

Math 60330: Basic Geometry and Topology, Fall 2017

Instructor: Prof. Andrew Putman

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Webpage: <http://www.nd.edu/~andyp/teaching/2017FallMath60330/>

Class Hours: MWF 10:30-11:20

Classroom: Pasquerilla Center 116

Office Hours: Tu 10:30-12:30, also by appointment (or just stop by if my door is open!)

Topics: We will begin with a rapid review of pointset topology. Next, we will discuss covering spaces and the fundamental group. The remainder of the semester will cover smooth manifolds.

Suggested Texts: I will not follow a textbook, but the following books are useful references.

1. *Introduction to Smooth Manifolds* by Lee
2. *Topology from the Differential Viewpoint* by Milnor
3. *Algebraic Topology* by Hatcher, available for free at
<http://www.math.cornell.edu/~hatcher/AT/ATpage.html>

Homework: Homework will be assigned every Friday and will be due the following Friday by 5pm in my office (slide it under my door if I am not there). It will be posted to the course webpage by Friday evening. Collaboration is encouraged, but each student must independently write up his/her own solutions. Late homework is never accepted, but the lowest homework grade is dropped.

Homework Grading: The grader will carefully grade a few randomly chosen problems each week (the number will depend on the enrollment for the course). The rest of your grade will be based on completeness (i.e. having a credible looking answer to each problem).

Exams: There will be one midterm exam and one final exam. The date of the midterm will be announced the second week of classes.

Grading:

25% Homework

35% Midterm

40% Final