Advanced Calculus II (MAA4212)

Spring 2017: Section 17G4, MWF 3rd hour, Little Hall, room 223
Email: mjury@ufl.edu
Office: Little Hall 484
Office Hours: MW 4th hour, R 3rd hour

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 updated 3 Jan 2017)

Schedule

This week's lectures
1/4: Introduction to the course, begin Section 9, up to Theorem 9.6

Past lectures

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: TBA

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 Monday 6 February
Exam 2 Wednesday 15 March
Exam 3 Monday 17 April

The final exam (Monday 24 April, 7:30–9:30 AM) 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.)