Math 572 Spring 2017 Introduction in Algebraic Topology Syllabus

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Homepage for the course: http://www.math.purdue.edu/~rkaufman/MA572sp17

Office hours: T Th 11:45-11:45 and by appointment. If you have a conflict with these times, we can arrange for another time to meet.

Textbook: Elements of Algebraic Topology by James R. Munkres Westview Press; New Edition (December 1, 1993) ISBN-10: 0201627280, ISBN-13: 978-0201627282 Other sources may also be used.

Course description: The course is an introduction to algebraic topology. The focus will be on homology and cohomology theory. This is a basic important subject which is used in many fields besides topology, such as differential, symplectic and algebraic geometry, number theory, mathematical physics, (harmonic) analysis, operator theory, etc..

We will treat the classical simplicial and singular homology and cohomology, but we also plan to cover CW complexes and deRham forms.

Required Work: Besides the expected participation in class there will be homework assignments and a take home final or written /oral project at the end of the semester. The homework will be listed on the webpage.

Academic Adjustments for Students with Disabilities

In this mathematics course accommodations are managed between the instructor, student and DRC Testing Center.

Students should see instructors outside class hours before or after class or during office hours to share your Accommodation Memorandum for the current semester and discuss your accommodations as soon as possible.