

# Math 60330: Basic Geometry and Topology, Fall 2016

**Instructor:** Prof. Andrew Putman

**Office:** Hurley 279

**Email:** andyp@nd.edu

**Webpage:** <http://www.nd.edu/~andyp/teaching/2016FallMath60330/>

**Class Hours:** MWF 12:50-1:40

**Classroom:** Hayes Healy 125

**Office Hours:** Tu 10-12, 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:** I will carefully grade 1 or 2 problems each week (chosen randomly). 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:**

40% Homework

30% Midterm

30% Final