

Math.1310: College Algebra
Course Syllabus - Fall 2017

Course number: Math 1310

Section number: 14971

Lecture Time/Place: AAA AUD1

Delivery format: Face to Face

Prerequisites: Math1300 or a satisfactory passing score on a placement examination.

**Note: This course is designed to prepare students for MATH 1330 Precalculus and MATH 1431 Calculus I. Students with prior credit in MATH 1330 or MATH 1431 will not be allowed to enroll or receive credit in MATH 1310.*

Course Description: In-depth study and applications of polynomial, rational, radical, absolute-value, piece-wise, exponential and logarithmic functions/equations/inequalities, graphing skills and linear systems of equations and solution methods.

Textbook: The learning materials for Math 1310, including the textbook, are available online in electronic form (PDF) through [CASA](http://www.casa.uh.edu) website at www.casa.uh.edu. **Students are required to purchase an access code at the Book Store to access the learning materials.** All students have free access to CASA until the access code deadline posted on the course website. To have continuing access to all course materials at CASA, you need to enter the access code.

The information contained in this class outline is an abbreviated description of the course. Additional important information is contained in the departmental policies statement at <http://www.mathematics.uh.edu/undergraduate/courses/math13xx/> or at your instructor's personal webpage. You are responsible for knowing all of this information.

Upon successful completion of this course, the student will be able to

- Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, inverses of functions.
- Recognize, graph and apply polynomial, rational, radical, piece-wise, exponential, logarithmic and absolute value functions and solve related equations.
- Apply graphing techniques.
- Evaluate all roots of higher degree polynomial and rational functions.
- Recognize, solve and apply systems of linear equations.
- Solve absolute value, polynomial and rational inequalities.

A student in this class is expected to complete the following assignments:

1. **Course Policy Quiz** – online on your CASA account :

You must make 100% on the course policy quiz in order to have access to the other online assignments in the course. The answers to the quiz may be found in the “Math 13xx Course Policies” document on your instructor’s website.

2. 4 Regular Exams
3. Final Exam
4. Weekly Online Quizzes (mostly 2 quizzes per week)
5. Weekly Homework Assignments
6. Poppers (in-class quizzes given daily starting the 3rd week of classes).

Components and Weights of Semester Assignments:

- Test 1: 5%
- Test 2: 15%
- Test 3: 15%
- Test 4: 15%
- Final Exam: 20%
- Online Quizzes: 10%
- Poppers: 10%
- Homework: 10%
- Total: 100%

Grading Scale: If you call your average “x”:

| | | |
|-------------------------------|----------------------------|----------------------------|
| A $93 \leq x \leq 100$ | B- $80 \leq x < 83$ | D+ $67 \leq x < 70$ |
| A- $90 \leq x < 93$ | C+ $77 \leq x < 80$ | D $63 \leq x < 67$ |
| B+ $87 \leq x < 90$ | C $73 \leq x < 77$ | D- $50 \leq x < 63$ |
| B $83 \leq x < 87$ | C- $70 \leq x < 73$ | F $0 \leq x < 50$ |

Online Quizzes: Online quizzes will be given twice weekly in this course. You may take each up to 20 times during the time that it’s available. Your highest score is retained as final score.

There will be **no makeup quizzes** for any reason. Neither the instructor, nor Math Department, is responsible for any difficulty that you have in accessing the quizzes. Please don’t delay taking quizzes – there are times during the week when CourseWare is slow or overloaded. There is **no amnesty period** for the quizzes; the quizzes will NOT be reopened at the end of the semester. If you miss a quiz, you will NOT have a chance to make up for it. Please contact CourseWare tech support directly if you are having technical problems for your account.

Tests: There will be 4 tests, along with a mandatory final exam. The complete schedule is on your instructor’s web page. All tests except Test 1 are taken at CASA testing center, with reservation. **You can NOT use calculators during the tests; study accordingly.**

Test 1 is over pre-requisite material, which includes Chapter 1 and beginning of Chapter 2. Test 1 will be available online by the end of first week. You will have ONLY two attempts to complete the test. Study well.

IMPORTANT: If you score low on Test 1 (below 60 without extra credit); you may consider dropping this course and taking the prerequisite course to prepare yourself for this course. If you decide not to drop, it is strongly recommended that you sign up for an **SEP workshop** designed for Math 1310 students; you can add a workshop in your PS account before the last day to add.

To see the exam dates and topics covered, please visit your instructor's website. **You must make a reservation to take a test prior to the first testing day.** You should print out the web page showing your reservation time for your records and proof of your reservation.

Tests are 50/55 minutes long. Push the "Submit" button when you're completely ready to leave the Testing Center, **AFTER** you've finished **ALL** the questions and checked your work.

If you miss a test, you receive a zero for it. When you take the final, the grade on the final will replace that zero. If you miss more than one test, only the first one will be replaced.

Final Exam: Final is comprehensive and compulsory for ALL students. There is no "exemption" or "opt-out" from the final in Math.1310. No make-ups/No excuses. **NO EARLY FINALS.**

Extra Credit: There are practice tests and a practice final on Courseware. If you take the practice test, then 10% of the highest score you earn will be applied to the relevant test as extra credit. You can take the practice tests several times (up to 20 times) and we only take your best score. Pay attention to the "end" dates on these. None of the practice tests will ever be reopened.

Poppers: Beginning the third week of school, you will have daily poppers (short questions on the material from that day's lecture or from the lecture just prior to that day.) Each popper will be taken on a bubbling form. We will drop 15% of the total number of the questions asked in poppers during all the semester. Popper grades will be posted in your CourseWare gradebook. There will be **no make-up Poppers.** The bubbling forms are for sale at the **BOOK STORE. Please buy the right bubbling form package for Math 1310 with your section number printed on it.**

**Note: If your popper's grade is missing even though you turned it in, that means you have made a bubbling mistake and there is nothing we can do about it, you will not receive credit for such poppers. It is your responsibility to make your attendance count.*

Homework: Homework is going to be assigned weekly covering all the material seen during the prior week of lectures. You need to submit your homework via your CASA account. Please see the link for Homework on your instructor's website for due dates and more detailed information. **NO late homework** is accepted. We will drop 2 lowest grades at the end of the semester.

IMPORTANT: *The instructor reserves the right to make changes on these policies. Any changes will be announced on the instructor's website in a timely manner.*

UH CAPS Statement

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments if you or someone you know is in crisis. No appointment is necessary for the “Let's Talk” program, a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html

CSD Accommodations

Academic Adjustments/Auxiliary Aids: The University of Houston System complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students who have a disability. In accordance with Section 504 and ADA guidelines, University of Houston strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustment and/or auxiliary aid, please visit The Center for Students with Disabilities (CSD) website at <http://www.uh.edu/csd/> for more information.

Accommodation Forms: Students seeking academic adjustments/auxiliary aids must, in a timely manner (usually at the beginning of the semester), provide their instructor with a current Student Accommodation Form (SAF) from the CSD office before an approved accommodation can be implemented.

Details of this policy, and the corresponding responsibilities of the student are outlined in The Student Academic Adjustments/Auxiliary Aids Policy (01.D.09) document under [STEP 4: Student Submission (5.4.1 & 5.4.2), Page 6]. For more information please visit the Center for Students with Disabilities FAQs page.

Additionally, if a student is requesting a (CSD approved) testing accommodation, then the student will also complete a Request for Individualized Testing Accommodations (RITA) paper form to arrange for tests to be administered at the CSD office. CSD suggests that the student meet with their instructor during office hours and/or make an appointment to complete the RITA form to ensure confidentiality.

***Note:** RITA forms must be completed at least 48 hours in advance of the original test date. Please consult your counselor ahead of time to ensure that your tests are scheduled in a timely

manner. Please keep in mind that if you run over the agreed upon time limit for your exam, you will be penalized in proportion to the amount of extra time taken.

College Algebra Topic List

An Introduction to Graphs and Lines

- Points, Regions, Distance and Midpoints
- Lines
- Graphing Equations
- Solving 2 x 2 systems of equations

Solving Equations and Inequalities

- Linear Equations
- Quadratic/Other Equations
- Complex Numbers
- Linear Inequalities
- Absolute Value

An Introduction to Functions

- Basic Ideas
- Functions and Graphs
- Transforming Functions
- Maximum and Minimum Values
- Combining Functions
- Inverse Functions

Polynomial and Rational Functions

- Polynomial Functions
- Dividing Polynomials
- Roots of Polynomials
- Rational Functions

Exponentials and Logarithms

- Exponential Functions
- The Number e
- Logarithms/Properties of Logarithms
- Exponential and Logarithmic Equations