COURSE DETAIL

ALGEBRAIC TOPOLOGY

Country Denmark

Host Institution University of Copenhagen

Program(s) University of Copenhagen

UCEAP Course Level Upper Division

UCEAP Subject Area(s) Mathematics

UCEAP Course Number 150

UCEAP Course Suffix

UCEAP Official Title ALGEBRAIC TOPOLOGY

UCEAP Transcript Title ALGEBRAIC TOPOLOGY

UCEAP Quarter Units 6.00

UCEAP Semester Units 4.00

Course Description

This course is a first introduction to algebraic topology, the area of mathematics in which algebra is used to study topological spaces. It defines the fundamental group and singular homology and studies their basic properties and applications. The course introduces foundational competencies in algebraic topology. Important concepts include homotopy, homotopy equivalence, fundamental group, covering space, chain complex, and homology. Prerequisites include knowledge about general topology and abelian groups, as obtained through courses such as Topology and Algebra 2, and Advanced Vector Spaces.

Language(s) of Instruction English

Host Institution Course Number NMAA05038U

Host Institution Course Title ALGEBRAIC TOPOLOGY

Host Institution Campus

Host Institution Faculty Science

Host Institution Degree

Master

Host Institution Department

Mathematical Sciences

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