

Genesee Community College
ALGEBRA II - MAT 102 - Fall 2018

Instructor: Ken Mead
Phone: 343-0055 (Ext. 6381)
Email address: kjmead@genesee.edu
Office: Math/Science Division, Room D395
Mailbox: Math/Science Division (across from my office)
Office Hours: MW 11:15am-1:15pm, TR 12-12:30pm, Friday by appointment

Course Description: Topics include solving first-degree inequalities, introduction to functions, linear equations in two variables and graphing, solving systems of two or three linear equations and inequalities, brief review of polynomial operations and factoring, algebraic fractions, variation, solving rational equations and proportions, rational exponents and radical expressions, complex numbers, solving radical equations, and four methods for solving quadratic equations, with emphasis on problem solving and applications throughout the course. Not open to students with credit in MAT 136 or higher. Prerequisite: MAT 092 or by placement. 3 credits

REQUIRED WebAssign Access Code: Your online homework assignments are on www.webassign.net. These assignments count for 20% of your course grade. I will give you a “class key” so that you can enroll in our class at this site. You will be granted access to our class without payment for a short grace period. By the end of the grace period you must purchase and enter an access code to continue using the site. The access code can be purchased directly from WebAssign or from the College Bookstore. It is available separately or packaged with the text.

REQUIRED Calculator: Scientific calculator required. Example: TI 30 XIIS
No graphing or cell phone calculators allowed.

REQUIRED Paper Textbook or eBook: *Intermediate Algebra: An Applied Approach*, 9th ed., Aufmann/Lockwood. It is up to you whether you purchase the paper textbook or the eBook. I recommend purchasing the access code and eBook package that is available on WebAssign (\$85). When you get into your first online homework assignment you will see help buttons at the bottom of the questions. One of the buttons is labeled, Read It, this button will take you to the section in the eBook covering this topic, IF you purchased the eBook. The eBook also contains YouTube links and other interactive features and videos. On the Batavia campus, there is a paper textbook on reserve at the front desk of the library and also at the Math Learning Center.



Grades: Final grades are assigned according to the following scheme, with the final average rounded to the nearest integer (in %): 92 or higher = A, 90-91 = A-, 88-89 = B+, 82-87 = B, 80-81 = B-, 78-79 = C+, 72-77 = C, 70-71 = C-, 68-69 = D+, 62-67 = D, 60-61 = D-, 59 or less = F.

Overall grade will be determined as follows:

60% - 4 Exams, lowest dropped

20% - Homework, lowest two dropped

20% - Comprehensive Final Exam (you can't drop the final exam)

NO MAKE-UPS: There will be **no make-ups** on poor, late, or missed grades (absent = 0)!!!
If you must miss, please talk to me before that day.

At the sole discretion of the instructor, a student's final exam may be waived if the collective average of all four exams is 90 or above, if no single exam grade is below 70, and if the homework average is 90 or above.

TENTATIVE TEST DATES 9/14, 10/12, 11/9, 12/5

Course Withdrawal:

- It's your responsibility to formally drop or withdraw from this course.
- First day of the semester - last day to drop (w/o **W**)
- End of the ninth week of semester - last day to **Withdraw**
- <http://www.genesee.edu/academics/dates.cfm>

Attendance:

- Taken at the beginning of each class. If you are not in class then you will be marked absent. I do not differentiate between excused and unexcused absences.
- Failure in the class may result if more than the equivalent of 20% of the semester is missed.
- If you know that you will be missing a class then contact me in advance.
- If you must miss a class unexpectedly then contact me or a friend as soon as possible to find out what you missed and the next assignment. You need to learn the material as soon as possible and will be expected to take part in the next class as if you never missed.

Homework:

- Homework is online at www.webassign.net
- Expect about 1-2 hours of homework each class.
- You may try each question on a homework assignment up to five times to improve your score before the deadline.
- Questions asked on exams will be similar to those assigned for homework.
- If you encounter technical problems with WebAssign: click on Student Support or Help

Practice Exams: I will provide you with many practice problems before each exam.

Math Learning Center:

The Math Learning Center, room D360, provides a place to work on math individually or in small groups (no signing up required). A tutor is always available along with solutions manuals, textbooks, calculators, computer software, videos and other support materials free of charge!
Hours: M–F 8:30–4:30

Plagiarism and Cheating

Cheating is obtaining or intentionally giving unauthorized information to create an unfair advantage in an examination, assignment, or classroom situation. Plagiarism is the act of presenting and claiming words, ideas, data, programming code or creations of others as one's own. Plagiarism may be intentional – as in a false claim of authorship – or unintentional – as in a failure to document information sources using MLA (Modern Language Association), APA (American Psychological Association), Chicago or other style sheets or manuals adopted by faculty at the College. Presenting ideas in the exact or near exact wording as found in source material constitutes plagiarism, as does patching together paraphrased statements without in-text citation. The purchasing or sharing of papers or projects between students or the re-use of papers or projects submitted for more than one assignment or class also constitutes plagiarism.

Cheating and plagiarism will not be tolerated: a grade of zero will be given on the assignment or exam. In certain extreme cases, including multiple offenses, the student will receive a grade of F for the semester.

Disruptive Behavior Policy:

Disruptive behavior will not be tolerated. Students exhibiting such behavior may be dismissed from class or receive some other form of punishment as outlined in the “Student Rights and Responsibilities Handbook”. Remember, your classmates have paid to take this class and they expect an atmosphere conducive to learning. Basically, any action that disrupts another student's learning is not acceptable. Here are some examples:

- Use of cell phones.
- Talking, whispering, goofing around, spitballs, towel-snapping, burping, loud yawns, passing gas, brawling, general mayhem.
- Consistently arriving late and/or leaving early.
- Using class time to discuss personal issues with the instructor.

Accessibility Statement

If you have a physical, psychological, medical or learning disability that may impact your coursework or participation in this class, please contact the Assistant Dean of Student Services/Disabilities Coordinator, Success Coach, or Academic Advisor who will arrange an intake meeting. The Assistant Dean/Coordinator will determine with you what accommodations are necessary, appropriate and reasonable. All information and documentation is confidential.

The Instructor reserves the right to make any necessary changes to above.

Student Performance Outcomes

Upon successful completion of this course as documented through writing, objective testing, case studies, laboratory practice, and/or classroom discussion, the student will be able to:

1. Correctly translate and solve first-degree equations and inequalities.
- *2. Given a relation, identify if it is a function. If so, find its domain and range, and then correctly evaluate the function given a value in its domain.
3. Given a linear equation, correctly graph it on a rectangular coordinate system.
4. Find the equation of a line given:
 - A point on the line and the slope of the line
 - Two points on the line
 - A point on the line and the equation of a line parallel or perpendicular to it
5. Given a system of linear equations, correctly solve the system by graphing, substitution or the addition method.
6. Given a system of inequalities, solve the system by the graphing method.
7. Given two or more polynomials, correctly add, subtract, multiply or divide the expressions.
8. Given two or more rational expressions, correctly add, subtract, multiply or divide the expressions.
9. Given an equation involving rational expressions, correctly solve the equation.
10. Given two or more radical expressions, add, subtract, multiply and divide the expressions and write the answer in simplest form.
11. Given two complex numbers, add, subtract, multiply or divide the numbers and write the answer in the form $a + bi$.
12. Given a quadratic equation, solve it by factoring, taking square roots, completing the square or using the quadratic formula.

* This course objective has been identified as a student learning outcome that must be formally assessed as part of the Comprehensive Assessment Plan of the college. All faculty teaching this course must collect the required data and submit the required analysis and documentation at the conclusion of the semester to the Office of Institutional Research and Assessment.

Getting started on WebAssign

You will be allowed to use the website for free for a short grace period before having to purchase and enter an access code. The class key below is all you need for now.

1. Preferred browsers: Mozilla Firefox or Google Chrome
2. Go to www.webassign.net
3. Click "I Have a Class Key" and enter the class key for your course:

genesee.ny 2621 0153

Verify that the Course, Section and Instructor are correct, and click "Yes this is my class". Once you set up your account you don't need the class key anymore.

4. Now, either create a new WebAssign account, or link this class to an existing WebAssign account. If you are creating a new account, I would appreciate it if you use the same username in WebAssign as you do on campus.

For more information about the site: click on Help (upper right corner of website) to access System Requirements, WebAssign Support Info, Etc.

If you encounter technical problems with WebAssign: click on Help > Customer Support or call their 800 number.

An access code is not the same as a class key. At some point you will need to purchase and enter an access code to continue.

When working through homework problems, you are **allowed five submissions** on homework before its due date.

Homework questions are algorithmically generated, each student gets the same objective but with different numbers.

WebAssign is capable of accepting answers in different forms, for example: $(1/2)x$ or $0.5x$. You can use the keys on your computer keypad to enter answers...but sometimes when you click in an answer blank a "Math Pad" will appear to make it easier to type in your answer:

Tentative and Rough Schedule – Subject to Change

Week	Topic
1	2.1 Solving First-Degree Equations 2.2 Mixture & Uniform Motion Problems
2	2.3 First-Degree Inequalities 3.1 Rectangular Coordinate System 3.2 Introduction to Functions
3	3.3 Linear Functions 3.4 Slope of a Straight Line 3.5 Finding Equations of Lines
4	3.6 Parallel & Perpendicular Lines Test 1
5	3.7 Inequalities in Two Variables 4.1 Solving Systems by Graphing & Sub.
6	4.2 Solving Systems by Addition 4.4 Application Problems 4.5 Solving Systems of Linear Inequalities
7	5.1 Exponential Expressions 5.2 Introduction to Polynomial Functions 5.3 Multiplication of Polynomials
8	5.4 Division of Polynomials Test 2
9	5.5 Introduction to Factoring 5.6 Factoring Trinomials 5.7 Special Factoring 5.8 Solving Equations by Factoring
10	6.1 Simplifying Rational Expressions 6.2 Multiplication & Division of Rational Expressions 6.3 Addition & Subtraction of Rational Expressions
11	6.4 Complex Fractions 6.5 Ratio & Proportion 6.6 Rational Eqns.
12	6.7 Variation Test 3
13	7.1-3A: Rational Exponents 7.1-3B: Square Roots 7.1-3C: Cube Roots
14	7.4 Solving Eqns. Containing Rad. Expressions 7.5 Complex Numbers
15	8.1 Solving Quadratic Equations by Factoring or Taking Square Roots 8.2 Solving Quadratic Equations by Completing the Square and the Quadratic Formula 8.4 Applications of Quadratic Equations
16	Test 4 Reflection, Review for Final
17	Final Exam – date to be announced during semester.