

## FACULTY OF SCIENCE Department of Mathematics and Statistics

## PURE MATHEMATICS 633 "ALGEBRAIC TOPOLOGY II"

**Calendar Description:** H(3-0)

Cohomology operations, CW-complexes, introduction to homotopy theory.

Suggested Text: Gray, "Homotopy Theory", Academic Press.

## Syllabus

## **Topics**

More on Fundamental Group

**Higher Homotopy Groups** 

**Fibrations** 

Simplicial Approximation Theory

Blakers Massey Theorem, Frendenthal Suspension Theorem

**CW-Complexes** 

Spectra

Puppe Axioms and Generalized Homology

Spectral Sequences, Hureuvicz Theorem

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