

## Course Information

**Instructor:**

<i>Name:</i>	Jake Wildstrom
<i>E-mail address:</i>	dwildstr@erdos.math.louisville.edu
<i>Phone number:</i>	(502)852-5845 (x5845)
<i>Office:</i>	Natural Sciences Building 231
<i>Office hours:</i>	M12:30–13:30, T11:00–12:00
<i>Alternative office hours:</i>	M16:00–17:00, R12:00–13:00, or by appt.

**TAs:**

<i>Name:</i>	Nathan Olds	Kris Wease	Chad Money
<i>E-mail address:</i>	ndolds01@louisville.edu	kjweas01@louisville.edu	cpmone02@louisville.edu
<i>Office:</i>		NS321	NS321
<i>Office hours:</i>	MW13–15	MW13–14:30, TR9–10	W12–13, R11–12

### Course Websites:

[https://blackboard.louisville.edu/bin/redirect\\_temp.pl?course\\_id=MATH-111-75-4108](https://blackboard.louisville.edu/bin/redirect_temp.pl?course_id=MATH-111-75-4108)  
<http://aleph.math.louisville.edu/teaching/2010FA-111>

**Lecture:** MW 17:30–18:45 in Davidson Hall 110.

**Recitation:** MW 19:00–19:50 in Natural Sciences 212E/108/212C.

**Textbook:** *College Algebra*, by J.S. Ratti and Marcus McWaters.

**Learning Goals:** In this class, we will learn to construct and manipulate functions, specifically polynomial, rational, exponential, and logarithmic functions. We will use these functions for modeling and problem-solving. This course fulfills a General Education requirement in Mathematics. One goal of the course will be to practice and develop critical thinking skills. Key elements of critical thinking include: identifying the question or problem, developing an abstraction or model, and drawing practical conclusions based on theoretical analysis.

**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 the weekly quizzes and examinations in your scheduled recitation section. Assignments are provided for your benefit and you are expected to work on them for your own benefit in order 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. For any calculation more complicated than simple arithmetic, you are expected to show your work.

**Honesty:** There are many outside resources available to help you succeed in this class, including consultation during office hours 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 one-sixth of your grade. The three midterm examinations will each be worth one-sixth, and the final examination is worth one-third. 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	Wednesday
1	August 23 Sections P.1–P.3	August 25 Sections P.4–P.6 Add/drop date Quiz #1
2	August 30 Sections P.7, 1.1	September 1 Sections 1.2, 1.3 Quiz #2
3	September 6 Labor day	September 8 Sections 1.4, 1.5 Quiz #3
4	September 13 Section 1.6, 1.7	September 15 Sections 1.8, 2.1 Quiz #4
5	September 20 Sections 2.2, 2.3	September 22 Section 2.4 Exam #1
6	September 27 Section 2.5	September 29 Section 2.6 Quiz #5
7	October 4 Section 2.7	October 6 Section 2.8 Quiz #6
8	October 11 Semester break	October 13 Section 3.1
9	October 18 Sections 3.2	October 20 Sections 3.3, 3.4 Quiz #7
10	October 25 Sections 3.5, 4.1	October 27 Section 4.2 Exam #2
11	November 1 Section 4.3	November 3 Section 4.4 Quiz #8
12	November 8 Section 4.5	November 10 Section 5.1 Quiz #9
13	November 15 Section 5.2	November 17 Section 8.1 Quiz #10
14	November 22 Section 8.2	November 24 Thanksgiving
15	November 29 Section 8.3	December 1 Review/Catchup Exam #3
16	December 6 Review	December 8 Final exam, 17:30–20:00

## Problem Sets through Exam #1

Boldface problems are particularly advanced and will test problem-solving skills often involving synthesis and initiative.

- Complete by *August 25* in preparation for *Quiz #1*:
  - *Section P.1*: 1, 3, 5, 7, 19, 21, 23, 25, 27, 33, 35, 37, 39, 41, 47, 49, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 93, 95, 97, 103, 105, 107, **109**, 111, **113**.
  - *Section P.2*: 1, 5, 11, 13, 15, 17, 19, **21**, 23, 27, **31**, 37, 39, 41, 43, 49, **53**, **55**, **61**, 69, 75, 79, 81, 85.
  - *Section P.3*: 1, 3, 5, 7, 9, 11, 17, 19, 23, 25, 29, 22, 25, 45, 53, **57**, **61**, 65, **69**.
- Complete by *September 1* in preparation for *Quiz #2*:
  - *Section P.4*: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 25, **31**, 37, 39, 41, 43, 45, 47, 49, **51**, **53**, 65, 67, **69**, 71.
  - *Section P.5*: 1, 3, 5, **11**, 17, **19**, 27, 29, **33**, 35, 37, 49, **51**, 61, 63, 75, 77, 79, **81**, **83**, **85**, 93.
  - *Section P.6*: 1, 4, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 29, 31, **35**, 39, 41, 49, 51, 57, **61**, 63, 65.
  - *Section P.7*: 1, 3, 5, 7, 9, 11, 13, 15, 23, 25, 27, 29, **31**.
  - *Section 1.1*: 1, 3, 5, 7, 9, 15, 17, 19, 21, 23, 27, 31, 35, 37, 41, **43**, 47, 49, 51, 53, 55, 59, 67, **69**.
- Complete by *September 8* in preparation for *Quiz #3*:
  - *Section 1.2*: 1, 3, 5, 7, 9, 11, 13, 19, 21, 27, 31, 35, 37, **39**, **43**, 49, 53.
  - *Section 1.3*: 1, 3, 5, 7, 11, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 41, 43, 47, 59, 61, 63.
- Complete by *September 15* in preparation for *Quiz #4*:
  - *Section 1.4*: 1, 3, 5, 7, 11, 13, 15, 17, 23, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 57, 65, 67, 69, **75**, 81, 83, 85, 87, 89, 91, 93, **95**, **101**.
  - *Section 1.5*: 1, **3**, 11, 13, 15, 21, 23, 25, 27, 43, 47, **57**.
  - *Section 1.6*: 11, 13, 15, 17, 19, 21, 23, 25, 29, 31, 41, 45, 47, 49, 51, 59, 61, 87, 89.
  - *Section 1.7*: 1, 3, 5, 7, 9, 11, 13, 15, 21, **23**, **35**, 43, 45, 47, 49, 51, **53**, 75, 77, 79.