Lecturer: Bobby Wilson  
Office: 2-171  
E-mail: blwilson@mit.edu  
Office Hours: Wednesdays 1 pm-3 pm, Thursdays 2 pm-3 pm and by appointment.

Grader Instructor: TBA

Class Times: Lecture: Mondays and Wednesdays, 9:30 am-11:00 am in Room 2-143

Text: Differential Geometry of Curves and Surfaces, Manfredo do Carmo

Course Description: Introduction to differential geometry, centered on notions of curvature. Starts with curves in the plane, and proceeds to higher dimensional submanifolds. Computations in coordinate charts: first and second fundamental form, Christoffel symbols. Discusses the distinction between extrinsic and intrinsic aspects, in particular Gauss' theorema egregium. The Gauss-Bonnet theorem. Geodesics. Examples such as hyperbolic space.

Course Website: General Policies

Student support services: If you are dealing with a personal or medical issue that is impacting your ability to attend class, complete work, or take an exam, please discuss this with Student Support Services (S^3). The deans in S^3 will verify your situation, and then discuss with you how to address the missed work. Students will not be excused from coursework without verification from Student Support Services. You may consult with Student Support Services in 5-104 or at (617) 253-4861. Also, S^3 has walk-in hours Monday-Friday, 10:00 am-11:00 am and 2 pm-3 pm.

Student disability services: MIT is committed to the principle of equal access. Students who need disability accommodations are encouraged to speak with Kathleen Monagle, Associate Dean, early in the semester so that accommodation requests can be evaluated and addressed in a timely fashion. Even if you are not planning to use accommodations, it is recommended that you meet with SDS staff to familiarize yourself with the services and resources of the office. You may consult with Student Disability Services in 5-104 or at (617)253-1674. If you have already been approved for accommodations, please speak with me and the Mathematics disabilities accommodation coordinator Theresa Cummings (tcumming@mit.edu) in the Math Academic Services (MAS) office as soon as possible so that we can work together to get your accommodation logistics in place.

Grading

(Out of 100 total points.)
Exams (80 points):
   Midterm (40 points): Wednesday, March 21
   Final Exam (40 points): Comprehensive, date to be determined

Homework (20 points): 11 assignments (Lowest Grade Dropped)

Miscellaneous

Collaboration policy:
Independently of whether you collaborate or not, any homework submitted must be formulated by you in your own words. If you choose to collaborate, it is necessary to note on the assignment with whom you collaborated with. Word-by-word copying is strictly forbidden, and may result in a 0 point score for all concerned.

Missed homework:
If you have to miss a homework deadline for some valid reason, contact the lecturer having obtained a note from S^3 if necessary. An attempt will then be made to deal with the matter in a satisfactory manner. The arrangement will be confirmed by email to you, which you should keep for your records. All such matters must be resolved before the last day of classes: no further changes to homework scores will be made after that.

Midterms and final exam: No notes, books, or calculators will be allowed in the exams.