Syllabus for Math 447, Section 001, CRN 433328

Instructor: Alex Freire

Office Location and Contact Info
Ayres Hall, room 325, 974-4313, 974-2461 (Mathematics front desk)
freire@math.utk.edu
Office Hours: MWF 10:30--12:00

Course Description
Analysis in euclidean space: basic topology, differentiable functions, differentiable maps and surfaces

Student Learning Outcomes
Preparation for graduate-level work, including practice in writing mathematical arguments and in independent learning

Prerequisites
This course is intended for honors math majors and first-year graduate students, so a certain level of mathematical sensibility (‘maturity’) will be assumed. This includes a fearless attitude (and curiosity) towards anything mathematical.

Specifically, multivariable calculus and basic linear algebra are prerequisites. Some analysis in one real variable, while not strictly a prerequisite, would certainly help a lot. Get hold of a standard text on General Topology (e.g. Dugundji, Kelley, Munkres) for occasional reference.

Text/Materials/Resources
Text 1: W. Fleming, Functions of Several Variables (Springer-Verlag)
Text 2: C.H. Edwards, Jr., Advanced Calculus of Several Variables (Dover)
Online handouts, see:
http://www.math.utk.edu/~freire/teaching/m447f16/m447f16index.html
**Calculator Policy**
Calculator? What’s that? Neither needed nor allowed.

**Learning Environment and Classroom Expectations/Etiquette**
Just be a polite, responsible adult, and we’ll be fine.

**Assessment and Evaluations Methods**
Homework sets (60%), one in-class midterm (20%), comprehensive final (20%)

**Attendance and Make Up Policies**
Come to every lecture, or you may find yourself lost on the next one. Turn your homework sets in on time (point deductions for late homework).

**Course Schedule**
MWF, 9:05--9:55, A111

**Math Tutorial Center**
(They probably won’t be able to help with this material)

**Campus Syllabus** (includes Disability Services info)