Syllabus Version 1
Calculus on Manifolds
MWF 1300-1350 (209 Deady) + F 1500-1550 (TBA)
Office hours Monday, Wednesday, Friday 1000-1050

Homework will be due each Monday on the material of the subsequent week. The Friday discussion hour is an opportunity for you to ask questions about the homework. The homework problems will be challenging and it is essential that you have thought about the homework before coming to the discussion hour. You should also feel free to ask questions regarding the lecture that have come up then (or during class of course). I will drop your 2 lowest homework scores in computing the homework average. This is to allow for life's little emergencies in case you have to miss turning in 1 or 2 homeworks. Late homework will not be accepted.

Grade: Will be based
25% on the homework
25% on the mid term Wednesday 2 May 2012
50% on the Final Exam 15:15 Monday 11 June 2012 Owing to faculty legislation, final exams may not be given early under any circumstances

Notes: No class Memorial Day Monday May 27 2011.

Teaching Associate: Ekaterina Puffini. Academic Calendar

Here are tentative reading and homework assignments. Subject to change

Week 1 (2 Apr - 6 Apr 2012): Read 1-34. Do 1.7, 1.10, 1.22, 1.30, 2.4, 2.5, 2.7.
Week 2 (9 Apr - 13 Apr 2012): Read 34-45. Do 2.12, 2.13., 2.21, 2.22, 2.23, 2.24, 2-25, 2-26. Also Extra problem
Week 3 (16 Apr - 20 Apr 2012): Read 46-56. Do 2.29, 2.30, 2.31, 2.32, 2.35, 2.36, 2.37 [not part b], 2.38, 2.39
Problem A1: Prove or disprove the following assertion: ``Let $U$ be a bounded open subset of $\mathbb{R}^n$. Then the characteristic function of $U$ is integrable in the extended sense over $U$.

Problem A2: Prove or disprove the following assertion: ``If $U$ is any unbounded open subset of $\mathbb{R}^n$, then the characteristic function of $U$ is not integrable in the extended sense over $U$.''

Week 8 (21 May - 25 May 2012): Assignment #8
Week 9 (29 May - 01 June 2012): Assignment #9
(28 May 2012 is Memorial Day)
Week 10 (04 Jun - 08 Jun 2012): TBA

Notes available in the class:

Change of variable Theorem
Green's, Gauss's, Stokes Theorem