

## Course Information

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<b>Instructor:</b>	<i>Phone number:</i>	(502)852-5845 (x5845)
	<i>Office:</i>	Natural Sciences Building 239
	<i>Office hours:</i>	Wednesday 12–1, Thursday 2–3 (tentative)
	<i>Alternative office hours:</i>	Tuesday 2:30–3:30, Wednesday 1–2 (tentative)

**Lecture:** TR 5:30–7:15 PM in EH110

**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**. **Please take special note of the new edition being used starting this year.**

**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, to turn in assignments promptly, and to attend examinations.

**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 20% of your grade. The three midterm examinations will each be worth 15%, and the final examination is worth 35%. 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, but quiz and exam dates are fixed, barring extraordinary circumstances or class consensus.

Week	Tuesday	Thursday
1	January 8 Section 1.1	January 10 Section 1.2, 1.3
2	January 15 Section 1.5, 1.6	January 17 Section 2.1 Quiz #1
3	January 22 Section 2.2, 2.3	January 24 Section 2.4
4	January 29 Section 2.5, 2.6	January 31 Section 2.7 Quiz #2
5	February 5 Section 2.8, 3.1	February 7 Exam #1
6	February 12 Section 3.2	February 14 Section 3.3 Quiz #3
7	February 19 Section 3.4	February 21 Section 3.5
8	February 26 Section 3.6, 3.7	February 28 Section 3.8, 3.9 Quiz #4
9	March 4 Exam #2	March 6 Section 3.10, 4.1
10	Spring break	
11	March 18 Section 4.2, 4.3	March 20 Section 4.4, 4.5
12	March 25 Section 4.7	March 27 Section 4.8, 4.9 Quiz #5
13	April 1 Section 5.1	April 3 Exam #3
14	April 8 Section 5.2	April 10 Section 5.3, 5.4
15	April 15 Section 5.5	April 17 Review
16	Thursday, April 24, 5:30–8:00 Final Exam	

## 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 *January 10* in preparation for *Quiz #1*:
  - *Section 1.1*: 2, 5, 10, 17, **21**, 23, **25**, 33, 37, 40, **41**, **43**, 45, 47, **50**, 54, **56**, 61, 62, **63**, **65**, 69, 70.
- Complete by *January 17* in preparation for *Quiz #1*:
  - *Section 1.2*: 3, 4, 5, 9, 13, **16**, **18**, 19, 20.
  - *Section 1.3*: 1, 3, 5, 6, 7, **12**, 13, 20, **22**, 23, **26**, 31, 42, 43, 50, 51, 53, **55**, **59**, **60**, **64**, **65**, **66**.
  - *Section 1.5*: 1(d), 7, **11**, 15, 25(a–c).
  - *Section 1.6*: 3, 5, 9, 11, 14, **17**, 19, 23, 25, **26**, 30, 33, 35, 36, **39**, 49 (express in terms of  $\ln$ ), **50**, 53, 54, 57, 61, 63, **64**, **67**.
- Complete by *January 24* 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, **12**, **14**, 17, 25.
  - *Section 2.3*: 2, 5, **9**, 10, 11, **19**, **22**, 28, 36, 45, **55**.
- Complete by *January 31* in preparation for *Quiz #2*:
  - *Section 2.4*: 1, **11**, 19, 21, 25, **31**, **38**.
  - *Section 2.5*: 1, 3, 7, 9, 15, 17, 19, 21, 35, 42, **45**, 49, **50**, **63**, **65**.
  - *Section 2.6*: 2, 3, 5, 7, 13, **25**, 28, 29, **31**, 39, 43, 56.
- Complete by *February 7* in preparation for *Quiz #3*:
  - *Section 2.7*: **5**, **7**, 11, 13, 17, 21, 25, **29**, 31, 33, **45**.
  - *Section 2.8*: 3, 5, 10, **11**, 12, **25**, **27**, 35, **41**, 49, **55**.
  - *Section 3.1*: 4, 7, 10, 11, 19, **23**, 25, 29, 33, **47**, 51, **53**.