

MAA 4102: Introduction to Advanced Calculus for Engineers and Physical Scientists 1

Fall 2018

Location: LIT 125
Time: MWF 10:40am-11:30am
Instructor: Michael Hull
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Office: LIT 452
Office Hours: MWF 1:00pm-1:45pm

Course Description

Theory of real numbers, functions of one variable, sequences, limits, continuity and differentiation; continuity and differentiability of functions of several variables.

Course Goals

The primary goal of the course is to obtain a sound understanding of the basic mathematical concepts of calculus. A secondary goal is to improve the ability to reason carefully and creatively when dealing with mathematical material. We will cover the first four chapters of the text and as much of chapter 5 as time permits.

Who Should Take This Course

The fundamental ideas of calculus play an important role in the physical sciences and engineering. For this reason, students in these areas may choose to take this course, even though no particular applications are discussed in the course. Students in mathematics, education, and other areas may also choose to take this course. However, students who intend to pursue graduate study in mathematics should not take this course. These students should take MAA 4211 instead.

Textbook

A Friendly Introduction to Analysis by Witold A. J. Kosmala.

Homework and Quizzes

Homework problems will be assigned (roughly) every week. Homework problems will not be collected or graded. Instead, there will be an in-class homework quiz consisting of one or more problems from the homework assignment. Some of these problems are very difficult and will require a significant amount of time to work. In particular, students should not expect to be able to complete problems in the amount of time allotted for the homework quiz unless they have already worked out the problems ahead of time.

Typically the homework assignment will be posted on Monday and the homework quiz will take place on Friday. There are no make-up homework quizzes. There will be three dropped homework quizzes for unavoidable situations. The homework assignment for each week will be posted online here: <https://people.clas.ufl.edu/mbhull/maa-4102-introduction-to-advanced-calculus-for-engineers-and-physical-scientists-1/>.

Exams

There will be 3 in-class exams and a cumulative, optional final exam. Students who choose to take the final exam will have their score on the final replace their lowest exam score if this is an improvement. Tentative dates for the exams are listed below. Students who expect to have conflicts with the exam times should make arrangements with the instructor as soon as possible. Make-up exams will only be given under extraordinary circumstances.

Exam 1: Friday, 9/21.

Exam 2: Friday, 10/26.

Exam 3: Monday, 12/3.

Final: Tuesday, 12/11, 12:30pm-2:30pm.

Grades

Final grades for the course will be computed as follows:

Homework Quizzes:	25%,
Exams:	25% each.
Final (optional)	Replaces lowest exam grade.

Final letter grades will be assigned according to the standard scale: 93-100 A, 90-92 A-, 87-89 B+, 83-86 B, 80-82 B-, 77-79 C+, 73-76 C, 70-72 C-, 67-69 D+, 63-66 D, 60-62 D-, 0-59 E.

UF Grading Policy

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

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](#) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Attendance Policy

Attendance in class is required, see the university attendance policy at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx> for more information.

Disability Accommodation

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu> during the last two or three weeks of the semester. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

Contact information for the Counseling and Wellness Center

<https://counseling.ufl.edu/>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies