

Course Information

Name: Jake Wildstrom
E-mail address: dwildstr@erdos.math.louisville.edu
Instructor: *Phone number:* (502)852-5845 (x5845)
Office: Natural Sciences Building 239
Office hours: Tuesday 10–11, Wednesday 12–2, Thursday 12–1

Lecture: MTR 2:30–3:45 PM in Humanities 101

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 semester.**

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.

Week	Monday	Tuesday	Thursday
1	August 20 Section 1.1	August 21 Section 1.2	August 23 Section 1.3
2	August 27 Section 1.5	August 28 Section 1.6	August 30 Section 2.1 Quiz #1
3	September 3 Labor day	September 4 Section 2.2	September 6 Section 2.3
4	September 10 Section 2.4	September 11 Section 2.5	September 13 Section 2.6 Quiz #2
5	September 17 Section 2.7	September 18 Section 2.8	September 20 Exam #1
6	September 24 Section 3.1	September 25 Section 3.2	September 27 Section 3.3 Quiz #3
7	October 1 Section 3.4	October 2 Section 3.4	October 4 Section 3.5
8	October 8 Midterm break	October 9	October 11 Drop date Section 3.6 Quiz #4
9	October 15 Section 3.7	October 16 Section 3.8	October 18 Exam #2
10	October 22 Section 3.9	October 23 Section 3.10	October 25 Section 3.11 Quiz #5
11	October 29 Section 4.1	October 30 Section 4.2	November 1 Section 4.3
12	November 5 Section 4.4	November 6 Section 4.5	November 8 Section 4.7 Quiz #6
13	November 12 Section 4.8	November 13 Section 4.9	November 15 Section 5.1
14	November 19 Section 5.2	November 20 Section 5.3 Quiz #7	November 22 Thanksgiving
15	November 26 Section 5.4	November 27 Exam #3	November 29 Section 5.5
16	December 3 Review	December 5 Final exam, 11:30AM-2:00PM	

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 23* 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.
 - *Section 1.2*: 3, 4, 5, 9, 13, **16**, **18**, 19, 20.
- Complete by *August 30* in preparation for *Quiz #1*:
 - *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 *September 6* 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.
- Complete by *September 13* in preparation for *Quiz #2*:
 - *Section 2.3*: 2, 5, **9**, 10, 11, **19**, **22**, 28, 36, 45, **55**.
 - *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**.
- Complete by *September 20* in preparation for *Quiz #3*:
 - *Section 2.6*: 2, 3, 5, 7, 13, **25**, 28, 29, **31**, 39, 43, 56.
 - *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**.

Problem Sets through Exam #2

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- Complete by *September 27* in preparation for *Quiz #3*:
 - *Section 3.1*: 4, 7, 10, 11, 19, **23**, 25, 29, 33, **47**, 51, **53**.
 - *Section 3.2*: 1, 5, 7, 11, 17, 23, 25, **27**, 31, **41**, **42**, 43, 45, 47, 53, **57**.
- Complete by *October 4* in preparation for *Quiz #4*:
 - *Section 3.3*: 3, 7, 11, 17, 18, 19, 24, 29, 34, **37**.
 - *Section 3.4*: 8, 9, 13, **17**, 21, 29, 31, **37**, **45**, 47, 51, 52, 60, 62, 63, 65, 75, **76**, 90.
- Complete by *October 11* in preparation for *Quiz #4*:
 - *Section 3.5*: 5, 8, 9, 10, 12, 16, 17, 18, 25, 28, 33, **40**, **42**, 45, 46, 47, 50, 52, 54, 57.
- Complete by *October 18* in preparation for *Quiz #5*:
 - *Section 3.6*: 2, 3, 7, 9, 13, 21, 24, **25**, 27, **30**.
 - *Section 3.7*: 5, 7, **11**, 13, 17, 18, 23, 29.
 - *Section 3.8*: 1, 3, 8, 9, 11, **12**, 15, 18, 20.

Problem Sets through Exam #3

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- Complete by *October 25* in preparation for *Quiz #5*:
 - *Section 3.9*: 3, 6, 11, **13**, **18**, 19, 27, **29**, **37**.
 - *Section 3.10*: 3, 23, 25, 29, 33, **39**.
- Complete by *November 1* in preparation for *Quiz #6*:
 - *Section 4.1*: 3, **4**, 5, 11, 29, 31, **35**, 41, 47, 49, 53.
 - *Section 4.2*: 3, 5, 7, 11, **14**, **16**, 19, **20**, **22**, 29.
- Complete by *November 8* in preparation for *Quiz #6*:
 - *Section 4.3*: 1, 2, 7, **8**, 9, 11, **12**, 13, 23, 25, **27**, **30**, 33, 34.
 - *Section 4.4*: 5, 8, 10, 14, 15, 17, 18, 25, 39, **48**, **54**, **59**, **63**, **70**.
 - *Section 4.5*: 3, 5, 8, 9, 12, **19**, **24**, **26**.
- Complete by *November 15* in preparation for *Quiz #7*:
 - *Section 4.7*: 2, 3, 9, 13, 14, **28**, **30**, 31, 55, **59**, **65**.
 - *Section 4.8*: 3, 5, 11, 15, **29**, **30**, 33, 35, **39**.
 - *Section 4.9*: 3, 7, 11, 15, **20**, 21, 23, 27, 37, **47**, 49, 51, 53, 59.
- Complete by *November 20* in preparation for *Quiz #7*:
 - *Section 5.1*: 1, 4, 5, 11, **14**, 17, 19, 21.
 - *Section 5.2*: 1, 9, 17, 19, 21, **23**, 33, **65**.
- Complete by *November 27* in preparation for *Exam #3*:
 - *Section 5.3*: 3, 19, 23, 25, **29**, 31, 37, **41**, 43, 45, 53, **55**, **65**.
 - *Section 5.4*: 2, **4**, 9, 11, 12, 14, **16**, 21, 23, 29, **31**, 47, 49, 51, 54.