Course: Boolean Algebras	
Teacher(s): Miloš Kurilić	
Course status: elective	
ECTS: 12	
Prerequisites: -	

Goal
Getting to know the theory of Boolean algebras and Boolean spaces

Outcomes
Minimal: At the end of the course a student is expected to show understanding of the listed parts of theory of Boolean algebras and to present proofs of the main theorems.
Desirable: At the end of the course a student is expected to show deeper understanding of the listed parts of theory of Boolean algebras, to derive proofs of the main theorems, to present standard examples and to connect and apply the corresponding methods in other fields of mathematics.

Contents
Theoretical teaching
Boolean algebras. Infinitary operations. Morphisms. Cardinal invariants. Distributivity laws. Completeness, Boolean completion of a partial order. Boolean Spaces. Topological duality. Cardinal functions on Boolean spaces. Borel and reduced Borel algebra. Baire Theorem. Measure algebras. The algebra P(N)/Fin. Stone-Čech compactification.

Recommended bibliography
1. M. Kurilić, Boolean Algebras, hand-written lecture notes
2. P. Halmos, Lectures on Boolean Algebras, van Nostrand, Princeton, 1963.
3. R. Sikorsky, Boolean Algebras, Springer Verlag, 1964.
4. Handbook of Boolean algebras, (J. D. Monk ed.), North-Holland, Amsterdam, 1989.

Active teaching hours:	Theoretical:	Practical:

Methods of teaching
Lectures, exercises, consultations

Knowledge estimation: (max 100 points)
Oral exam (100)