

Syllabus

General Info

Course MAT122 Calculus II

Instructor Charilaos Skiadas (skiadas at hanover dot edu)

Term Winter 2016-2017

Office SCH 121C

Office Hours MWF 1:00pm-2:30pm, and by appointment.

Book *Calculus*, 3rd ed, by Jon Rogawski

Websites for notes¹

Class times MWF 9:20pm-10:30pm in CFA106.

Course Description

Calculus 2 continues the work that started in Calculus 1. You are already familiar with derivatives and integrals. We will now put those concepts to work as we explore a number of applications, including:

- The exponential and logarithm functions and their properties
- Trigonometric and inverse trigonometric functions
- Various proper and improper integrals and techniques of integration

By the end of this course:

- You will have mastered the techniques employed in the computation of integrals for various functions.
- You will be familiar with how the various special functions are defined and their properties.
- You will develop an appreciation for abstract mathematical concepts by seeing how all the properties of the various special functions are rooted in their definitions as integrals and inverses.
- You will have seen how these abstract mathematical concepts can help solve real world problems in areas such as exponential growth and decay and compound interest, to name a few.

Course Components

Reading Notes and Practice Problems

On the website you will find a schedule² with links to documents for each class day. In those documents you will find notes for the day's lesson, a reading assignment, and

¹skiadas.github.io/Calc2Course/site/

²<http://skiadas.github.io/Calc2Course/site/schedule.html>

a list of practice problems. You should work on those practice problems, and ask any questions you have about them. You do not have to turn the problems in.

Class Attendance

You are expected to attend every class meeting, including labs. You are only allowed to miss 3 classes without excuse. From that point on, every unexcused absence will result in a reduction of your final score by one percentage point, up to a total of 5 points. Excused absences should be arranged in advance, and backed by appropriate documentation. Emergencies will be dealt with on an individual basis. There are very few reasons that would qualify as an excuse for an absence.

Homework Assignments

There will be regular homework assignments about 2 per week. There will also be a list of problems that you are expected to solve but not turn in. Questions on the exams tend to be similar to the homework problems, so it is to your advantage to really *understand* the homework, and not merely “do it” or copy it just to get it turned in. Homework assignments are 20% of your final grade.

Exams

There will be two midterms, on Monday, February 10th and Monday, March 20th, and a final/3rd midterm during finals week. **You have to be here for the exams.** If you have conflicts with these days, let me know as soon as possible. Do not plan your vacation before you are aware of the finals schedule. In terms of your final grade, the exams you did better on will weigh more.

Getting Help

- The learning center has set up study groups for the class. **USE THEM!**
- You should never hesitate to ask me questions. I will never think any less of anyone for asking a question. Stop by my office hours or just email me your question, which has the great benefit of forcing you to write it down in clear terms, which often helps you understand it better.
- You are allowed, and in fact encouraged, to work together and help each other regarding the notes and the practice problems. However, I strongly encourage you to try the problems out on your own first before talking to someone about them.
- You may discuss homework problems with others, but only after you have spent some time trying them on your own. And in any event the submitted work must be your own! So even though you may talk to others about the problem, when you sit down to write the answers you should be on your own.

Grading

Your final grade depends on class attendance, homework, project, quizzes, midterms and the final, as follows:

| Component | Percent |
|----------------|---------|
| Attendance | 5% |
| Homework | 20% |
| Worst Midterm | 20% |
| Middle Midterm | 25% |
| Best Midterm | 30% |

This gives a number up to 100, which is then converted to a letter grade based roughly on the following correspondence:

| Letter grade | Percentage Range |
|--------------|------------------|
| A, A- | 90%-100% |
| B+, B, B- | 80%-90% |
| C+, C, C- | 70%-80% |
| D+, D, D- | 60%-70% |
| F | 0%-60% |