Study program: Mathematics (Ph.D. program)	
Course: Topology 4	
Course instructor(s): Miloš Kurilić	
Course type (compulsory/elective): elective	
Credit points: 10 ECTS	
Prerequisites: -	

Course objectives:

Introduction to the properties of connectedness and metrizability and their various generalizations.

Learning outcomes:

Minimal:

Understanding of the studied parts of topology; the ability to analyze advanced properties of a topological space.

Desirable:

Deeper understanding of the theory, through more sophisticated examples, applications and connections to other braches of mathematics.

Course description (outline):

Connectedness. Various forms of non-connectedness. Metric spaces. Completeness. Total boundedness. Metrizability. Uniform spaces. Para-compactness.

References:

1. R. Engelking, General Topology, Heldermann Verlag, Berlin, 1989.

2. Kelley J.L., General Topology, D. Van Nostrand Comp. Inc., Princeton, New Jersey, 1957, [руски превод са додатком А. В. Архангелског: Наука, Москва, 1980.]

3. Kuratowski K., Topology I-II, Academic Press, New York; PWN, Warszawa, 1966. [руски превод: Мир, Москва, 1966.

Active teaching hours	**Theoretical classes:** 2	**Practice classes:** -6

Methods of teaching:

Lectures, with active participation of the students, discussion, etc.

Grading structure			
Pre-exam obligations	**Points**	**Exam**	**Points**
Colloquia	**50**	Oral exam	**50**
Seminars			