## Math 60440: Basic Topology II, Spring 2024

Instructor: Prof. Andrew Putman Office: Hurley 156A Email: andyp@nd.edu Webpage: http://www.nd.edu/~andyp/teaching/2024FallMath60440/ Class Hours: TTh 11:00-12:15 Classroom: HH 117 Office Hours: Just stop by if my door is open!

**Topics**: The main topics of this course are homology, cohomology, and Poincaré duality, together with various geometric applications of these tools.

Suggested Texts: I will sort of follow Algebraic Topology by Hatcher, available for free at

http://www.math.cornell.edu/~hatcher/AT/ATpage.html

**Homework**: Homework will be assigned every Thursday and will be due the following Thursday by 5pm in my office (slide it under my door if I am not there). It will be posted to the course webpage by Thursday 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 grade a couple randomly chosen problems each week. 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:

 $\begin{array}{l} 25\% \ \mathrm{Homework} \\ 35\% \ \mathrm{Midterm} \\ 40\% \ \mathrm{Final} \end{array}$