

Ministry of Education and Science of Ukraine
National Aerospace University
«Kharkiv Aviation Institute»

Department of Ukrainian Language and Language Communication (№ 801)

APPROVED

Guarantor of the educational program

I. Malyk
(signature)

Igor MALKOV
(first and last name)

« 29 » 08 2025

SYLLABUS OF THE COMPULSORY ACADEMIC DISCIPLINE

Methodology of Teaching Activity

(name of academic discipline)

Field of knowledge: G Engineering, manufacturing, and construction

(code and name of the field of knowledge)

Specialty: Aviation and rocket and space technology

(code and name of the specialty)

Educational program: Aviation and rocket and space technology

(name of educational program)

Form of study: full-time/part-time

Level of higher education: third (educational and scientific)

Syllabus effective from 01.09.2025

Kharkiv - 2025

(surname and initials, position, academic degree and academic title)

(signature)

(name of department)

(academic degree and academic title)

(signature)

(initials and surname)

(signature)

(initials and surname)

1. General information about the lecturer



Shlenova Maryna, PhD in Philology, Associate Professor at the Department of Ukrainian Language and Language Communication. Since 2018, she has been teaching the following disciplines at the university: Personnel Management; Fundamentals of Pedagogical Knowledge; General Document Science, Strategic Communications; Scientific Foreign Language Communications; Ukrainian as a Foreign Language; Country Studies (For Foreigners). Areas of Scientific Research: Innovative Foundations of Public Administration, Administration, and Economic Development; Strategic Management Research; Trendy Teaching Methods in Higher education. Contact: - m.shleneva@khai.edu

2. Description of the academic discipline

Form of education	Full-time, part-time
Semester	4
Language of instruction	English
Type of discipline	Compulsory
Scope of discipline: ECTS credits/number of hours	Full-time: 5 ECTS credits / 150 hours (64 classroom hours, including: lectures – 32, practical classes – 32; independent study – 86);
Types of educational activities	part-time: 5 ECTS credits / 150 hours (16 classroom hours, including: lectures – 6, practical classes – 10; independent work – 134)
Types of assessment	Lectures, practical classes (seminars)
Prerequisites	Continuous assessment, modular assessment, exam
Co-requisites	None
Post-requisites	None

3. Purpose and objectives of the academic discipline

The purpose of teaching is to master the patterns and principles of teaching methods and technologies for training highly qualified specialists in higher education.

Objectives: to study the basics of didactics and methodology of pedagogical activity; to develop the ability to analyze and evaluate the main trends in the development of pedagogical theories in higher education; to develop the ability to understand the essence and use of pedagogical technologies in higher education institutions; to develop the ability to formulate thoughts logically and discuss them, taking into account one's own and the interlocutor's individual psychological characteristics; ability to generate new ideas for the educational process; achievement and consolidation of professional skills and abilities to use pedagogical technologies in higher education institutions.

Competencies acquired:

General competencies (GC)

GC01. Ability to identify, pose, and solve problems.

GC02. Ability to search for, process, and analyze information from various sources.

GC04. Ability to solve complex problems based on a systematic scientific worldview and general cultural outlook, adhering to the principles of professional ethics and academic integrity.

Special competencies (SC)

SC02. Ability to carry out scientific and pedagogical activities in higher education

Program learning outcomes (LO):

LO02. Freely present and discuss with specialists and non-specialists the results of research, scientific and applied problems of aviation and rocket and space technology in the national and foreign languages, competently reflect the results of research in scientific publications in leading international scientific journals

LO06. Understand the general principles and methods of technical and aerospace sciences, as well as the methodology of scientific research, apply them in their own research in the field of aviation and rocket and space technology, related interdisciplinary areas, and in teaching practice.

4. Course content

Module 1.

Content module 1. *Theoretical foundations of pedagogical activity.*

Topic 1. Introduction to pedagogy

- *Form of classes: lecture, practical class, independent work.*
- *Topic of practical class – Pedagogical situations and their analysis*
- *Required subjects and resources (equipment, materials, tools): none*
- *Brief description: reveals the fundamental principles of pedagogical science, its object, subject, purpose, and tasks. The main categories of pedagogy, such as education, training, development, and socialization, are studied. Particular attention is paid to the historical development of pedagogy, its integration with other sciences, and its significance in personality formation. The topic also highlights the functions of pedagogy in modern society, its role in the professional training of specialists, especially in the field of information, library, and archival science. Practical aspects of applying pedagogical knowledge in professional activities to ensure effective learning and interaction with different categories of audiences are considered.*
- *Topics and types of work related to the applicant's independent work: studying lecture material; formulating questions for the instructor..*

Topic 2. Psychological and pedagogical foundations of teaching and education.

- *Form of classes: lecture, practical class, independent work.*
- *Topic of the practical class – Development of pedagogical interaction: application of psychological and pedagogical foundations in teaching and education.*
- *Required subjects and resources (equipment, materials, tools): none*
- *Brief summary: highlights the interconnection between psychological and pedagogical aspects in the process of personality formation. Key concepts are considered: motivation, individual characteristics, cognitive processes, emotional intelligence, and socialization. Particular attention is paid to the analysis of psychological patterns of learning, the role of the educational environment, and the influence of social factors on personality development. The topic covers techniques for creating a favorable educational environment, organizing group work, and ensuring the harmonious development of participants in the educational process. Practical aspects of applying psychological knowledge in pedagogy contribute to increasing the effectiveness of the professional activities of future specialists.*
- *Topics and types of work related to the applicant's independent work: studying lecture material; formulating questions for the instructor..*

Topic 3. Patterns and principles of the pedagogical process.

- *Form of classes: lecture, practical class, independent work.*
- *Topic of the practical class – Teaching methods in practical application.*
- *Required subjects and resources (equipment, materials, tools): none*
- *Brief description: reveals the basic patterns that determine the effectiveness of teaching and education, in particular the relationship between goals, content, methods, and results. The principles of the pedagogical process are studied, such as scientificity, systematicity, accessibility, individualization, and the unity of teaching and education. The topic covers the analysis of the influence of external and internal factors on the organization of pedagogical activity, as well as the mechanisms for ensuring its effectiveness. The importance of patterns and principles for building an effective educational environment that promotes professional development is considered.*
- *Topics and types of work that are part of the applicant's independent work: studying lecture material; preparing questions for the instructor.*

Topic 4. Teaching methods and forms.

- *Form of classes: lecture, practical class, independent work.*
- *Topic of practical class – Teaching methods in practical application*
- *Required subjects and resources (equipment, materials, tools): none*
- *Brief summary: explores the main ways of organizing the educational process aimed at achieving learning objectives. The classification of teaching methods is considered: explanatory-illustrative, problem-solving, interactive, game-based, and independent work. Forms of teaching are analyzed, in particular lectures, seminars, training sessions, distance learning, and group work. Particular attention is paid to the choice of methods and forms in accordance with the content of the teaching material, the needs of the audience, and modern pedagogical approaches. The topic provides practical recommendations on the use of innovative tools in teaching, which contributes to the professional development of higher education students.*
- *Topics and types of work that are part of the student's independent work: studying lecture material; formulating questions for the teacher.*

Modular control.

- *Form of classes: writing a modular assignment in the classroom (at the lecturer's discretion, it may be done remotely).*
- *Required subjects and resources (equipment, materials, tools): none*
- *Amount of independent work required of students: as necessary*
- *Preparation for modular assessment.*

Content module 2. Teaching skills and professional communication.

Topic 1. Teaching skills.

- *Form of classes: lecture, practical class, independent work.*
- *Topic of the practical class – Organizing pedagogical dialogue. Developing a lesson plan*
- *Required subjects and resources (equipment, materials, tools): none*
- *Brief description: includes a deep understanding of pedagogical theories, the application of various teaching methods and techniques, as well as the ability for professional reflection and self-improvement. Pedagogical skills are formed through practical experience, as well as through the continuous improvement of communication, organizational, and motivational skills. A high level of pedagogical skill allows the*

teacher to interact effectively with higher education students, ensure an individualized approach to learning, and promote the development of their potential in professional activities.

- *Topics and types of work related to independent study: reviewing lecture material; preparing questions for the instructor.*

Topic 2. Use of information and communication technologies in the educational process.

- *Form of classes: lecture, practical class, independent study.*
- *Practical class topic – Creating teaching materials using ICT.*
- *Required subjects and resources (equipment, materials, tools): none*
- *Brief summary: The use of information and communication technologies (ICT) in the educational process contributes to the modernization of the educational environment and increases the effectiveness of learning. ICT enables the use of interactive teaching methods, access to multimedia resources, electronic libraries, and online courses, which expands opportunities for independent study and interaction between participants in the educational process. It contributes to the individualization of learning, increases student motivation, and develops digital competencies. The use of ICT in education helps to optimize the teaching and assessment process, as well as the preparation of future specialists for work in a digital society.*
- *Topics and types of work that are part of the student's independent work: studying lecture material; preparing questions for the teacher..*

Topic 3. Developing critical thinking in the learning process.

- *Form of classes: lecture, practical class, independent work.*
- *Topic of the practical class: Methods and techniques for developing critical thinking in the learning process.*
- *Required subjects and resources (equipment, materials, tools): none*
- *Brief summary: The development of critical thinking in the learning process is an important aspect of modern education, contributing to the formation of the ability to analyze, evaluate, and argue information. Critical thinking helps future professionals ask questions, recognize hidden assumptions, analyze arguments, and make informed decisions. It is developed through active learning methods such as discussions, debates, and problem-solving tasks.*
- *Topics and types of work related to the applicant's independent work: studying lecture material; formulating questions for the instructor.*

Topic 4. Professional communication in the higher education system.

- *Form of classes: lecture, practical class, independent work.*
- *Topic of the practical class – Pedagogical ethics and professional culture. Conflict resolution in the educational environment*
- *Required subjects and resources (equipment, materials, tools): none*
- *Brief annotation: pedagogical activity involves the formation of professional competencies in students through a combination of theoretical knowledge and practical skills. The main feature is the need to adapt pedagogical methods.*
- *Topics and types of work related to independent work of the applicant: studying lecture material; formulating questions for the teacher.*

Modular control.

- *Form of classes: writing a modular paper in the classroom (at the lecturer's discretion, it may be done remotely).*
- *Required subjects and resources (equipment, materials, tools): none*
- *Scope of independent work for students – as necessary*
- *Preparation for modular assessment.*

Assessment: *exam*

5. Individual assignments

None

6. Teaching methods

Explanatory-illustrative, problem-solving, heuristic, and practical teaching methods.

7. Assessment methods

Ongoing assessment (quizzes), interim assessment (module tests), final assessment (exam).

8. Assessment criteria and distribution of points awarded to students

Components of academic work	Points per class (assignment)	Number of classes (assignments)	Total number of points
VII Semester			
Content module 1			
Work during lectures	0	8	0
Presentations and completion of tasks during practical classes	1...5	8	0..40
Modular control	1-10	1	1-10
Content module 2			
Work during lectures	0	8	0
Presentations and completion of tasks in practical classes	1..5	8	0...40
Modular control	1... 10	1	1-10
Total for the semester			0...100

Criteria for assessing student performance during the semester

Excellent (90-100). The student has fully mastered the basic and additional material and completed all module assignments. Has a deep understanding of the fundamentals of pedagogical activity, pedagogical theories, and methodologies, and clearly applies them to professional activity. Possesses effective pedagogical communication skills, is able to develop pedagogical plans and use modern methods of teaching and education. Knows the specifics of pedagogical activity in various educational contexts. Has skills of self-analysis and reflection in pedagogical practice.

Good (75-89). The applicant has a confident knowledge of the main theoretical and practical aspects of pedagogical activity and has completed all module assignments. Has a sufficient understanding of pedagogical methods and is able to apply basic teaching and education methods. Has mastered the skills of organizing the educational process and is able to

respond adequately to pedagogical situations, but needs improvement in the individualization of teaching.

Satisfactory (60-74). The applicant has a limited understanding of the basics of pedagogical activity and has completed the modular work at a minimum level. Knows basic theoretical concepts but has difficulty applying them. Possesses the basics of organizing the educational process, but needs improvement in the use of pedagogical methods and forms. Has limited ability to reflect on and correct pedagogical activities.

Unsatisfactory (0-59) The applicant did not demonstrate a sufficient level of knowledge in the discipline, did not complete some of the tasks or completed them with errors. Has significant difficulties in understanding the basics of pedagogical activity and its methods, is unable to effectively apply the knowledge gained in practical situations. Is unable to organize the educational process and is incapable of self-analysis and correction of pedagogical activity.

Grading scale: point-based and traditional

Total points	Grade on the traditional scale
	Exam
90–100	Excellent
75–89	Good
60–74	Satisfactory
0–59	Unsatisfactory

9. Course policy

Missed classes are made up according to the consultation schedule, subject to prior agreement with the instructor. Issues related to academic integrity are considered by the instructor or according to the procedure specified in the Academic Integrity Policy.

10. Methodological support

1. Научитель О.Д Психологія та педагогіка вищої школи: методологічні і прикладні аспекти // Научитель О.Д., Бідюк І.А., Гулий Ю.І. - http://library.khai.edu/library/fulltexts/Knigi/Nauchitel_Psihologiya.pdf
2. Навчальні посібники, основні теоретичні положення, завдання для самостійного контролю в електронній формі та допоміжні матеріали надаються здобувачам на сервері кафедри: <http://Mentor.khai.edu/>

11. Recommended reading

Basic

1. Березюк О. С., Власенко О. М. Дидактика: теорія і практика: навч.- метод. посіб. Житомир: ЖДУ ім. Івана Франка, 2020. 211 с.
2. Завгородня Т.К., Стражнікова І.В. Методологічні засади педагогічних досліджень: навчально-методичний посібник. Івано-Франківськ, 2021. 120 с.
3. Ковальчук Л. Моделювання науково-педагогічних досліджень: навчальний посібник. Львів: Видавничий центр ЛНУ імені Івана Франка, 2020. 520 с.
4. Менеджмент наукових проєктів та політика академічної доброчесності: навчально-методичний посібник в схемах і таблицях / [О.І. Витяганець, Н. В. Домброван, О. О.

- Іванов та ін.] за загальною ред. М.В. Корнієнка, А. В. Семенової. Одеса: ОДУВС. 2023.: Бондаренко М.О., 2023. 364 с.
5. Основи інклюзивної освіти: навчально-методичний посібник. Тернопіль: КІЦ «ПРИНТ-ОФІС», 2020. 378 с.
6. Семенова А.В. Професійна педагогіка: підручник / Авт.: А. В. Семенова, О. В. Грабовський, Л. В. Коломієць, О. С. Савельєва, В. Ф. Яні; за заг. ред. А. В. Семенової. Одеса: Бондаренко М. О., 2020. 575 с.
7. Технології професійного розвитку педагогів в умовах формальної і неформальної освіти: практичний посібник / М.П. Вовк, Г.І. Сотська, Н.О. Філіпчук, Ю.В. Грищенко, С.О. Соломаха, Л.Ю. Султанова, Н.С. Гомеля. К.: Талком, 2020. 320 с.

Auxiliary

1. Вітвицька С. С. Педагогіка вищої школи: практикум. Житомир: Вид-во ЖДУ ім. І. Франка, 2023. 174 с.
2. Дистанційне та змішане навчання як засіб реалізації індивідуальної траєкторії професійного зростання педагога: монографія / за наук. ред. І.П. Воротникової. Київ: Київ. ун-т ім. Б. Грінченка, 2022. 256 с.
3. Кафарський В. І., Чижевський Б. Г., Жилиєв І. Б. Конституційні механізми розвитку освіти в Україні: монографія / В. І. Кафарський, Б.Г. Чижевський, І.Б. Жилиєв ; під ред. канд. філософ. наук, док. юрид. наук, професора Кафарського В.І.; Інститут педагогіки НАПНУ, Національний університет водного господарства та природокористування, Навчальнонауковий інститут права; Івано-Франківськ : Супрун В. П., 2023. 266 с.
4. Кремень В.Г. (Ред.). Енциклопедія освіти. Національна академія педагогічних наук України. 2-ге вид. допов. і перероб. Київ: Юрінком Інтер. 2021. 1144 с.
5. Кухаренко В.М. Екстрене дистанційне навчання в Україні: монографія / за ред.: В.М. Кухаренка, В.В. Бондаренка. Харків: Міська друк., 2020. 409 с. URL: <http://dl.khpi.edu.ua/mod/resource/view.php?id=46362>
6. Педагогічна освіта в Україні: теорія і практика: словник / М.П. Вовк, Ю.В. Грищенко, С.О. Соломаха, Н.О. Філіпчук, С.В. Ходаківська; Інститут педагогічної освіти і освіти дорослих імені Івана Зязюна НАПН України. Київ, 2021. 312 с.
7. Потапюк Л.М. Соціально-психологічний контекст становлення та розвитку педагогічно-просвітницької діяльності громад в Західній Україні (друга половина XIX – 30-ті рр. XX ст.): монографія. Луцьк: відділ іміджу та промоції ЛНТУ, 2023. 296 с.
8. Староста В. Педагогічні дослідження: методичні матеріали для практичних занять та самостійної роботи студентів. Вид. 2-е, випр. і доп. Ужгород: ДВНЗ «УжНУ», 2023. 32 с.

12. Information resources

1. Закон України: Про вищу освіту. URL: <https://zakon.rada.gov.ua/laws/show/1556-18#Text>
2. Закон України: Про освіту. URL: <https://zakon.rada.gov.ua/laws/show/2145-19#Text>
3. Освітньо-науковий портал «Педагогічна майстерність викладача вищої школи». URL: <https://www.pedagogic-master.com.ua/publikaci%D1%97/>
4. <http://www.anthropos.lnu.edu.ua/jspui/handle/123456789/300> — (Л.Рижак «Система освіти в Україні та її перспективи: філософський аналіз»).
5. <http://pidruchniki.com/1613030534943/pedagogika/pedagogika> — (Фіцула М. Педагогіка).