



Pure Mathematics 505 Topology I

Metric spaces. Introduction to general topology.

Course Hours: H(3-0)

Prerequisite(s): [Pure Mathematics 435](#) or [455](#) or consent of the Division.

Text: "Topology," by J.R. Munkres, 2nd edition, Prentice Hall, 2000.

Syllabus

Topics

Set theory

Metric spaces and topological spaces

Connectedness, compactness

Separation axioms, the Urysohn metrization theorem

The Tychonoff product theorem, compactifications

Further topics such as complete metric spaces, Baire spaces, dimension theory

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