Further Topics in Differential Geometry, 2: Syllabus and course information: Further Topics in Differential Geometry, 1 — MAT 6932/4930 — Fall 2015

MWF 8th period, LIT 223
Link to class home page

Office Hours: Tentatively Tuesday 6th period (12:50–1:45) and Wednesday & Friday 9th period (4:05–4:55). Please come early in the period or let me know to expect you later; otherwise I may not stay in my office for the whole period. See my schedule for updates. Students who can’t make scheduled office hours may see me by appointment on most weekdays.

Prerequisite: Further Topics in Differential Geometry, 1.

Textbook: None.

Syllabus (course content): This course is the second semester of a two-semester sequence. Topics I currently plan to cover are fiber bundles (with many subtopics: vector bundles, principal bundles; associated bundles; holonomy; connections on principal bundles and vector bundles; curvature of connections; Chern-Weil theory and characteristic classes of vector bundles) and some geometry of Lie groups and homogeneous spaces. This list of topics may be modified depending on the composition of the class.

Exams, Homework, and Grading: There will be no exams. Homework will include some required hand-in problems, and some optional problems for students who want to explore further. I will also expect students to study their notes to keep up with the lectures. Grades will be based on homework and attendance. The workload needed to receive an A will not be burdensome; however, your attendance will need to be good.

Attendance: I work hard to prepare my lectures, and I expect all enrolled students to attend all of them, with the usual allowances for illness, emergency, etc. When you must miss a class, please obtain notes from a classmate.

Student Honor Code. UF students are bound by The Honor Pledge, which states:

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

The Honor Code (here) specifies a number of behaviors that are in violation of this code, and the possible sanctions. Furthermore, students are obligated to report to appropriate personnel any condition that facilitates academic misconduct. If you have any questions or concerns about student conduct, please consult me.

Accommodations for students with disabilities: Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. See http://www.dso.ufl.edu/drc.