements for the organization of a **barrier-free environment** and the possibility of easy use of all cafe premises for people with disabilities. Ramps should be organized in places of different elevation, both inside the cafe and in the adjacent territory, while the access to the upper floors should be provided by elevators. Convenient bathrooms for people with limited mobility should also be organized in the cafe, and appropriate parking spaces should be provided by the master plan.

Presentation of results for the second module.

The result of the work on the second module is an album containing solutions for all plans with dimensions, axis markings and the arrangement of tables and main equipment, as well as solutions for the main facades (two or more).

The album of graphic tasks (clausures) consists of sheets of A4 album format. The title page indicates the name of the album and the name of the author. On the sheets of the album, the name of the image and the page number must be indicated at the top. Each individual scheme, drawing and image must have a title in accordance with the content of the graphic task. The schemes must be accompanied by an explication of the premises with an indication of the area of each.

4.3 Development of the interior space of the café

At this stage, sections are designed and the main spatial solution of the interior of the dining hall of the cafe is developed. It should satisfy the basic requirements of

comfort, create the necessary degree of coziness, and also form a characteristic memorable visual impression. It is important to choose a general theme and predict the impact of the interior design on the feelings and mood of visitors, which should be associated with the general theme, name and specialization of the cafe (if any), as well as the style of its exterior solution. This contributes to the integrity of the perception of the artistic image by visitors and helps to form the main character of their impressions of the establishment.

The basis for the interior design is provided by the expressive spatial composition of the dining hall and its configuration, which are formed at the stage of creating a functional solution. The placement and types of tables in the hall determine the nature of the movement of visitors, as well as the way of using different zones (as more massive, more cozy, etc.), and, accordingly, significantly affect the functional and spatial solution of its interior. Different zones inside the hall can have distinct unique designs within a common theme. Columns, elevators and stairs can be designed as expressive elements of the interior. Decorative sculptural elements, fountains and landscaping can also be actively used.

An entertainment area can be organized in the dining hall, including a stage or a dance floor. Such elements can serve as active elements of the composition due to their highly visible placement and unique architectural and design solution.

A complex section can contribute to the formation of an expressive interior – with its help, skylights, balconies and atriums can be added, and the hall can be connected with terraces at different levels. Different ceiling heights modify the impression of different parts of the hall, from majestic to cozy and comfortable, while different floor levels can help in the formation of different zones with a distinct aesthetic design. Views to the outside can also serve as expressive elements of the interior, visually including urban spaces into the field of perception of visitors inside

Presentation of results for the third module.

The result of the work on the third module is an album of graphic images including a three-dimensional interior solution (provided as one or more perspective images reflecting the internal environment of the dining hall and, optionally, other

spaces), as well as the main sections of the cafe (one or two, with at least one of them depicting a vertical solution of the main hall).

The album of graphic tasks (clausures) consists of sheets of A4 album format. The title page indicates the name of the album and the name of the author. On the sheets of the album, the name of the image and the page number must be indicated at the top. Each individual scheme, drawing and image must have a title in accordance with the content of the graphic task. The elevation marks are indicated on the sections. The drawings must be accompanied by an explanation (legend) of the symbols used.

4.4 Graphic design of the exposition and the defense of the project

At the final stage, the main architectural and planning solutions are finalized, the final version of the master plan is designed, the main three-dimensional exterior images are created, and an exposition of graphic materials on a sheet is formed that will represent the project during its defense.

Design of the graphic exposition of the project.

Exposition of graphic materials is developed taking into account the sequence of providing materials, which generally corresponds to the sequence of work on the project. The usual logic of perceiving a sheet is from the upper left corner to the lower right. First, a group of drawings and schemes related to the design site and its analysis is provided, followed by the master plan depicting the spatial and functional organization of the site. The schemes are provided in the scale of 1 : 2 000 or without scale, the master plan is presented in the scale of 1 : 500 or 1 : 1 000. The master plan and schemes should contain indication of the northern direction. The approximate center of the exposition is occupied by plans in the scale of 1 : 100 with explanations, as well as elevations in 1 : 100 (usually arranged sequentially in a line so that their elevation marks coincide) and sections in 1 : 100.

The main three-dimensional images of the exterior and interior of the building are placed closer to the lower right corner, but additional images can be located in

other places of the exposition. If there are several images, one or two are selected as the main ones and presented in a larger size, focusing the viewer's attention on important aspects of the solution. Plans, sections and elevations are usually presented in monochrome, therefore, colored three-dimensional images play an important role in the perception of the sheet as a holistic graphic composition. For additional expressiveness of the exposition, background effects (such as color fill or background images) can be used, but in such a way as not to interfere with the perception of the main drawings.

The exposition of graphic materials is performed on 1–2 sheets of A1 format (841 mm × 954 mm) or on a whole sheet of equivalent area. Each separate scheme, drawing and image must have a title according to the content of the graphic task.

5 CONTROL METHODS AND CRITERIA FOR ASSESSING LEARNING OUTCOMES

The main control methods for the academic discipline are:

1. Current control: written control (essays) and graphic control (albums of clauses completed during practical classes and independent work).
2. Module control: oral control (presentation and defense of albums of clauses by the stages of architectural design of buildings and structures).
3. Final semester control: differentiated credit (graphic design and defense of the general exposition of design solution).

Two components are objects of the assessment:

1. The quality level of the content of the practical task (text and graphic parts).
2. The quality level of the presentation of the practical task (report and answers to questions).

The assessment of the quality of the practical task is based on the following indicators:

- compliance of the content with the posed task and methodological requirements for its completion;

- degree of independence in solving the task, developing the project and making drawings;
- justification of solutions and consistency of results with modern standards of architectural practice;
- ability to use regulatory documents and literature, with references to sources;
- correct design of the abstract and graphic elements according to the State Standards of Ukraine (DSTU).

The quality of the defense is assessed according to the following criteria:

- informativeness of the report regarding the main results of the work;
- the structure and logic of the presentation of the material;
- justification of conclusions and proposals for practical implementation;
- use of professional terminology from the professional field and science;
- accuracy, detail and validity of answers to questions.

Module control is assessed according to a specific scale of levels with a maximum number of points provided by the module:

High level (tasks completed correctly).

Sufficient level (tasks completed with minor errors).

Average level (tasks completed with significant errors).

Initial level (tasks completed incorrectly).

Assessment criteria for final semester control (differentiated test)

Final semester control is in the form of graphic design and defense of architectural project (differentiated test) (Table 2).

Table 2 – Final semester control

Final semester control – differentiated test (graphic design and defense of the general exposition of design solution)	30
Graphic design of the general exposition of architectural project	20
Defense of architectural project	10

Assessment criteria on a 100-point scale

The results of studying the discipline are assessed according to the national (four-point) scale (excellent, good, satisfactory, unsatisfactory); 100-point system; unified (seven-point) rating scale – «excellent»(A), «good» (B, C), «satisfactory» (D, E), «unsatisfactory» (FX, F). The correspondence of score on a 100-point scale to the level of competence is given in Table 3.

Table 3 – Grading scale

100-point scale	Level of competence	Four-point/two-point scale	
		exam	test
90–100	high	excellent	passed
82–89	sufficient	good	
74–81			
64–73	average	satisfactory	
60–63			
35–59	low	unsatisfactory	failed
0–34			

90–100 points applicants receive for a high (excellent) level of knowledge (minimal inaccuracies are possible) of educational material of the educational component; the ability to analyze and use the acquired knowledge in decision-making in the relevant subject area, apply theoretical provisions when solving practical problems; clearly, succinctly, logically, consistently answer / solve the questions / tasks;

82–89 points applicants receive for a very good level of knowledge (a small number of inaccuracies is possible) of educational material of the educational component above the average level; reasoned answers / solutions to the questions / tasks, ability to apply theoretical provisions when solving practical problems;

74–81 points applicants receive for a generally correct (good) understanding of educational material of the educational component; answering / solving the questions / tasks and applying theoretical provisions when solving practical problems with certain (insignificant) shortcomings;

64–73 points applicants receive for mediocre knowledge of educational material of the educational component, poorly reasoned answers, the presence of errors in solving tasks, weak application of theoretical provisions when solving practical problems;

60–63 points applicants receive for weak knowledge of educational material of the educational component, inaccurate or poorly reasoned answers with a violation of the sequence of presentation, the presence of significant errors in solving tasks, weak application of theoretical provisions when solving practical problems;

35–59 points applicants receive for ignorance of a significant part of educational material of the educational component, significant errors in answers / tasks, inability to apply theoretical provisions when solving practical problems;

0–34 points applicants receive for ignorance of the main fundamental provisions of educational material of the educational component, inability to answer / solve the questions / tasks, inability to orientate in elementary ways when solving practical problems.

RECOMMENDED LITERATURE AND INFORMATION RESOURCES

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APPENDIX A

Example of a title page for an essay of School of AUPD of O. M. Beketov NUUE in Kharkiv

MINISTRY OF SCIENCE AND EDUCATION OF UKRAINE
O. M. BEKETOV NATIONAL UNIVERSITY
OF URBAN ECONOMY IN KHARKIV
School of Architecture, Urban Planning and Design
Department of Architecture of Buildings and Constructions

ESSAY
on the topic of
“CAFE FOR 75-100 SEATS”
for the discipline of “Architectural design of buildings and structures”, CM1

Completed by: student of 2nd year,

Group _____

Specialty:

G17 “Architecture and Construction”

(code and name of the direction of education, specialty)

EP “Architecture and Town Planning”

(code and name of the direction of education, specialty)

Full name

(last name and initials)

Checked by:

Full name

Full name

(last name and initials)

Kharkiv – O. M. Beketov NUUE – 2026

APPENDIX B

List of cafe premises (provided for a cafe for 75 seats)

Number	Name of premise	Size (minimal)	Unit of measuremen t
1	Master plan		
1.1	Car parking	50	cars
1.2	Parking lots for disabled people	1–5	cars
1.3	Open seating area for the cafe	varied	m ²
1.4	Utility yard 12x12 m (unloading area)	144	m ²
1.5	Greenery	varied	m ²
Total		2300	m ²
2	Cafe for 75 seats		
2.1	Dining hall	135	m ²
2.2	Hot shop (kitchen)	36	m ²
2.3	Cold shop (kitchen)	12	m ²
2.4	Bread slicing area	8	m ²
2.5	Preparatory shop	12	m ²
2.6	Tableware washing room	20	m ²
2.7	Kitchenware washing room	12	m ²
2.8	Plate serving room (dinnerware room)	9	m ²
2.9	Dish distribution room	18	m ²
2.10	Freezer chambers	9+6	m ²
2.11	Freezer for waste	4	m ²
2.12	Dry food pantries	12+9	m ²
2.13	Inventory room, washing for containers	9	m ²
2.14	Unloading room	12	m ²
2.15	Staff wardrobe	20	m ²
2.16	Linen room	6	m ²
2.17	Production manager's office	9	m ²
2.18	WCs for staff	18	m ²
2.19	Showers for staff	2x(4)	m ²
2.20	WCs for visitors	12	m ²
2.21	Storeroom	4	m ²
2.22	Director's office	9	m ²
2.23	Accounting office	9	m ²
Total		420 (+10–15 %)	m ²

32

APPENDIX D

Examples of interior design solutions for catering establishments



Figure D. 1 – Blue Bottle Coffee Shibuya Cafe, Tokyo, Japan



Figure D. 2 – Hygge Cafe, Banten, Indonesia



Figure D. 3 – Keereetara Restaurant, Kanchanaburi, Thailand



Figure D. 4 – Dawn to Dusk Restaurant, Bangkok, Thailand



Figure D. 5 – LAPH Cafe, Huế, Vietnam

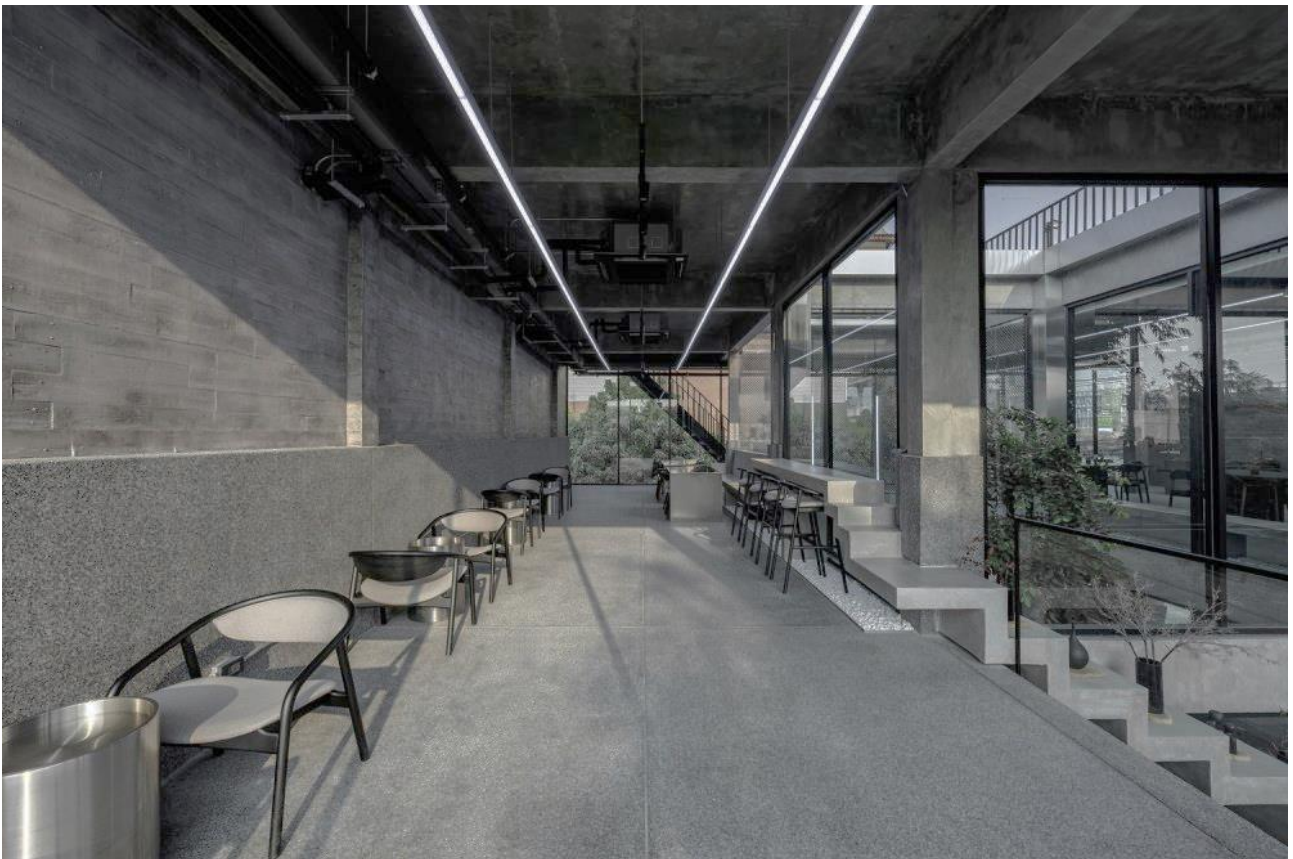


Figure D. 6 – Phuffle Restaurant and Café, Bangkok, Thailand

APPENDIX E

Examples of graphic exposition of the project

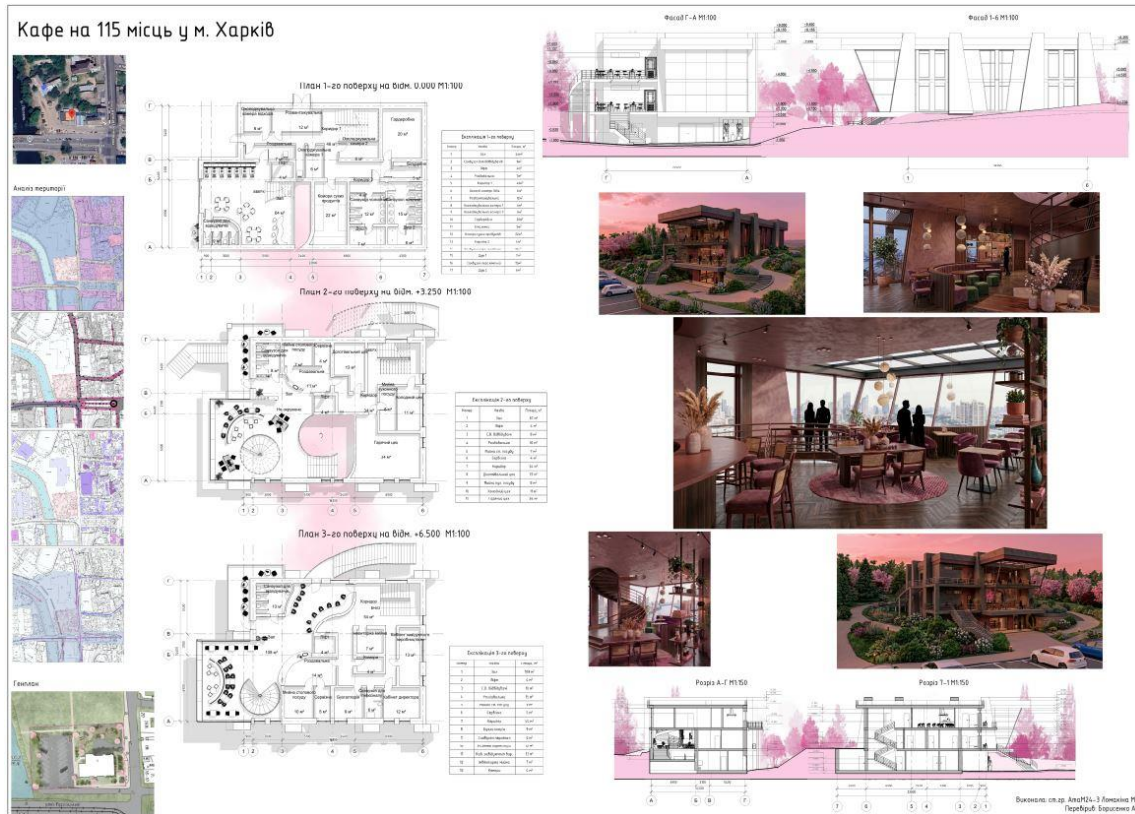


Figure E. 1 – Project of cafe by Lomakina M.V., student of AtaM 2024-3 group



Figure E. 2 – Project of cafe by Polianska D. A., student of AtaM 2024-3 group



Figure E. 3 – Project of cafe by Ostapenko V. V., student of AtaM 2024-2 group

Електронне навчальне видання

Методичні рекомендації
до проведення практичних занять та організації самостійної роботи
з навчальної дисципліни

**«АРХІТЕКТУРНЕ ПРОЄКТУВАННЯ БУДІВЕЛЬ І СПОРУД: КАФЕ НА
75-100 МІСЦЬ»»**

*(для здобувачів першого (бакалаврського) рівня вищої освіти
зі спеціальності G17 – Архітектура та містобудування)*

(Англ. мовою)

Укладачі: **БОРИСЕНКО** Артем Сергійович,
НЕСТЕРЕНКО Віталій Володимирович

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