

| 1. Name of the subject (course unit) | 2. Code |
|--------------------------------------|---------|
| Logic                                |         |

| 3. Teacher(s)                                 | 4. Unit(s)                             |
|---|--|
| Coordinating teacher: Prof. Dr. Vytis Valatka | Creative Society and Economy Institute |

| 5. Study cycle | 6. Level of the subject (course unit) | 7. Type of the subject (course unit) |
|----------------|---------------------------------------|--------------------------------------|
| Bachelor       | Course not divided into parts         | Optional                             |

| 8. Implementation form | 9. Implementation period | 10. Instruction language(s) |
|------------------------|--------------------------|-----------------------------|
| Full-time studies      | 1 semester               | English                     |

| 11. Requirements for the student |                                   |
|----------------------------------|-----------------------------------|
| Prerequisites:                   | Associated requirements (if any): |
| English language level B2        | -                                 |

| 12. Scope of the subject (course unit) in ECTS | 13. Total student work load (hours) | 14. Contact hours | 15. Independent work hours |
|--|-------------------------------------|-------------------|----------------------------|
| 6  | 160                                 | 20                | 140                        |

| 16. Purpose of the subject (course unit): competences sought to be developed by the study programme  |
|--|
| To acquaint students with main concepts, ideas, theories, principles and methods of contemporary Logic and to reveal the role they play in cognition and everyday life; to develop students' abilities to reason clearly and correctly, to express their thoughts in precise and definite way, to substantiate properly their positions and propositions, to analyze and critically evaluate the argumentation of opponents. |

| 17. The interrelation between the learning outcomes of the study programme with the projected results of the subject, and the methods of the assessment of the studies and the student achievements |  |   |
|---|--|---|
| Results of the study subjects   | Study methods  | Methods for the assessment of the achievements of the student   |
| Students will know fundamental logical criteria of rationality; they will be able to formulate exactly their thoughts and positions.  | Lectures, seminars, group discussions, solving of logical exercises of various types.  | Assessment of activity of students during seminars, test, written exam.   |
| They will be able to present properly and demonstrate their positions and propositions as well as to analyze, interpret and critically evaluate arguments and reasons of opponents.                 | Lectures, seminars, solving of exercises of argumentation theory, group discussions, evaluation of one's own argumentation and that of opponents in group discussions. | Assessment of activity of students during seminars, assessment of argumentation of students applied in group discussions, written exam. |
| Students will be able to formulate correct propositions and definitions, to make well – formed classifications, to form sound arguments and reasonings.   | Lectures, seminars, solving of exercises of Logic of classes and Propositional logic   | Assessment of activity of students during seminars, test, written exam.   |

| 18. Content of the subject  |                                   |               |          |                 |                    |            |                     |                                       |   |
|---|-----------------------------------|---------------|----------|-----------------|--------------------|------------|---------------------|---------------------------------------|---|
| Themes  | Contact hours and studying method |               |          |                 |                    |            |                     | Time and tasks of independent studies |   |
|   | Lectures                          | Consultations | Seminars | Practical class | Laboratory classes | Practicums | Total contact hours | Independent work                      | Tasks   |
| 1. Logic and truth. Significance of Logic                                   | 1                                 | -             | 1        | -               | -                  | -          | 2                   | 12                                    | Reading of manuals and other materials on Logic.  |
| 2. Logic and language. Natural and formal languages. Propositional calculus | 3                                 | -             | 3        | -               | -                  | -          | 6                   | 24                                    | Analysis of methods of formalization, truth tables, formal deduction etc., application of those methods to solving exercises.           |
| 3. Concepts. Logic of classes.  | 2                                 | -             | 2        | -               | -                  | -          | 4                   | 16                                    | Analysis of methods of Logic of classes, solving of typical exercises of that logic.  |
| 4. Theory of argumentation. Argumentation and demonstration.                | 2                                 | -             | 2        | -               | -                  | -          | 4                   | 16                                    | Studying of particularity of argumentation, its sorts and typical errors. Analysis and evaluation of various examples of argumentation. |
|   | 8                                 | -             | 8        | -               | -                  | -          | 16                  | 64                                    |   |

| 19. Strategy and criteria for the evaluation of students |            |                         |  |
|--|------------|-------------------------|--|
| Evaluation method  | Percentage | Accounting time         | Evaluation criteria  |
| Working in the classroom during the seminars             | 20 %       | Throughout the course   | 2 points: a student actively participates in discussions, answers questions, formulates questions and problems, actively and precisely solves exercises, notices and defines errors made by his/her colleagues;<br>1 point: a student takes part in discussions, answers questions, solves exercises;<br>0 points: a student almost does not solve exercises, does not answer questions or does not participate in seminars. |
| Test   | 30 %       | In the middle of course | The solution of exercises contained in test is assessed according to criteria typical of each given exercise.  |
| Written exam   | 50 %       | After the course        | The solution of exercises contained in exam is assessed according to criteria typical of each  |

|  |  |  |                 |
|--|--|--|-----------------|
|  |  |  | given exercise. |
|--|--|--|-----------------|

## **20. Sources of studies, reference lists**

### **Mandatory sources of studies, reference lists**

1. Copi I.M., Cohen C. Introduction to Logic. Upper Saddle River (New Jersey): Pearson, Prentice Hall (12th edition), 2005
2. Herrick, P. W. Introduction to logic. New York (N.Y.) : Oxford University Press, 2013
3. Klement K. C. Propositional logic: Internet Encyclopdia of Philosophy, <http://www.iep.utm.edu/prop-log/>

### **Additional sources of studies, reference lists**

1. Tomassi P. Logic. London, N.Y.: Routledge, 1999.
2. Walton D. N. What is reasoning? What is an argument? Journal of philosophy, vol. 87, 1990, p. 399 – 419, <http://www.dougwalton.ca/papers%20in%20pdf/90reasoning.pdf>
3. Weston A. A rulebook for arguments Indianapolis ; Cambridge: Hackett. 2009.
4. <http://www2.humboldt.edu/act/HTML/>