

**CU-Denver Math 1110-001
College Algebra Fall 2010**

**Tuesday & Thursday 4:00 p.m.-5:15 p.m. Room: NC 1322
Recitation: Tuesday & Thursday 3:00-3:50 p.m. Room: NC 1311**

Instructor: Eric Sullivan T.A.: Monica Blomker	Math Department Office
Office: CU-Denver Building Room 631	CU-Denver Building, 6 th Floor (1250 14 th St.) Across Speer Blvd.
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Math 1110 Office Hours: The hour and a half before recitation generally works well, but this is subject to change. Other Available Times: Please email to set up an appointment	Fax: 303-556-8550 (Please put my name on all faxes) Course Captain: Gary Olson CU-Bldg., RM. 642 gary.olson@ucdenver.edu Email is best way to reach Gary Dept. Associate Chair: Dr. Stephen Billups CU-645 (303)-556-4814

Course Objectives:

- To help students understand the fundamental concepts of algebra;
- To show how algebra can be used to model real-world problems;
- To foreshadow important ideas of calculus and trigonometry;
- To use technology efficiently to facilitate the understanding of important algebraic concepts.

Prerequisites:

It must be assumed that every student has a good understanding of the mathematical concepts in an intermediate Algebra course or a good Advanced Algebra (Algebra 2) course in high school. An assignment will be administered during the first week of the course to help you gauge your readiness for the rigor of the mathematics content. While this assignment will not determine mandatory placement it should be used as a guide to help you determine whether this class is the right fit for your current mathematical abilities.

NOTE: I reserve the right to change the syllabus throughout the course of the semester.

Required Text Book:

Algebra and Trigonometry Enhanced with Graphing Utilities (5th Edition) by Sullivan and Sullivan. An eBook is available and recommended for purchase since we will be utilizing the associated MyMathLab software.

You can purchase the software and the text by going to www.coursecompass.com . Under the **Students** tab click on **Register**. You would like to ‘**Get Access to a New Course**’. You will need your University email address (which you check regularly), the **Course ID** which is: **sullivan60674** and either a student access code or a valid credit card. If you purchased the text new at the bookstore it will have a student access code which gives you access to the homework software. I would recommend just using a credit card and purchasing the software because it will also give you access to an eBook which you can use for the class. The total cost for the software and eBook is \$75.00. If you purchase the eBook and software this semester, the College Trigonometry eBook and software will be free to you (if you take the Trig course in Spring 2011).

Note: The text is very readable and the software is INCREDIBLE. The software gives you immediate feedback and tutoring on the homework problems and greatly helps to increase your understanding of the algebra concepts.

Graphing Calculator:

All students will need a graphing calculator for this class which will be utilized in class, on the homework assignments, and on portions of the exam. The recommended calculator is one of the TI-83/84 Calculators. The TI-89 is also a sufficient calculator but the syntax of the 89 will not be discussed in class. The TI-86, TI-85, TI-82, and the TI-81 are not sufficient since they are outdated and do not handle data collection and data analysis. You should bring your calculator to class every day, as it will be an integral part in our instruction. Note: If you are planning on taking the Calculus sequence you should purchase the TI-89.

Exam Schedule and Grading Policy:

Tests: There will be three in-class exams worth 15% each plus a comprehensive uniform common final exam worth 20%. There will be parts of every test that require a graphing calculator, including the final exam. The dates of the tests and final exam are as follows:

Exam #1:	Week of 9/20
Exam #2:	Week of 10/25
Exam #3:	Week of 11/29
Final Exam:	Saturday, 12/11 9:00-12:00

Homework Assignments: Homework assignments will come in two forms. The first will be assigned over MyMathLab (CourseCompass) and will be automatically graded by the computer. With this software you have unlimited attempts at a problem so you have every possibility of attaining a 100% on each of these assignments!

The second portion of the assignment will be a set of problems from the text for you to write-up in your notebook. These problems will be optional depending on your comfort level with the online homework problems. Each Tuesday there will be a short quiz covering problems from this optional homework set. Students will be allowed to use their written solutions of the problems on this quiz.

There will be approximately 12 of each assignment throughout the course of the semester and all homework assignments and quizzes will count toward 20% of your final course grade.

Online assignments are due each Tuesday by the start of recitation.

Late assignments will not be accepted.

One quiz will be dropped at the end of the semester.

You are encouraged to work together in doing homework assignments, however, copying someone's assignments will not be tolerated. If this occurs, all students involved will receive no credit on the assignment.

Algebra Application Problems: Four problems will be assigned during the semester that will be an extension to the homework assignments. These problems will require the use of a graphing calculator. You will have approximately two weeks to complete the problem and they will account for 5% of your final course grade.

Recitation Attendance or Exam Averages: 10% of your final grade will be determined by the higher of the following:

- A) Recitation Attendance Grade
- B) Exam Grade

Your recitation grade will be calculated for three different intervals. (1/3) of the points will be allocated based upon your attendance at recitation previous to Exam 1 or your Exam 1 grade (whichever is higher), (1/3) of the points for attendance at recitation between Exam 1 and Exam 2 or Exam 2 grade (whichever is higher), and (1/3) of the points for attendance at recitation between Exam 2 and Exam 3 or Exam 3 grade (whichever is higher).

Course Grade Summary:

Exams:	45%
Final Exam:	20%
Homework Assignments/Quizzes	20%
Recitation Attendance/Exam Average	10%
Algebra Application Problems	5%

Grading Policy:

Your Final grade will be determined according to the following grade scale:

A:	92-100%
A-:	90-91.99%
B+:	88-89.99%
B:	82-87.99%
B-:	80-81.99%
C+:	78-79.99%
C:	70-77.99%
D	60-69%
F:	Below 60%

Incompletes: The incomplete policy of the department and college is strictly enforced: incompletes are given only in situations in which a student who has been in good standing all semester, is prevented from completing a course assignment (for example, the final exam) by circumstances beyond his/her control (for example, hospitalization, death in the family.)

Cheating: Cheating of any kind will result in a course grade of F and possible expulsion from the University. Don't do it!

Missing an Exam: If circumstances arise that prevent you from attending an exam, please contact me ahead of time as I will be much more lenient. Unexplained absences will require hard evidence such as a death certificate, hospital paperwork, etc.

How much time should I be spending on this class each week?

A "full-time job" is considered to be 40 hours per week and a "full-time student" is considered to have a schedule of 15 credit hours per week. If you subtract 15 hours of class time from the 40 hours, that leaves 25 hours of studying per week. This is a three credit course so (3/15) of 25 hours amounts to 5 hours of studying, outside of class time, per week. Consider this the absolute minimum amount of time that you should be spending per week. In reality, you should spend between 5 and 10 hours per week on this class.

Fall 2010 CLAS Academic Policies

The following policies pertain to all students and are strictly adhered to by the College of Liberal Arts and Sciences (CLAS).

- Every student **MUST** check and verify their schedule prior to the published drop/add deadlines. Failure to verify a schedule is not sufficient reason to justify a late add or drop later in the semester.
- CLAS students must use their email.ucdenver.edu email address. Email is the official method of communication for all University of Colorado Denver business. All email correspondence will take place using your UCDHSC email address. Go to <http://www.ucdenver.edu/student-services/resources/registrar/students/policies/Pages/EmailPolicy.aspx> to activate your email address.
- Students **are NOT automatically added** to a course off a wait list after wait lists are dropped. If a student is told by a faculty member that they will be added off the wait list, ***it is the responsibility of the student to complete the proper paperwork to add a course.***
- Students are ***not automatically notified*** if they are added to a class from a wait-list. Again, it is the responsibility of the student to verify their schedule prior to any official dates to drop or add courses.
- Students must complete and submit a drop/add form to make any schedule changes. ***Students are not automatically dropped from a class if they never attended, stopped attending or do not make tuition payments.***
- Late adds will be approved ***only*** when circumstances surrounding the late add are beyond the student's control and can be documented independently. This will require a petition and documentation from the student. Please note that the signature of a faculty member on an add form does not guarantee that a late add petition will be approved. Undergraduates should contact the Advising office and Graduate students should contact the Dean's office to petition for a late add.
- Late drops will be approved ***only*** when circumstances surrounding the late drop have arisen ***after*** the published drop deadlines, are beyond the student's control, and can be documented independently. This will require a petition and documentation from the student. Pre-existing circumstances (circumstances that existed prior to the published drop deadlines) regarding illness, work, family, or other confounding issues will not be considered adequate reason to drop or withdraw from courses after the published University and/or College drop deadlines. Please note that the signature of a faculty member does not guarantee that a late drop petition will be approved. Undergraduates should contact the Advising office and Graduate students should contact the Dean's office to petition for a late drop.

- **Undergraduate students wishing to graduate in fall of 2010** must meet with their academic advisor and complete their graduation application and intent to graduate form by 5 PM on **September 8, 2010**. You can obtain an application ONLY after meeting with your academic advisor so make your appointment early. **There are no exceptions to this policy or date.**
- **Graduate students wishing to graduate in fall semester 2010** must complete their Intent to Graduate form and have a Request for Admissions to Candidacy on file with the CLAS Dean's office no later than 5 PM, **September 8, 2010**.

Students are responsible for completing financial arrangements with financial aid, family, scholarships, etc. to pay their tuition. Students will be responsible for all tuition and fees for courses they do not officially drop using proper drop/add procedures and forms.

Important Dates:

- **August 23, 2010:** First day of Class
- **August 29, 2010:** Last day to add a class or be added to a wait list for a class using the UCDAccess portal. Please note that if your course does not appear as "enrolled" on your schedule you are not enrolled in the class.
- **August 30, 2010: LAST DAY TO DROP WITHOUT DROP CHARGE – THIS INCLUDES SECTION CHANGES.**
- **August 30, 2010: Wait Lists are dropped.** Any student who was not added to a course automatically from the wait list by this date and time **MUST** complete a schedule adjustment form to be added to the class. Students are **NOT** automatically added to the class from the wait list after this date and time. If your name is not on the official student roster, you are not registered for the course.
- **August 31, 2010:** First day instructor may approve request to add a student to a course with a Schedule Adjustment Form. (Late start classes may be added up until the day the class starts).
- **September 8, 2010:** Census date.
- **September 8, 2010 at 5 PM:** Last day to add structured courses using a schedule adjustment form with instructor signature without a written petition for a late add. **This is an absolute deadline and is treated as such.** This deadline does not apply to independent study, internships, project hours, thesis hours, dissertation hours, and late-starting modular courses.
- **September 8, 2010 at 5 PM:** Last day to drop a fall 2010 course **or** completely withdraw from all fall 2010 courses with a tuition adjustment **minus the drop charge** and no transcript notation – this includes section changes. Drops after this date will appear on your transcript. Drops will require instructor approval and withdraw from all classes requires a dean's signature. **This is an absolute deadline and is treated as such.**

- **September 8, 2010 at 5 PM:** Last day to request pass/fail or no credit option for a course.
- **September 8, 2010 at 5 PM:** Last day to for a graduate student to register for a Candidate for Degree.
- **September 8, 2010 at 5 PM:** Last day for a Ph.D. student to petition for a reduction in hours.
- **September 8, 2010 at 5 PM:** Last day to apply for fall 2010 graduation. Undergraduates must make an appointment and see your academic advisor before this date to apply for graduation if you are an undergraduate; graduate students must complete the intent to graduate and candidate for degree form.
- **September 6, 2010:** Labor Day (campus closed/ no classes)
- **September 20-29, 2010:** Faculty can use the early alert system.
- **November 1, 2010 at 5 PM:** Last day for students to drop or withdraw from all classes without approval from the student's academic Dean.
- **November 15, 2010 at 5 PM:** Last day for **CLAS students** can obtain dean's permission to drop or withdraw without a full petition. **This is treated as an absolute deadline.**
- After **November 15, 2015** all schedule changes require a full petition. Undergraduates should contact their CLAS advisor, graduate students should contact the dean's office.
- **November 25, 2010:** Thanksgiving Day Holiday (campus closed)

No schedule changes will be granted once finals week has started. There are NO exceptions to this policy.

Tentative Course Outline

Week	Topic/Reading	Notes
8/23/10	Syllabus; 1.2; 1.3	Solving Quadratic Equations; Solving Equations by Graphing
8/30/10	1.5; 1.7; 2.1	Radical Equations; Absolute Value Equations; Inequalities
9/6/10 Monday is Labor Day	2.2; 2.3	No Class on Monday 9/6 Lines; Circles; Algebra Application Problem #1
9/13/10	3.1; 3.2	
9/20/10	Review/Catch-Up; Exam #1	The Graph of a Function; Exam #1
9/27/10	3.3; 3.4; 3.5	Properties of Functions; Library of Functions; Piecewise Functions; Application Problem #2
10/4/10	3.5; 3.6; 4.2	Mathematical Models; Building Linear Models From Data;
10/11/10	4.3; 5.1; 5.2	Quadratic Functions; Polynomial Functions; Rational Functions
10/18/10	5.2; 5.3; 5.5; 5.6	The graph of a Rational Function; Real Zeros; Complex Zeros; Application Problem #3
10/25/10	Review; Exam #2	Complex Zeros; Exam #2
11/1/10	6.1; 6.2; 6.3	Composite Functions; One-to- One Functions; Exponential Functions;
11/8/10	6.4; 6.5; 6.6	Logarithmic Functions; Properties of Logarithms
11/15/10	6.8; 6.9	Exponential Growth and Decay Application Problem #4
11/22/10	Fall Break-No Class	
11/29/10	Review; Exam #3	Exam #3
12/6/10	Review and Catch-Up	Practice Final Will be Given
12/11/10	Final Exam	Saturday 9:00-12:00

College Algebra Survey

1. Name:
2. Major:
3. Email Address: (In Case of Emergencies)
4. Total number of hours you are taking this semester:
5. Briefly explain your background in mathematics. When and where did you take your last math course?
6. How much mathematics is required for your major? How much do you plan to take?
7. What, if any, experience do you have with graphing calculators?
8. Anything else you want to tell me about yourself?