

# MATH 477/578

## Topology (3 units)

### Course Outline

Sections	Topics	# of weeks
1–6	<b>General Topology:</b> Sets; topology on a set; bases; metric spaces; subspaces; position of a point with respect to a set.	3.0
9–11	<b>Continuity:</b> Maps; continuous maps; homeomorphisms.	2.5
12–17	<b>Topological Properties:</b> Connectedness; path connectedness; separation axioms; compactness.	2.5
21, 23	<b>Topological Constructions:</b> Quotient spaces; projective spaces.	2.5
30, 32	<b>Fundamental Group:</b> Homotopy; fundamental group.	2.5
	<b>Tests</b>	1.0

Textbook: *Elementary Topology*, 1st edition, by O. Viro, O. Ivanov, N. Netsvetaev, V. Kharlamov.

Adopted: Spring 2013.