

MATH 528: Algebraic Topology II

Instructor: Alejandro Adem

Course Material and Topics:

This is the second part of an introductory sequence in topology which will familiarize students with basic topics and provide preparation for more advanced courses. Topics include: higher homotopy groups, fibrations, vector bundles, classifying spaces, characteristic classes, spectral sequences, elements of K-theory, Lefschetz Fixed-Point Theorem, cohomology operations, etc.

Prerequisites: Math 527 or equivalent.

Evaluation: The course mark will be based on problem sets and presentations in class; there will be no final exam.

Possible references:

- Bredon, *Topology and Geometry*
- Hatcher, *Algebraic Topology*