

COURSE DETAIL

GENERAL TOPOLOGY

Country

Korea, South

Host Institution

Yonsei University

Program(s)

Yonsei University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

103

UCEAP Course Suffix**UCEAP Official Title**

GENERAL TOPOLOGY

UCEAP Transcript Title

GENERAL TOPOLOGY

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course begins with an understanding of the concept of distance in mathematics, and introduces the fundamental concepts and various properties of topological structures. It provides a theoretical foundation for topics previously used in calculus, including the real number system, limits, continuous functions, the extreme value theorem, the mean value theorem, the existence of definite integrals, the fundamental theorem of calculus, and the intermediate value theorem. In addition, the course explores the geometric properties of topological concepts. Topics include Set Theory and Logic, Topological Spaces and Continuous Functions, Connectedness and Compactness, Countability and Separation Axioms, The Tychonoff Theorem, Metrization Theorems and Paracompactness, and Complete Metric Spaces and Function Spaces.

Language(s) of Instruction

English

Host Institution Course Number

MAT3122

Host Institution Course Title

GENERAL TOPOLOGY

Host Institution Course Details

<https://underwood1.yonsei.ac.kr/>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2025-2026

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