Faculty of Philosophy / TEACHER`S EDUCATION / Introduction to Logic

Course:	Introduction to Logic			
Course ID	**Course status**	**Semester**	**ECTS credits**	**Lessons** (Lessons+Exercises+Laboratory)
1881	Mandatory	2	3	2+0+0
Programs	TEACHER`S EDUCATION			
Prerequisites	There is no conditionality to other subjects			
Aims	Introducing students to the most important problems of logic, philosophy of science and scientific methodology; introducing students to the importance of logic and rational interpretation of the world as a prerequisite for modern science and civilization; introducing students to different types of argumentation and the limits of their application; developing in students the ability of reasoned and critical thinking.			
Learning outcomes	After students pass this exam, they will be able to: 1. Master the methods of rational argumentation; 2. Forms a rational attitude towards reality; 3. Master the ability of critical thinking and developing a culture of dialogue. 4. Explain the basic properties of all declarative logical conjunctions and the logical laws that characterize them. 5. Examines the validity of the conclusion; 6. Logically shapes teaching contents.			
Lecturer / Teaching assistant	Dr. Vladimir Drekalović			
Methodology	Lectures, seminars, practical work, colloquia.			
Plan and program of work				
Preparing week	Preparation and registration of the semester			
I week lectures	Getting to know the subject and the conditions for taking it. Literature review. The field of logic. Logic until the 19th century;			
I week exercises				
II week lectures	Basic problems of logic and elements of thinking - concept, judgment and conclusion;			
II week exercises				
III week lectures	Propositional logic. Statements. Conjunctions. True functionality;			
III week exercises				
IV week lectures	Conjunction and disjunction. Implication and equivalence. Other binary connections;			
IV week exercises				
V week lectures	Statement formulas. Object language and meta language. Tree of subformulas;			
V week exercises				
VI week lectures	Semantics of propositional logic. Tautologies;			
VI week exercises				
VII week lectures	First colloquium;			
VII week exercises				
VIII week lectures	Substitution of equivalents. Cleaning;			
VIII week exercises				
IX week lectures	Duality between conjunction and disjunction. Connections between conjunctions and functional completeness;			
IX week exercises				
X week lectures	Disjunctive and conjunctive normal form;			
X week exercises				
XI week lectures	Proof and errors in reasoning;			
XI week exercises				
XII week lectures	Validity of reasoning;			
XII week exercises				

XIII week lectures	Logic and teaching;
XIII week exercises	
XIV week lectures	Second colloquium;
XIV week exercises	
XV week lectures	Additional colloquium.
XV week exercises	
Student workload	

Per week	**Per semester**
3 credits x 40/30=4 hours and 0 minuts 2 sat(a) theoretical classes 0 sat(a) practical classes 0 excercises **2 hour(s) i 0 minuts** of independent work, including consultations	Classes and final exam: **4 hour(s) i 0 minuts x 16 =64 hour(s) i 0 minuts** Necessary preparation before the beginning of the semester (administration, registration, certification): **4 hour(s) i 0 minuts x 2 =8 hour(s) i 0 minuts** Total workload for the subject: **3 x 30=90 hour(s)** Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) **18 hour(s) i 0 minuts** Workload structure: **64 hour(s) i 0 minuts (cources), 8 hour(s) i 0 minuts (preparation), 18 hour(s) i 0 minuts (additional work)**
Student obligations	Students are required to attend lectures and do colloquiums.
Consultations	Consultations are held after the lecture.
Literature	K. Došen, Osnovna logika, 2013, elektronsko izdanje, slobodno na Internetu; M. Borisavljević, Uvod u logiku, I dio, Saobraćajni fakultet, Beograd, 2009; Dopunska literatura: A. Kron, Logika, Filozofski fakultet, Univerzitet u Beogradu, 1998, str. 1-184; M. Božić i S. Vujić, Matematematička logika sa elementima opšte logike, Naučna knjiga, Beograd, 1979; D. van Dalen, Logic i Structure, Springer, Berlin, 1983, glave 1 i 2; E.Dž. Lemon, Upoznavanje sa logikom, Jasen, Nikšić, 2002, glave 1-4; S. Vujošević, Matematička logika, CID, Podgorica, 1996; S. Prešić, Elementi matematičke logike, Zavod za izdavanje udžbenika, Beograd, 1972; Ž. Kovijanić-Vukićević i S. Vujošević, Uvod u logiku, Podgorica, 2009, elektronska verzija slobodno dostupna na Internetu; P. Janičić, Matematička logika u računarstvu, Matematički fakultet, Beograd, 2004, glava 2, posebno odjeljak 2.3.2, glava 3, posebno odjeljak 3.3.1.
Examination methods	Each of the two colloquiums carries 20 points; Class attendance and class work carry 10 points; The final exam carries 50 points;
Special remarks	
Comment	

Grade:	F	E	D	C	B	A
Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points