

MAT 364: Topology and Geometry

Stony Brook, Fall 2011

Text: *Topology from the Differentiable Viewpoint*, (4th ed.) by John W. Milnor.

This little book is a classic, but it does assume some background material, which I will endeavor to fill in as we progress through the semester.

Other useful texts for companion reading are:

Topology of Surfaces, by L. Christine Kinsey

Topology, by James Munkres

Differential Topology, by Victor Guillemin & Alan Pollack

About this course: This course is an introduction to topology. We will cover several basic topological ideas, but not study topology in its full detail. For the most part, we will stick to the topology of smooth manifolds embedded in \mathbb{R}^n .

Reading: The text is rather densely written, so you may not understand it on the first or even second reading. Keep trying— it will eventually pay off. If you are having trouble reading the text, please discuss this with me!

Examinations and grading: There will be one midterm exam, weekly homeworks, and a final exam. Doing the homeworks is very important. Don't fool yourself into thinking you understand just because it makes sense when *I* talk about the material.

What	When	% of Final Grade
Midterm	late October in class	33%
Final Exam	Tuesday, Dec 19 2:15–4:45 pm	33%
Homeworks, Participation, etc.		33%

Make sure that you can attend the exams at the scheduled times; **make-ups will not be given**. If one midterm exam is missed because of a serious (documented) illness or emergency, the semester grade will be determined based on the balance of the work in the course.

Webpage: <http://www.math.sunysb.edu/~scott/mat364.fall11/>

Homework and Schedule: The list of homework assignments and the most current schedule of topics can be found on the [class web page](#). It will change, so check it regularly.

Homeworks will be due in class on the wednesday following the week they are assigned. This gives you a chance to discuss the problems with me in class or office hours and still have time do the problems. The graded homeworks will be returned in class.

Instructor: Prof. S. Sutherland / Math 5-112 / 632-7306 / scott at math.sunysb.edu

Office hours: Mondays 2-4 in Math 5-112, Thursdays 10-11 in Math P-143, and by appointment.

Note that I can often be found around the department most days. Send me an email or phone first if you want to be sure I'm around, or just come by and take your chances. I'm around a lot, though sometimes you'll have to wait a bit.

Grader: Seyed Ali Aleyasin / Math 2-121 / sali at math.sunysb.edu

Disabilities: If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact Disability Support Services at <http://studentaffairs.stonybrook.edu/dss/> or (631) 632-6748. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website:<http://www.stonybrook.edu/ehs/fire/disabilities.shtml>.

Academic Integrity: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is **always** wrong, whether this is another student's work or taken uncredited from websites or solution manuals. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/uaa/academicjudiciary/>.

Critical Incident Management: Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn.