SYLLABUS

1. Course title:

LOGIC

2. Code:

3. Cycle of study:

1

4. ECTS credits:

7

5. Type of course:

(•) Mandatory ( ) Elective

6. Prerequisites:

(max. 110 characters)

7. Class restrictions:

(max. 150 characters)

8. Duration / semester:

1 2

9. Weekly contact hours:

9.1. Lectures: 3

9.2. Seminars: 2

9.3. Laboratory/Practice classes:

10. Faculty:

Faculty of Humanities and Social Sciences

11. Department/study program:

Phylosophy - Sociology

12. Lecturer:

13. Lecturer's e-mail:

14. Web site:

www.ffuntz.ba

15. Course aims:

The goals of the course are to acquaint students with fundamental concepts (validity and invalidity of a conclusion, ways of forming a valid conclusion, symbolic notation, logical principles, methods of eplication of concepts) and concepts (concept, judgment, conclusion, conclusion, definition, proof, function, variable, set etc.) of logic as a philosophical discipline (from syllogistic to symbolic and classical logic), and highlight possible applications of logic in different contexts (eg within scientific methods and artificial languages in modern technology).

16. Learning outcomes:

Knowledge:
1. Knows fundamental teachings in the field of logic (syllogistic, symbolic, non-classical)
2. Knows how to recognize the basic logical organ (concept, judgement, conclusion, proof)
3. Knows how to clearly define and differentiate concepts, judgments, conclusions and proofs
4. Knows how to recognize, apply and make syllogistic figures
5. Knows how to use deductive and inductive forms of reasoning
6. Can write natural language statements in the form of a conceptual letter (canonical notation)
7. Can determine the truth values of statements within a canonical notation

Skills:

1. Skillfully explains the ways of reasoning and proof procedures in arguments
2. Skillfully identifies errors in reasoning and proof
3. Skillfully translates natural language statements into canonical notation
4. Skillfully recognizes logical structures within cognitive acts
5. Skillfully writes down the logical structure of cognitive acts in the form of a conceptual structure

17. Course content:

Topic 1. Introduction to basic topics, issues and terminology of logic
Topic 2. Ancient ontological logic: Plato's dialectic and Aristotle's syllogistic
Topic 3. Aristotle's teaching on categories (basic concepts)
Topic 4. Aristotle's theory of syllogism
Topic 5. Syllogism (as evidence) in scientific systems
Topic 6. Aristotle's paralogisms
Topic 7. Medieval division of syllogistic figures
Topic 8. Half-semester test of students' knowledge
Topic 9. Logic as a conceptual letter (canonical notation)
Topic 10. The idea of a logical function
Topic 11. Theories of sets in logic
Topic 12. Learning about predicate logic and predicate calculus
Topic 13. Theory of quantification
Topic 14. Logic and calculus of classes
Topic 15. Examples of non-classical logics
16. Preparation for the exam (no classes this week)

17. Final exam for students I. and II. cycle according to the Bologna Process

18. Learning methods:

analysis of selected topics, construction of examples of the use of logical structures in discourse, heuristic models

19. Assessment methods:

Knowledge verification includes two tests during the semester. After the class, students who have successfully completed the previous exam tests, as well as completed the pre-exam obligations, will take the oral exam. By examining the results of the exam as well as evaluating the pre-exam obligations, the final grade will be formed for the students.

20. Assessment components:

Attendance and activity in class:
- attendance at lectures and exercises 10
- activity in classes 10
- defended seminar paper 10
Written exam: 20
Oral exam: 50
GRADING SYSTEM:
number of points: from 94-100=10, from 84-93=9, from 74-83=8, from 64-73=7, from 54-63=6, from 0 to 53=5

21. Required reading list:

Ibrulj, N., „Filozofija logike, Sarajevo publishing, 1999
TARSKI.A.,Uvod u matematičku logiku i metodol. matematike,Rad, Beograd 1979. PRIOR, A.,Historija logike,Naprijed, Zagreb 1970.
WITTGENSTEIN, L., Tractatus Logico-Philosophicus, Moderna vremena, Zagreb 2003.
Aristotel, Organon, Kultura, Beograd, 1970

22. Web sources:

(max. 687 characters)

23. Applicable starting from the academic year:

2021/2022

24. Adopted in the Faculty/Academy session:

(max. 10 char.)