Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
MAT301	Topology	5	4	0	0	4	8

Prerequisites	MAT101, MAT102
Admission Requirements	MAT101, MAT102

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	Master elementary topology via the study of the topology of metric spaces.
Content	Metric spaces (main inequalities, distances, equivalent distances, examples of metric sapces, normed vector spaces and convexity, distance between two sets and diametre, open and closed balls, neighborhood, open and closed sets, closure and interior, dense subsets). Topology (topological spaces, induced topology). Sequences in metric spaces (convergence, convergence in a product of metric spaces, limit point, caractersation of closed sets with sequences, Cauchy sequences, complete spaces). Continuous maps between metric spaces (sequential and topological caracterisation of continuity, uniform continuity, lipshizt maps). Compacity. Connectedness
References	Léa Blanc-Centi - Cours de Topologie http://math.univ-lille1.fr/~blanccen/Enseignement/td/1314/L3/Topologie_Cours.pdf James Munkres, Topology. Georges Skandalis - Topologie et analyse -Dunod (2004)

Theory Topics

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