Advanced Calculus II (MAA4212)

Spring 2015: Section 1754, MWF 3rd hour, Little Hall, room 221
Email: mjjury@ufl.edu
Office: Little Hall 484
Office Hours: TBA
Text: There is no required text for the course, all the material may be found in the lecture notes which will be posted below as the course progresses. If you want to look at a book, two that may be helpful are Introduction to Analysis, by Maxwell Rosenlicht, Dover, 1968.
and

Course Content
Topics for this second semester include, uniform convergence; differentiation; Riemann integration; sequences and series of functions; the calculus of functions from $\mathbb{R}^n \to \mathbb{R}^m$; and the inverse and implicit function theorems. Other topics as time permits. In addition to mastery of the course content, course objectives include reading, writing, and discovering proofs and constructing proofs and counterexamples in analysis.

Lecture Notes [Last update: 1/7/15]
Schedule
This week's lectures
Wednesday 7 Jan: First class, begin Section 9, through Example 9.5

Homework assignments
Homework will be collected and graded roughly once a week; for a total of about 10 to 15 problems. In addition several problems will be assigned each lecture (not to be turned in). Late homework will not be accepted, but the the lowest two homework scores will be dropped.

Homework 1 (due Wednesday 14 Jan): Exercise 9.4 and Problem 9.4 (see lecture notes)

Grading policies
The course grade will consist of the homework average (25% of the final grade) and three midterm exams (25% each). Final grades are assigned according to the standard scale: 90-100 A, 87-89 A-, 84-86 B+, 80-83 B, 77-79 B-, etc.

Tentative exam dates are as follows:
Exam 1 Friday 6 February
Exam 2 Monday 16 March
Exam 3 Monday 19 April
End of Course Exam Monday 20 April

The final exam (Thursday 30 April, 5:30–6:30 PM) will serve as a make-up.
No notes or books will be allowed during exams.

University policies and resources
- Dean of Students:
  - Academic Honesty Guidelines
    (Includes Code of Student Conduct, University of Florida Honor Code)
  - Disability Resources
- Americans with Disabilities Act Compliance
- Mathematics Department Policy on Incompletes
- UF Policies for assigning grade points
  (This link has nothing to do with the grading policies of this course; rather it explains how letter grades are converted to grade points for the purpose of computing GPAs.)