

MA102-QL Intermediate Algebra

Spring 2022

Students in this course are required to complete the following tasks by Sunday, January 16th, 2022:

- Activate their MyMathLab account **AND**
- Post in the Introduction Discussion **AND**
- Complete the Honor Code

Failure to complete **ALL** of these tasks may result in administrative withdrawal from the course. Students adding the course after the first day of class are responsible for contacting the instructor within 24 hours of enrollment.

Instructor Information

Name: Caren Alexander

Email: caren12@uab.edu

Phone: 934-2154

Office Hours: By appointment or check Canvas

COURSE INFORMATION

First day of class: Monday January 10, 2022

Last day of class: Friday April 22, 2022

Final Exam: Tuesday April 26th, 2022 by 8 PM

Prerequisites: "C" or better in MA 096, Ma097, or MA 098, or "P" in MA 098. Or, beginning freshmen meet Math Screening requirements (see ACT Math Subscore/GPA Grid in the latest on-line UAB Class Schedule). Transfer students must have an appropriate score on the Advanced Screening Test in order to be eligible for MA 102.

COURSE DESCRIPTION

(3 semester hours). Absolute values. Cartesian coordinates. Graphs of equations. Concept of a function. Function notation. Lines. Linear systems. Word problems with linear models. Algebra of polynomials. Factoring of polynomials. Polynomial Division. Algebra of fractional expressions. Literal equations. Rational equations. Word problems with rational models. Integer and rational exponents. Algebra of radical expressions. Radical equations. Complex numbers. Introduction to quadratic functions. Quadratic equations.

This course is about developing quantitative reasoning ability as well as acquiring specific mathematical skills (algebra, arithmetic, etc.). The above learning outcomes are realized in the course with a variety of learning opportunities (group work, video lecture, and computer-aided instruction)

COURSE MATERIALS

Access Code

The MyMathLab access code for the course is required and is available through Canvas with the First Day access unless you opt out. Access is also available for purchase at the bookstore, but more expensive. There is no textbook for the course, eText is included with the Access Code.

Calculator

During testing only the computer desktop calculator may be used and no handheld calculators are allowed.

Whiteboard

For testing you will be required to use a 8.5" x 11" whiteboard to work out problems. Paper will not be permitted.

COURSE OBJECTIVES

1. Students can solve linear equations and inequalities in one variable, can solve absolute value equations and inequalities, and can use interval notation and the real number line for describing solution sets. Students can graph linear equations in two variables, and are able to recognize and use the equation of a straight line in different forms.
2. Students can use the slope to identify parallel or perpendicular lines, can solve linear systems of two equations algebraically and by graphing lines, and can use linear systems of two equations to solve a variety of verbal problems.
3. Students can perform arithmetic operations on polynomial expressions, factor polynomials, and solve polynomial equations by factoring. Students know that solving polynomial equations of higher degree is intrinsically difficult.
4. Students can identify rational expressions and functions and their domains, can multiply, divide, add, and subtract rational expressions, simplify complex fractions, and solve rational equations.
5. Students know the rules of exponents and can apply them to simplify expressions involving positive and negative rational exponents. Students are able to combine, multiply and divide radical expressions and solve radical equations.
6. Students are able to solve quadratic equations by factoring, by the square root method, by completing the square, and by using the quadratic formula. Students can interpret square roots of negative numbers as complex numbers and perform arithmetic operations on complex numbers.
7. Students can create, interpret, and use linear, polynomial, and rational models to solve problems in a variety of application areas.

COURSE ACCESS

Canvas

All additional course materials as well as deadlines will be in Canvas. Official communication will be done through Canvas announcements.

MyMathLab

All homework, quizzes, and tests for this course are available in MyMathLab only. A user account is created for every student and needs to be activated through Canvas. During activation, an access code needs to be provided that you will receive through the First Day Access Program under Course Materials in Canvas.

Browser

It is recommended to use Mozilla Firefox or Google Chrome to avoid any browser issues with Canvas or MyMathLab.

ProctorU

ProctorU will be used for online monitored testing. Additional information for requirements can be found in Canvas under the Course Information Module. Students are responsible for fees that are not covered by UAB eLearning.

We reserve the right to require a student to re-take a test with ProctorU if any testing inconsistencies or questions of academic integrity arise during the testing session or after the review of the recording by the instructor. Students will be responsible for payment of any fees to retake a Test.

Academic misconduct undermines the purpose of education and can generally be defined as all acts of dishonesty in an academic or related matter and will not be tolerated.

COURSE GRADE

Your grade in the course is determined by the points earned throughout the semester.

Assignments	Points
Homework (13 assignments @ 7 points each)	91
Quizzes (13 quizzes @ 8 points each)	104
Tests (4 tests @ 100 points each)	400
Final Exam	250
Group Discussion (10 @ 7 points each)	70
Individual Problem (10 @ 8 points each)	80
Intro Discussion	3
Honor Code	2
Total points possible	1000
Practice Tests (5 @ 5 points each for Bonus)	25

Points earned	Grade
880-1000	A
750-879	B
620-749	C
500-619	D
Below 500	F

Homework

The homework exercises are done using a computer program named MyMathLab. You can use the computers in the UAB Math Learning Lab in room 202 of Heritage Hall, computers in the Library's ETS facility, or you can use your own computer with an Internet connection. Be aware if you are using your own computer, you may have to download the *Flash* plug-in in order to do the homework assignments. Homework assignments must be completed no later than 11:59 PM on the day specified in your course schedule to receive full credit. Any work submitted after the deadline will receive half-credit automatically. Each assignment has section videos that are part of the grading for the assignment.

Quizzes

Like the homework, quizzes are taken on-line. Each quiz can be taken two times (the highest grade will count). **Do not hit the BACK button on your browser when taking a quiz.** This will end your quiz and you will not be able to get back into it. If you think your computer or network connection is not reliable, you should take your quizzes in the UAB Math Learning Lab. Quizzes have a 30-minute time limit. They are open-book. **Students are strongly advised to not wait until the last minute to complete homework and quizzes.** Problems occurring at the last minute are the responsibility of the student. Quizzes must be completed no later than 11:59 PM on the day specified in your course schedule to receive full credit. Any work submitted after the deadline will receive half-credit automatically.

Tests/ Final Exam

There will be four 50-minute tests and a 120-minute final exam. The final exam will be comprehensive. The tests and final exam must be completed with the computer calculator and whiteboard only through ProctorU. Students found using anything besides the permitted items during testing will receive at least a zero on the test. For more testing rules and guidelines, look at the ProctorU Testing Info.

Practice Tests

Practice tests are available to prepare you for each test and the final. They can be completed in MyMathLab for Bonus points until their deadline day. There are an unlimited number of attempts available.

Make-ups

There are no make-ups for missed homework and quiz assignments. This is because they can and **should be completed ahead of time**. However, you can complete the assignments late for half credit.

- **If a student misses 1 test** (not including the Final Exam), the Final Exam grade will be used to replace the missed test grade if the student formally makes a request to do so. The student must complete a **Replacement Test Grade** form in the math department office (UH 4005) no later than 12:00pm on the last day of classes. **Note that only one missed test grade may be replaced with the Final Exam grade. All students are expected to attend the Final Exam session.**
- *A student missing a test due to university related business or government mandated activities is required to notify the instructor **no later than one week prior to the missed test date in order to be able to take the test prior to scheduled test date.** If a student does not communicate with the instructor one week prior to the missed test date, the student will be required to use the Final Exam grade to replace the missed test grade.*

Group Discussions

Weekly discussion will be done in Canvas in groups. Each student should follow the guidelines for the discussion listed in the Course Information Module and is expected to participate on more than one day.

Problems

For each discussion, students are expected to submit an individual solution to the problem on Canvas. The grading rubric is available in the Canvas Grading Info and should be used when preparing your solution.

Intro Discussion/Honor Code

The introduction discussion must be completed in Canvas as part of three requirements to be able to take this course. The Honor Code will also be completed in Canvas and all students are expected to abide by it.

COURSE POLICIES

Cell phones and other electronics

All cell phones, iPhones, iPads, and laptops must be turned off and put away during testing. Violations will be reported to the Pre-Calculus Curriculum Director and will be punished with at least a 0 on the test.

Grade Review

Official student grades are maintained in the Math Department grade database (a.k.a. MADDIE). To access your grade record, go to www.uab.edu/mathematics and click on *Student Resources* then *Check grades*. You will need to enter your BlazerID and password. You can also access it through Canvas.

Students are asked to review all grades for accuracy immediately after they are posted. **All questions involving homework grades, quiz grades, test grades and participation points must be resolved before the final exam.** Once the final exam is taken the course is complete, and no further review of in-term grades is permitted.

Tutoring

Please visit Resources on the Math Department website and see the times listed at <https://www.uab.edu/cas/mathematics/resources> .

Email

Information about the course (changes to assignments, reminders, schedules, etc.) will be distributed to students using their [BlazerID](#) email address or Canvas. Each student is required to access their UAB email account daily, as these communications represent official university business. This is a requirement for all UAB students. For UAB email account assistance, send an email to userservices@uab.edu, or call 934-3540.

Disability support Services (DSS)

UAB is committed to providing an accessible learning experience for all students. If you are a student with a disability that qualifies under Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act, and you require accommodations, please contact Disability Support Services for information on accommodations, registration and procedures. If you are registered with Disability Support Services, please contact DSS to discuss accommodations that may be necessary in this course. Disability Support Services can be reached at 934-4205 or www.uab.edu/dss or in the Hill Center Suite 409.

Title IX Statement

UAB is committed to providing an environment that is free from sexual misconduct, which includes gender-based assault, harassment, exploitation, dating and domestic violence, stalking, as well as discrimination based on sex, sexual orientation, gender identity, and gender expression. If you have experienced any of the aforementioned conduct we encourage you to report the incident. For more information about Title IX, policy, reporting, protections, resources and supports, please visit <http://www.uab.edu/titleix> for UAB's Title IX Policy, UAB's Equal Opportunity, AntiHarassment Policy and Duty to Report and Non-Retaliation Policy.

Academic Misconduct

UAB Faculty expects all members of its academic community to function according to the highest ethical and professional standards. You are expected to be aware of, and rigorously adhere to, the UAB code of conduct with regard to academic honesty and inter-personal relations.

Academic dishonesty and misconduct includes, but is not limited to, acts of abetting, cheating, plagiarism, copying homework, fabrication, and misrepresentation. Candidates are expected to honor the UAB Academic Code of Conduct as detailed in the most current *UAB Student Catalog*.

Syllabus: This syllabus is subject to changes announced in canvas.