Title:	**General 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, basic Calculus and Topology of Metric Spaces
Course content:	Definition of topology and examples; open and closed sets; bases and sub-bases of a topology, weight of topological spaces; interior, closure, and boundary of sets in a topological space. Continuous functions and homeomorphisms; topological invariants. Subspaces, quotient spaces and products of topological spaces; Tychonoff topology. Compact and local compact spaces, Alexander lemma, Tychonoff product theorem. Axioms of separation; normal spaces, Urysohn lemma; Tychonoff spaces and Tychonoff cubes, separating families of continuous functions, embeddings in Tychonoff cubes. Connected spaces; components and quasi-components; locally connected and linearly connected spaces.
Learning outcomes:	A student should demonstrate knowledge of basic properties of subsets of topological spaces, various sorts of topological spaces and continuous functions defined on them. A student also should prove some basic propositions concerning topological spaces and its properties.
Name of lecturer:	Prof. Taras Radul
Contact (email address):	tarasradul@yahoo.co.uk
Literature:	1. Ryszard Engelking. General Topology. Polish Scientific Publishers. 1977 2. Seymour Lipschutz. Theory and Problems of General Topology. Schaum's Outlines Series. McGraw-Hill Education. 2011