PJSC "Higher Education Institution" INTERREGIONAL ACADEMY OF PERSONNEL MANAGEMENT"

Danube branch

SYLLABUS

of the academic discipline (selective)

LOGIC AND CRITICAL THINKING IN BUSINESS

Specialty **D3 Management**

Educational level: **First (bachelor's) level**

Educational program: **Management**

IAPM 2025

General information about the academic discipline

Name of the discipline	**Logic and critical thinking in business**
Code and name of specialty	**D3 Management**
Level of higher education	First (bachelor's) level
Discipline status	Selective
Number of credits and hours	**3 credits / 90 hours.** Lectures: 20 Seminars/practical classes: 14 Students' independent work : 56
Terms of study of the discipline	3 semester
Language of instruction	Ukrainian
Type of final control	Pass/fail (credit)

General information about the teacher. Contact information.

Bayramova Olena Viktorovna	
Academic degree	PhD in Philosophy
Credentials	Associate Professor
Areas of scientific research	Philosophical dimension of modern management and economics; methodology of scientific knowledge; Problems of Formation of Cultural Identity and Communicative Competence in the Context of Globalization
Links to ID registers for scientists	Google Scholar https://scholar.google.com.ua/citations?user=adMYwMgAAAAJ&hl=uk ORCID https://orcid.org/0000-0002-2836-7037
Contact information:	
E-mail:	menedzmentuk@gmail.com
Contact phone number	+380677445957
Instructor's portfolio on the website	https://izmail.maup.com.ua/assets/files/bajramova-portfolio-a.pdf

Discipline's description.

Logic and critical thinking in business is a philosophical science that studies universal forms and laws of building correct reasoning. Being one of the oldest branches of scientific knowledge, it studies the structure of people's mental activity on the basis of the analysis of linguistic expressions, establishes the necessary relationships between thoughts, investigates ways to obtain new knowledge, determines the conditions for the truth of reasoning and criteria for their correctness. The study of "Logic" contributes to the improvement of the culture of human thinking due to the formation of a conscious attitude to the process of reasoning, the development of skills to correctly build conclusions, substantiate or criticize

theses, choose a strategy and tactics of argumentation in disputes, find and eliminate errors in one's own and others' reasoning, etc.

The subject of the discipline is the forms (concepts, judgments, inferences) and laws of abstract thinking, as well as logical procedures for substantiating knowledge, methods of building evidentiary argumentation and ways of identifying logical errors in professional communication.

The aim of the discipline is to provide theoretical knowledge and practical skills to students on the logical analysis of natural language; the procedure for reasoning and formulating judgments and inferences, based on the laws of logic; rules for reasoned polemics, business conversation.

The objectives of the discipline are

- assimilation of forms (concepts, judgments, inferences) and fundamental laws of abstract thinking;
- mastering the art of polemics, argumentation strategies and communicative functions of a business conversation;
- formation of skills to build reasonable hypotheses (versions) and forecasts in the analysis of managerial situations;
- development of skills of logical analysis of professional texts, identification and elimination of logical errors in documentation;
- acquisition of practical skills of critical thinking and informed decision-making in the field of business and management.

As a result of studying the selective educational component " Logic and critical thinking in business ", applicants must:

Know:

- the object, subject and meaning of logic as a philosophical science of thinking;
- the main forms of abstract thinking: concepts, judgments and inferences;
- fundamental laws of logic (identity, non-contradiction, excluded third, sufficient reason) and conditions for the truth of reasoning;
- rules and techniques for logical analysis of natural language and professional texts;
- structure and types of argumentation, proof and refutation;
- strategies and tactics for conducting polemics, business conversation and discussion;
- typical logical errors (paralogisms and sophisms) that occur in communication.

Be able to:

- carry out a logical analysis of concepts and establish relationships between them;
- correctly formulate judgments and build logically grounded inferences to obtain new knowledge;
- apply the laws of logic to verify the correctness of one's own reasoning and that of an opponent;
- build and test working hypotheses (versions) in the process of analyzing management situations;

– defend their own position with arguments, substantiate or criticize theses during business conversations and disputes;
– identify and eliminate logical errors in oral communication and written documentation;
– critically evaluate information and apply the acquired logical skills to solve professional problems.

Prerequisites for the discipline. Effective mastery of the course is based on the competencies formed by the disciplines "Philosophy", "Higher Mathematics" and "Probability Theory", which develop abstract thinking skills. Another important basis is knowledge of the courses "Modern Ukrainian Language" and "Jurisprudence" for the analysis of texts and normative statements.

Post-requisites for the discipline. The tools of logic are the direct basis for studying the disciplines "Fundamentals of Academic Writing", "Negotiation Techniques" and "Decision Making". The acquired skills in building argumentation and identifying cause-and-effect relationships are critical for the course "Fundamentals of Scientific Research in Management" and writing a bachelor's thesis.

Content of the academic discipline

<table>
<tr><th>№</th><th>Topic name</th><th>Teaching Methods/Assessment Methods</th></tr>
<tr><td>Topic 1</td><td>Subject, method and tasks of the academic discipline "Logic"</td><td rowspan="10">Teaching methods:
Methods of organization and implementation of educational and cognitive activities:
– verbal teaching methods: explanations, narration, instruction on independent work, lecture: informational, problem, as well as visualization lectures, detailed conversation in the form of questions and answers, work with literature, speeches with abstract reports;
– visual teaching methods: multimedia presentations;
– individual research work.
Methods of stimulation and motivation of educational and cognitive activities: discussion, polemics, exchange of opinions, situational tasks, creation of non-standard situations, situational role-playing games, use of experience from managerial practice.
Assessment methods
Assessment is carried out according to the cumulative system and includes:
- current control: oral questioning, express testing, solving situational problems and defense of individual tasks;
- modular control: written modular control work (MCR) after the completion of content blocks;
- final control: exam/test (written work with theoretical and practical tasks).</td></tr>
<tr><td>Topic 2</td><td>The Foundations of Theory and the History of the Formation of Logic as a Science</td></tr>
<tr><td>Topic 3</td><td>The semiotic nature of logic</td></tr>
<tr><td>Topic 4</td><td>Name and concept</td></tr>
<tr><td>Topic 5</td><td>Logical operations on concepts</td></tr>
<tr><td>Topic 6</td><td>Laws of logic</td></tr>
<tr><td>Topic 7</td><td>Logical analysis of statements and judgments</td></tr>
<tr><td>Topic 8</td><td>Reasoning and inference: types and characteristics</td></tr>
<tr><td>Topic 9</td><td>Fundamentals of the theory of argumentation</td></tr>
<tr><td>Topic 10</td><td>Logical analysis of questions and answers</td></tr>
<tr><td colspan="3">Module Assessment Task</td></tr>
<tr><td colspan="3">Final assessment: pass/fail (credit)</td></tr>
</table>

Technical Equipment and Software.

Multimedia equipment (projector, computer) is used to visualize the educational material during lectures and seminars. Practical tasks and in-depth study of individual topics are provided by access to the Internet through free Wi-Fi coverage.

Forms and methods of assessment.

The system of assessment of applicants' knowledge includes current and final (semester) control.

Current assessment is carried out systematically during practical and seminar classes in order to check the level of assimilation of theoretical foundations, the formation of diagnostic and forecasting skills.

Forms of student participation in the educational process that are subject to ongoing control.

Students' participation in the educational process is realized through oral presentations, presentations of analytical research, reports on the results of case studies, as well as active involvement in professional discussions and brainstorming. The written component of the work includes the performance of control and test tasks, the preparation of analytical notes, abstracts and notes based on the materials of lectures and independent study.

Methods of ongoing assessment include: The methodological tools of control combine oral forms (surveys, interviews) and written types of work (reports, construction of logical schemes and truth tables). The assessment is also based on observing the activity of applicants in solving problem situations, checking the results of the presentation of individual projects, and conducting testing with open and closed types of tasks.

Grading system and requirements.

Table of distribution of points received by students*

Topics	Ongoing knowledge assessment						Final control		Total points
	Seminar 1 (Topic 1.2)	Seminar 2 (Topic 3,4)	Seminar 3 (Topic 5)	Seminar 4 (Topic 6)	Seminar 5 (Topic 7.8)	Seminar 6 (Topic 9. 10)	Module assessment task	Pass /Fail	
Work in a seminar class	6	6	6	6	6	6	20	20*	100
Independent work	4	4	4	4	4	4			

*The table contains information about the maximum points for each type of academic work of a higher education applicant.

Assessment Criteria and Procedure

Assessment of students' educational achievements is carried out in accordance with the current Regulations on Assessment in a Higher Education Institution.

Modular Assessment. Modular Assessment (MA) is carried out at the final lesson of each content block in the form of written testing.

When evaluating the unit test, the volume and correctness of the tasks are taken into account:

- grade "excellent" (A) is given for the correct completion of all tasks (or more than 90% of all tasks);
- grade "good" (B) is given for completing 80% of all tasks;
- grade "good" (C) is given for completing 70% of all tasks;
- the grade "satisfactory" (D) is given for the correct completion of 60% of the proposed tasks;
- the grade "satisfactory" (E) is given if more than 50% of the proposed tasks are correctly completed;
- An "unsatisfactory" (FX) rating is given if less than 50% of the tasks are completed.
- Failure to appear for the unit test - 0 points.

The above scores are converted into rating points as follows:

"A" - 18-20 points;
"B" - 16-17 points;
"C" - 14-15 points;
"D" - 12-13 points.
"E" - 10-11 points;
"FX" - less than 10 points.

The final semester assessment in the discipline "Logic and Critical Thinking in Business" is a mandatory form of assessment of students' learning outcomes. It is carried out within the terms determined by the curriculum and covers the amount of material determined by the course program.

The final assessment is carried out in the form of a test. A student who has completed all the necessary work is admitted to the semester assessment.

The final grade is given based on the student's learning outcomes during the semester. The student's assessment consists of points accumulated from the results of the current assessment and incentive points.

Students who have completed all the required tasks and received a score of 60 points or higher receive a grade corresponding to the grade received, without additional testing.

For students who have completed all the necessary tasks, but received a score below 60 points, as well as for those who want to improve their score (result), the teacher conducts the final work in the form of a test during the last scheduled lesson in the discipline in the academic semester.

Evaluation of Additional (Individual) Educational Activities

Additional (individual) types of educational activities include the participation of applicants in the work of scientific conferences, scientific circles of applicants and problem groups, preparation of publications, participation in All-Ukrainian Olympiads and competitions and International competitions, etc., in excess of the scope of tasks that are established by the relevant work program of the academic discipline.

By the decision of the department, students who participated in research work and performed certain types of additional (individual) types of educational activities can be awarded incentive (bonus) points for a certain educational component.

Assessment of independent work (Maximum — 4 points)

The total number of points received by a student for independent work is one of the components of academic success in the discipline. Independent work on each topic, according to the course program, is evaluated in the range from 0 to 4 points using standardized and generalized criteria for assessing knowledge.

Scale for evaluating the performance of independent work (individual tasks)

Maximum possible assessment of independent work (individual tasks)	Execution level			
	Excellent	Good	Satisfactory	Unsatisfactory
4	4	3	2	0-1

Forms of assessment include: current assessment of practical work; current assessment of knowledge acquisition based on oral answers, reports, presentations and other forms of participation during practical (seminar) classes; individual or group projects that require the development of practical skills and competencies (optional format); solving situational problems; preparation of resumes on independently studied topics; testing or written exams; preparation of draft articles, conference abstracts and other publications; other forms that ensure a comprehensive assimilation of the curriculum and contribute to the gradual development of skills for effective independent professional (practical, scientific and theoretical) activities at a high level.

To assess the learning outcomes of a higher education applicant during the semester, a 100-point, national and ECTS assessment scale is used

Summary assessment scale: national and ECTS

Total points for all types of learning activities	ECTS assessment	National scale assessment	
		for exam, course project (work), internship	For pass/fail (credit)
90 – 100	A	excellent	pass
82 – 89	B	good	
75 – 81	C		
68 – 74	D	satisfactorily	
60 – 67	E		
35 – 59	FX	unsatisfactory with the possibility of reassembly	fail unsatisfactory with the possibility of retaking
0 – 34	F	unsatisfactory with mandatory re-study of the discipline	fail with mandatory re-study of the discipline

Discipline's Policy

Successful mastering of the educational component "Logic and Critical Thinking in Business" requires high self-discipline and a responsible attitude to the educational process from students. Prerequisites are regular attendance of lectures and practical classes, active

participation in classroom work, as well as timely and high-quality performance of all types of independent and control tasks provided for by the program. In case of missing classes or obtaining unsatisfactory results, the student is obliged to liquidate academic debt by working out the relevant topics.

An integral part of education is strict adherence to the norms of academic ethics and culture of behavior. The educational process is based on the principles of academic integrity, which involves the exclusive independent performance of all written works, reports and presentations. Any borrowings of thoughts or texts of other authors should be accompanied by correct references to primary sources. Within the course of the course, any manifestations of academic dishonesty are unacceptable, including plagiarism, self-plagiarism, fabrication and falsification of data, cheating, deception, bribery or biased evaluation.

Recommended sources of information

Basic literature:

1. Grinenko O. M. Technology for the Development of Critical Thinking: Information and Methodological Manual. : O.M. Grinenko. Slavyansk, 2023. 57 p.
2. Konverskyi A. E. Critical thinking: textbook / A.E. Konversky. Kyiv: Center for Educational Literature, 2020. 370 p.
3. Kruglyak M. I. Critical thinking. Materials of the III part of the online course "Logic, argumentation, critical thinking" / M.I. Kruglyak. Kyiv, 2021. 193 p.
4. Logic: textbook / [O.M. Yurkevich, S.V. Kachurova, O.P. Nevelska-Gordeeva et al.] ; for general. Ed. Kharkiv: Pravo, 2022. 220 p.
5. Storozhuk S. V. Logic: textbook / S.V. Storozhuk, I.M. Goyan, I.S. Matvienko. Kyiv: Vadex, 2020. 370 p.
6. Yavorskyi A. Y. Logical Principles of Professional Communication: Textbook / A.Y. Yavorsky. Lutsk: VNU them. Lesya Ukrainka. 2024. 150 p.

Additional literature:

1. Burlakova I. A. Psychology of professional thinking, readiness for change: educational and methodological material / I.A. Burlakova. Kyiv, KRCPC Publishing House, 2022. 68 p.
2. Lapshina N. O. Critical thinking as a means of reducing information stress and its consequences / N.O. Lapshina, S.V. Shulgan. *Habit*. 2024. Issue 64. Pp. 152-156. URL: http://habitus.od.ua/journals/2024/64-2024/28.pdf.
3. Nadurak V. Critical thinking: concept and practice / V. Nadurak. *Philosophy of education. Philosophy of Education*. 2022. № 28. Pp. 122-149. URL: https://www.researchgate.net/publication/368380838_Critical_thinking_concept_and_practice.
4. Senchenko O. Mass Media – a Means of Cognition of the World or Manipulation of Consciousness? *Bulletin of the Book Chamber*. 2022. №3. Pp. 20-28. URL: http://visnyk.ukrbook.net/article/view/261755.
5. Golden, V. Enabling critical thinking development in higher education through the use of a structured planning tool. *Irish Educational Studies*. 2023. Vol. 42, № 4. P. 949-969. URL: https://dspace.mic.ul.ie/mic7/server/api/core/bitstreams/0196b555-1fa0-429f-a7a5-ac5ef8fe2db3/content

6. Lionenko, M., & Huzar, O. Development of Critical Thinking in the Context of Digital Learning. *Economics and Education*, 2023. No. 8(2), pp. 29-35. DOI: https://doi.org/10.30525/2500-946X/2023-2-5.
7. Luchko, H. & Duhin, O. Integrating the Paradox Thinking into Organizational Change Management Frameworks. *International scientific journal «Internauka». Series: «Economic sciences»*. 2024. № 7(87), vol. 2. P. 9-14. URL: https://fpk.in.ua/images/biblioteka/zhyrnal/INTERNAUKA--7-2024-2.pdf
8. Martin, B. The Philosophy of Logical Practice. B.Martin. *Metaphilosophy*. 2022. №53(12). URL: https://unknownscience.net/wp-content/uploads/2022/03/thephilosophylogicalpractice_preprint.pdf
9. Selvaha, L. Design Thinking: Logic or Creativity. Human, Technologies and Quality of Education. Conference: 80th International Scientific Conference of the University of Latvia, 2022. P. 871-880. URL: https://www.apgads.lu.lv/fileadmin/user_upload/lu_portal/apgads/PDF/HTQE-2022/htqe.2022.62_Selvaha_871-880.pdf

Information resources:

1. National Library of Ukraine named after V.I. Vernadsky. URL: http://www.nbuv.gov.ua/.
2. Disinformation: How to Recognize and Fight. Faculty of Law of Yuriy Fedkovych Chernobyl National University. URL: https://law.chnu.edu.ua/dezinformatsiia-yak-rozpiznaty-ta-borotysia/.
3. Critical thinking: key characteristics and exercises for its development. Comprehensive education. URL: https://vseosvita.ua/library/kriticne-mislenna-klucovi-harakteristiki-ta-vpravi-dla-jogo-rozvitku-191829.html.
4. How to fight fakes: 7 practical recommendations. What are fakes and how to protect yourself from and counteract disinformation. Explainer. URL: https://explainer.ua/yak-borotisya-z-fejkami-7-praktichnih-rekomendatsij/.
5. Critical Thinking: What It Is and Why It Counts. Peter A. Facione. (2023). URL: https://insightassessment.com/iaresource/critical-thinking-what-it-is-and-why-it-counts/.
6. The Holistic Critical Thinking Scoring Rubric A Tool for Developing and Evaluating Critical Thinking. Peter A. Facione. (2023). URL: https://insightassessment.com/iaresource/the-holistic-critical-thinking-scoring-rubric/