Instructor: Tristan Collins, Science Center 239

Office Hours: 2:00-3:00p, Wednesday and Thursday.

Textbooks:
- Differential Geometry: Bundles, Connections, Metrics and Curvature– Clifford Taubes
- Foundations of Differential Geometry– Shoshichi Kobayashi and Katsumi Nomizu

Course Outline:
- Smooth manifolds
- Lie groups
- Vector bundles
- Metrics and Connections
- Geodesics
- Principal bundles
- Characteristic classes
- Other topics too

Prerequisites: Math 132 and/or Math 136, or permission of the instructor.

Homework: There will be weekly assignments, posted on Wednesday, which are to be turned in the following Wednesday at 5:00 pm. Late homework is discouraged. Please staple or paper clip your homework, and remember to write your name on it!

Exams: There will be a take-home final exam

Grading: The final grade will (essentially) be computed in the following way: Homework: 60%, Final: 40%.

Collaboration: I encourage students to collaborate on their homework. However, it is absolutely essential that students write up their own solutions. Collaboration extends to discussion amongst
classmates and peers, but *DOES NOT* include the use of online resources of any kind (eg. Math Stack Exchange, online solutions manuals etc.). Collaboration on the final exam is prohibited.

**Important Dates:**

- University Holiday ............... Monday, September 5 (tentative)
- Thanksgiving Recess .......... Saturday, March 14 - Sunday, March 22
- Second Midterm .... Wednesday, November 23–Sunday, November 27
- Last Day of Class ......................... Friday, December 2