Math 60440: Basic Topology II, Spring 2019

Instructor: Prof. Andrew Putman Office: Hurley 164 Email: andyp@nd.edu Webpage: http://www.nd.edu/~andyp/teaching/2010FallMath60440/ Class Hours: MWF 10:30-11:20 Classroom: HH 125 Office Hours: MW 11:30-12:30, also by appointment (or 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 mostly follow 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 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:

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