

Math 151: Calculus 1, Section 3

Fall 2014

Syllabus

Instructor: Prof. Goldstine (rhymes with "line")

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Phone: x4366

Office: Schaefer 171 (by the big Fibonacci mobile)

Office Hours: Monday, 2:30–3:30 PM; Wednesday, 12:00–1:00 PM;
Thursday, 11:00 AM–12:00 PM; and by appointment.
Drop-ins are welcome, as long as I happen to be free.

TA: Cara Machlin

E-mail: cdmachlin@smcm.edu

Textbook: Stewart, *Single Variable Calculus*, fifth edition

WeBWorK site: <https://ftcourses.webwork.maa.org/webwork2/ft-smcm-math151>

How to Succeed in this Class

This is a fast-paced course, and to succeed you need to do more than listen in class and take notes. Your notes and coursework and textbook and WeBWorK are all important resources, but even more important are the people who are here to help you.

- **Me.** If you have any questions about the course or your progress in it, come to my office hours, make an appointment by email, or come by my office (though in the last case I do not guarantee that I will be available). You do not need to have a specific question about a homework or test problem. There is a tremendous difference between attending my classes and talking to me one-on-one.
- **Your TA.** In the evening class, whenever you are not taking a quiz or test, your TA will help to answer your questions and review the course material. Get as much out of this as you can by looking over your course notes and homework *before* you arrive so that you can better ask questions and engage in the answers.
- **Your classmates.** Many people benefit from studying the material and working on the written homework with peers, and I strongly recommend that you try this to see if you are one of them. I am also happy to have visits from groups of students (either preorganized or spontaneous) in my office hours.

Keep in mind that *copying* someone else's homework, even with that person's permission, is a violation of the Student Code of Conduct and subject to judicial review. Discuss the homework with your peers, but write up your solutions on your own.

Note that WeBWorK usually generates questions with different numbers or multiple choice options for different students, so not only is it cheating to copy someone else's WeBWorK, it won't actually work.

Course Content

This is the first of a two-semester sequence in differential and integral calculus. Below are the topics I expect we will cover between the exams, though the details are subject to change.

Sections 1.1–1.3: Review of functions, graphs, composition of functions.

Sections 2.1–2.6: Limits, rates of change, continuity.

Sections 3.1–3.2: Definition of the derivative.

Test 1

Sections 3.3–3.9: Derivative formulas, the chain rule, applications.

Sections 4.1–4.3: Maxima and minima, Mean Value Theorem, derivatives and graphing.

Test 2

Sections 4.4–4.5, 4.7, 4.10: Curve sketching, optimization, more applications.

Sections 5.1–5.2: Areas and the definite integral

Test 3

Sections 5.3–5.5: The Fundamental Theorem of Calculus, indefinite integrals, substitution.

Selected topics from later sections

Assessment

Show all your work! This goes for written homework, quizzes, and tests. Answers alone will receive little or no credit (except when explicitly stated otherwise). Consider each solution to be an explanation of your work to one of your classmates. Use complete sentences, proper grammar, and punctuation.

WeBWorK

There will be an assignment on WeBWorK for most class meetings, due in the morning before our class meets. Keep in mind that you can try questions more than once—in general, you will be able to try as many times as you need. Persistence is important. The goal of the WeBWorK assignments is to help you as directly as possible master the course material.

Written Homework

Most weeks, you will also have a short written assignment due in class on Friday. This allows us to ask more in depth questions and give you more detailed feedback, and it lets you prepare for the quizzes and tests. **Late homework will not be accepted for credit.** However, your two lowest homework scores will be dropped. Since there will be no exceptions, please try to use these only for emergencies.

I encourage you to work together with your classmates on the homework, but the final preparation and write-up of your work must be your own. (See the comments about working together on the first page!) Your submitted work should be stapled, neatly written, and labeled with your name.

Quizzes

We will have three or four short quizzes during the semester, given at the beginning of the evening course meeting. These will help you get a little bit of practice for the tests, and as for the tests, you may not use graphing calculators during quizzes.

Your quiz grades will be incorporated into your written homework score, and your lowest quiz grade will be dropped.

Tests

We will have three evening tests and a final exam. The dates for these exams are given in the grading table below. Graphing calculators are not permitted in any exams.

*Barring an incapacitating illness, religious conflict (note the first test this semester!), or other such obstacle, there are **no excuses** for missing a test.* If you do have such a conflict, please let me know **at least two weeks** before the exam.

Grading

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|-----------------------------------|------|
| WeBWorK | 15% |
| Homework/Quizzes | 15% |
| Test 1: Wednesday, September 24* | 20% |
| Test 2: Wednesday, October 22 | 20% |
| Test 3: Wednesday, November 19 | 20% |
| Final Exam: Thursday, December 18 | 20% |
| Total | 110% |

Note that there is an extra 10% in the table above. Whichever of the four exams most hurts your course grade will have its weight reduced to half and only count for 10% of your course grade.

Any student with a disability requiring accommodations in this class is encouraged to contact me after class or during office hours. Students with a disability may also wish to contact Kevin Selby in the Office of Academic Services, Glendening Hall, suite 230, x4388.

*Due to schedule constraints, the first test will be given on Rosh Hashanah. If you need to arrange an alternate testing time, please contact me as soon as possible to make arrangements.