Title:	**Introduction to Topology**
Lecture hours:	30
Study period: (summer/winter)	winter or summer
Number of credits:	6
Assessment methods:	oral and written exam
Language of instruction:	English
Prerequisites:	basic set theory, basics of calculus
Course content:	Metric spaces: definition and examples. Convergence in metric spaces. Open and closed subsets of metric spaces; interior, closure and boundary of sets. Metric products of metric spaces. Continuous and uniformly continuous mappings. Homeomorphisms and isometries. Complete spaces; theorems of Banach, Cantor and Baire. Separable metric spaces. Compact and connected metric spaces; continuous maps on compact and connected metric spaces; compactness in Euclidean spaces.
Learning outcomes:	A student should demonstrate knowledge of basic properties of subsets of metric spaces, various sorts of metric spaces and continuous functions defined on them. A student also should prove some basic propositions concerning metric spaces and its properties.
Name of lecturer:	Prof. Taras Radul
Contact (email address):	tarasradul@yahoo.co.uk
Literature:	1. S.Kumaresan. Topology of Metric Spaces. Alpha Science International Ltd. Harrow. 2005 2. Walter Rudin. Principles of Mathematical Analysis. 3rd ed. International Student Edition. McGraw-Hill. 1985 3. Seymour Lipschutz. Theory and Problems of General Topology. Schaum's Outlines Series. McGraw-Hill Education. 2011