MTH 868: Geometry and Topology I

http://www.math.msu.edu/~xwang/MTH868.htm

Lecture: A334 Wells Hall, MWF 9:10 AM-10:00 AM.
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- Office Hours: TTh 2:00PM-3:30PM.

Course description: This course is an introduction to smooth manifolds. We begin with the definition, properties and examples of manifolds, tangent and cotangent bundles and tensor bundles. We will then study vector fields, differential forms, integration on manifolds, Riemannian metrics and vector bundles.


There are many books on smooth manifolds. The following are several other commonly used references which you may find helpful:


Homework and Exam: Homework will be assigned regularly in class and collected weekly. There will be a two-hour final exam (time and date to be announced).

Grading: homework (60%), final exam (40%).