

# COURSE DETAIL

## TOPOLOGY

**Country**

Ireland

**Host Institution**

University of Galway

**Program(s)**

Irish Universities,National University of Ireland, Galway,University of Galway

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Mathematics

**UCEAP Course Number**

114

**UCEAP Course Suffix****UCEAP Official Title**

TOPOLOGY

**UCEAP Transcript Title**

TOPOLOGY

**UCEAP Quarter Units**

4.00

**UCEAP Semester Units**

2.70

## Course Description

This course introduces the theory and application of topology. Topics include the basic algebra of set theory, including De Morgan's Laws; topological space; the relationship between topologies and continuous functions; homeomorphism; construction of new topological spaces using the subspace and quotient constructions; compactness and basic theorems relating to this concept; connectedness and basic theorems relating to this concept; and applying topological ideas to solve problems in other areas of mathematics or applied mathematics e.g. topological proof of the fundamental theorem of algebra or a proof of the Brouwer fixed point theorem.

## Language(s) of Instruction

English

## Host Institution Course Number

MA342

## Host Institution Course Title

TOPOLOGY

## Host Institution Campus

National University of Ireland, Galway

## Host Institution Faculty

## Host Institution Degree

## Host Institution Department

Mathematics

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