

**University of Washington**  
**Math 545**  
**Winter 2019**  
**General Information**

**Instructor:**

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**Office hours:** By appointment, or just drop in. The grader will be Tuomas Tajakka again ([ttajakka@uw.edu](mailto:ttajakka@uw.edu)). He will also be available by appointment as well as shortly before each assignment is due.

**Text:** J.M. Lee, *Introduction to Smooth Manifolds*, second edition, available at the University bookstore. I have also put Spivak's *A Comprehensive Introduction to Differential Geometry, Volume 1*, on reserve in the Math Library.

**About the course and prerequisites:** After finishing up Chapter 12 of Lee's *Introduction to Topological Manifolds* (second edition), we will move on to the study of smooth manifolds. I hope to cover more or less the first 10 or 11 chapters of the text this quarter. You will need to be familiar with the material in Appendices A–D to be able to succeed in this course.

**Homework:** Homework will be assigned more or less weekly and will consist of 5 or so problems to be written up and handed in for grading. This homework is expected to be demanding and will count for much of your grade. Although you are encouraged to share ideas on homework problems with your classmates, I expect you to actually write your homework on your own. You are also not allowed to use discussion boards on the internet, and any unattributed use of material from the internet constitutes plagiarism. This will result in a grade of 0 on your assignment. (Repeated instances of plagiarism may also lead to more serious sanctions.) In principle, late homework will not be accepted.

In addition, there are many exercises integrated into the text. Although these will generally not be assigned as homework problems, I expect that you read each exercise carefully and make sure that you know exactly how to solve it.

**Final Exam:** The Final Exam is scheduled for Monday, March 18 from 2:30–4:30.

**Grading:** Your grade will be based approximately 60% on the required homework problems and 40% on the in-class final. A grade at or below 3.0 means you are not performing at the level expected of a graduate student.