

## Course Information

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<b>Instructor:</b>	<i>Phone number:</i>	(502)852-5845 (x5845)
	<i>Office:</i>	Natural Sciences Building 231
	<i>Office hours:</i>	Monday 12:00–13:00, Thursday 11:00–12:00
	<i>Alternative office hours:</i>	Tuesday 13:00–14:00, Wednesday 11:00–12:00

**Lecture:** MTR 2:30–3:45 PM in Natural Sciences Building 212E

**Prerequisites:** MATH 111-112, MATH 190 or an appropriate score on a placement exam.

**Description:** First course in differential and integral calculus of single variable functions.

**Special notes:** Credit may not be received for both MATH 205 and MATH 180. MATH 205 is a general education course and may not be taken pass/fail.

**Textbook:** *Calculus, Early Transcendentals* by James Stewart, sixth edition.

**Objectives:** In this class, we will review the commonly encountered transcendental functions, including trigonometric, logarithmic, and exponential functions. We will learn to identify continuity and take limits of functions, as well as developing the tools to take derivatives and integrals of functions.

**Responsibilities:** You are responsible for attending class on a regular basis and maintaining comprehension of the scheduled class objectives for each day. You are expected to be active participants in class, and to attend examinations. Assignments are provided for your benefit and you are expected to work on them as necessary to grasp concepts for the course.

**Special needs:** Any scheduled absence during a quiz or examination, or any other special needs, *must* be brought to my attention during the first week of class. Unscheduled absences will be handled on a case-by-case basis, with exceptions generally made only for documented emergencies.

**Calculators:** Calculators are unnecessary for any in-class work, and may not be used on quizzes or examinations. Calculators will also be unnecessary for most homework problems, but may be used at your discretion. For any calculation more complicated than the evaluation of functions, you are expected to show your work.

**Honesty:** There are many resources available to help you succeed in this class, including consultation during office hours, secondary textbooks, and cooperation with other students. It is important, however, that all papers handed in be the result of your individual comprehension of the course material. Duplication of others' work is both a disservice to your own education and a serious violation of the university's academic honesty policy.

**Grades:** Homework is ungraded and is provided for study purposes. Quizzes will be based on the homework problems, and will account for 25% of your grade. The three midterm examinations will each be worth 15%, and the final examination is worth 30%. A 90% overall guarantees a grade of A–, 80% guarantees a B–, and 70% guarantees a C–.

**Changes:** The syllabus is subject to change. Changes will be announced in class and updated online.

## Course Schedule

This schedule is tentative and subject to change.

Week	Monday	Tuesday	Thursday
1	August 24 Section 1.1	August 25 Section 1.2	August 26 Section 1.3
2	August 31 Section 1.5	September 1 Section 1.6	September 3 Section 2.1 <b>Quiz #1</b>
3	September 7 <b>Labor day</b>	September 8 Section 2.2	September 10 Section 2.3
4	September 14 Section 2.4	September 15 Section 2.5	September 17 Section 2.6 <b>Quiz #2</b>
5	September 21 Section 2.7	September 22 Section 2.8	September 24 <b>Exam #1</b>
6	September 28 Section 3.1	September 29 Section 3.2	October 1 Section 3.3 <b>Quiz #3</b>
7	October 5 Section 3.4	October 6 Section 3.4	October 8 Section 3.5
8	October 12 <b>Midterm break</b>	October 13	October 15 Section 3.6 <b>Quiz #4</b>
9	October 19 Section 3.7	October 20 Section 3.8	October 22 <b>Exam #2</b>
10	October 26 Section 3.9	October 27 Section 3.10	October 29 Section 3.11 <b>Quiz #5</b>
11	November 2 Section 4.1	November 3 Section 4.2	November 5 Section 4.3
12	November 9 Section 4.4	November 10 Section 4.5	November 12 Section 4.7 <b>Quiz #6</b>
13	November 16 Section 4.8	November 17 Section 4.9	November 19 Section 5.1
14	November 23 Section 5.2	November 24 <b>Exam #3</b>	November 26 <b>Thanksgiving</b>
15	November 30 Section 5.3	December 1 Section 5.4	December 3 Section 5.5 <b>Quiz #7</b>
16	December 7 Review	December 8 <b>No class</b>	
16	Wednesday, December 9 <b>Final exam, 11:30PM–2:00PM</b>		

## Problem Sets through Exam #1

Boldface problems are particularly advanced and will test problem-solving skills beyond the core of the course material.

- Complete by *August 27* in preparation for *Quiz #1*:
  - *Section 1.1*: 2, 5, 10, 17, **21**, 23, 25, 37, **41**, **43**, 45, 47, 54, **57**, 61, 63, **65**, 69.
  - *Section 1.2*: 3, 5, 9, 13, 19, 20.
- Complete by *September 3* in preparation for *Quiz #1*:
  - *Section 1.3*: 1, 3, 5, 7, 13, 20, **22**, 23, 26, 31, 41, 43, 51, **55**, **59**, **64**, **65**, **66**.
  - *Section 1.5*: 1(d), 7, **11**, 15, 25(a–c).
  - *Section 1.6*: 3, 5, 7, 9, 11, 13, **17**, 19, 23, 25, 33, 35, 36, **39**, 47, 49 (express in terms of  $\ln$ ), **50**, **53**, 57, 61, 63, **64**, **67**.
- Complete by *September 10* in preparation for *Quiz #2*:
  - *Section 2.1*: 2, 3, 5, 7. These problems may require a calculator.
  - *Section 2.2*: 1, 5, 9, 10, 13, 15, 17, 25.
- Complete by *September 17* in preparation for *Quiz #2*:
  - *Section 2.3*: 3, 5, **9**, 10, 11, **19**, **21**, 28, 35, 45, **55**.
  - *Section 2.4*: 1, 7, **11**, 19, 21, **25**, **38**.
  - *Section 2.5*: 1, 3, 7, 9, 15, 17, 19, 21, 35, 41, **42**, 45, 49, **63**, **65**.
- Complete by *September 24* in preparation for *Quiz #3*:
  - *Section 2.6*: 1, 2, 3, 5, 7, 13, **25**, 28, 29, **31**, 39, 43.
  - *Section 2.7*: **5**, **7**, 11, 13, 17, 21, 25, **29**, 31, 33, **45**.
  - *Section 2.8*: 3, 5, 9, **11**, 12, 19, 21, 23, **25**, **27**, 35, **41**, 49(b–c), **55**.