
COLLEGE ALGEBRA

Spring 2021 | Syllabus | Math 111-02

CLASS INFORMATION

Professor

Lauren Williams, PhD

Meeting Times

MWF 1:00 - 1:50

Meeting Location

Hirt 207

ZOOM OFFICE HOURS

Monday 12 - 12:50
Tuesday 9 - 10, 12 - 1:50
Wednesday 12 - 12:50
Thursday 9 - 10

GET IN TOUCH

Email

lwilliams@mercyhurst.edu

Office

Old Main 404

Office Phone

(814) 824-2226

COURSE DESCRIPTION

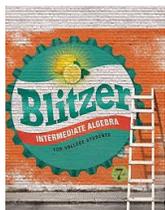
This is a course in algebra, similar to high school courses in algebra except that the pace will be faster. We will begin with some review of real-number concepts, and proceed into linear equations in one variable, mathematical modeling, polynomials, rational expressions, functions, lines, exponents, and radicals, equations, inequalities, and polynomial and rational functions.

COURSE OBJECTIVES

In this class, you will

- Identify, distinguish, perform algebraic operations and find solutions to equations using the integer, rational, real and complex number systems.
- Use common algebraic methods to solve linear, quadratic, polynomial, radical, and absolute value equations and inequalities.
- Translate the written problem and create algebraic models to solve real-life problems.
- Use and create algebraic functions.
- Demonstrate your understanding of introductory language of mathematics through the use of proper mathematics notation.

REQUIRED MATERIALS



Intermediate Algebra for College Students, 7th Edition, by Robert Blitzer. No other supplies are required for the course. You do NOT need to purchase any subscriptions to MyMathLab or workbooks related to this textbook.

You will not be expected to bring your textbook to class. If you prefer to purchase or rent an electronic version of the text, you're welcome to do so.

Calculators

You are not required to purchase a calculator for this course, and calculators or other electronic devices should not be used on any quizzes or exams. You are strongly encouraged to avoid using a calculator while working on homework.

Moodle

At the beginning of the semester, you will receive a code to register for our course on Moodle. This is a free site created for this course by the Mercyhurst Mathematics Department. While most materials will also be posted on Blackboard, you will need to access Moodle for the course quizzes. You will receive an email to your Mercyhurst address with further information on creating your Moodle account.

COURSE COMPONENTS

Quizzes

Keeping up with the homework will ensure that you are prepared for the quizzes, which will feature problems very similar to those in the homework as well as more conceptual questions about the topics you'll see each week.

There will be a total of 10 quizzes available for the semester. Your lowest quiz grade will be dropped when calculating your final grade, including a missed quiz (so only your best 9 quiz grades will be counted towards your final grade).

Exams

We will have four midterm exams and a (cumulative) final exam as shown on the course schedule. All exams will be delivered via Moodle. You will not need to attend class on scheduled exam days; instead, use that time to work on the exam online.

Your lowest exam grade, including a missed exam, will be replaced by your final exam grade. This policy **does not** apply to exam grades of 0 due to academic dishonesty.

IMPORTANT DATES

January

Jan 25: First Day of Class

Jan 29: Last Day to Add/Drop

February

Feb 17: Break, No Class

Feb 19: Exam 1

March

Mar 15: Fake Wednesday

Mar 16: Advising Day

Mar 19: Exam 2

Mar 30: Fall Registration Open

April

Apr 2: Last Day to Declare P/F

Apr 7: Break, No Class

Apr 9: Last Day to Withdraw

Apr 9: Exam 3

Apr 29: Break, No Class

May

May 5: Exam 4

May 6: Spring Classes End

May 7: Reading Day

May 10: Final Exam

QUIZ AND EXAM POLICIES

In addition to the usual University policies regarding academic honesty, please be sure to follow the specific requirements for this course when taking quizzes or exams:

You may...

- refer to your textbook and course materials while taking quizzes.
- contact me during an exam for clarification on an exam question, grading policy, etc.

You may NOT...

- refer to any materials besides the textbook or course materials. This includes solution manuals, web pages, etc. If it is not on Moodle, Blackboard, or in the textbook, do not use it while taking an exam!
- use mathematical software or apps such as Wolfram Alpha, CoCalc, Photomath, or any other utilities.
- ask for help or clarification from a classmate, friend, family member, online service such as Chegg, or anyone besides the instructor of the course.
- assist a classmate that requests help or information about a quiz or exam.

Violations of this policy may result in a grade of 0 on the quiz or exam. Severe or repeated instances of academic dishonesty will result in an academic dishonesty report to the University.

GRADES

Your final grade will be calculated as follows:

Component	Total Value
Quizzes (9 best)	30%
Exams (4)	50%
Final Exam	20%

Mathematics Department Grade Scale:

Grade	F	D	D+	C	C+	B	B+	A
Percentage	0-59	60-69	67-69	70-76	77-79	80-86	87-89	90-100

OTHER POLICIES

Missed Class

You do not need to let me know if you'll have to miss class. Just make sure you keep up to date with the schedule, and take advantage of the Zoom recordings of class if you are unable to attend in person.

Missed Quiz/Exam

If you know in advance that you will not be able to take a quiz or exam on the day it is scheduled, please discuss with me to make arrangements for an alternative time. Make up quizzes or exams will not be given for undocumented reasons unless arrangements are made in advance. However, keep in mind that a single missed quiz will be dropped from your final grade, and a missed exam will be replaced by your final exam grade.

Extra Credit

Out of fairness to all students in the class, I do not give extra credit opportunities to improve your final grade.

MOODLE



Moodle is a Learning Management System, similar to Blackboard, that allows for flexible mathematics based quizzes. We will be using Moodle for all quizzes and for additional course resources. There is no fee for using Moodle.

Accessing Moodle

At the beginning of the semester, you will receive an email (delivered to your Mercyhurst email address) with information on enrolling in the Moodle course. You will be required to create a password. Be sure to keep this password safe, and do not share your login information with other students in the course. There is a mobile app available for Moodle, but it is not recommended for use in this course. A computer (desktop or laptop) or tablet is strongly preferred, using the Moodle website as opposed to the app. If you already have a Moodle account and would like to use it rather than the new one generated for you, just let me know. You can link the course to any existing account.

Question Styles

The quizzes and exams you'll take on Moodle are based on homework problems from the textbook. Some questions are multiple choice, and others will require you to enter a numerical answer. When necessary, specific instructions will be provided with a question. Questions will be asked one at a time, so you can focus on each individual question as you work.

Time Restrictions

You will be required to finish each quiz within 90 minutes. Any work you have completed will be submitted at the end of this period, even if you have not finished the assessment.

Availability Windows

Each quiz can only be submitted during its availability window. You will have a 24 hour period, from 12 am until 12 pm, in which to complete the quiz on the dates in this syllabus. Please note that once you begin a quiz, you will be required to complete it within the given time period or before the end of the availability window, whichever comes first. For instance, if you begin a quiz at 11 pm, you will only have 1 hour to finish. Be sure to allow yourself enough time to finish each assessment before you begin.

Grades

Your quiz grades will be available immediately. Correct answers and detailed solutions will be available the day after the quiz is available. Grades will be transferred to Blackboard so you can keep track of your overall progress in the class.

Technical Support

The Moodle website has a support page with answers to many common questions:

<https://support.moodle.com/hc/en-us>.

If you have questions or issues with the course itself, or if you encounter any problems with a quiz, please notify me as soon as possible.

SEMESTER SCHEDULE

An updated schedule will be maintained on Blackboard in the case of any changes.

N: No one attends class A: A group attends B: B group attends

Monday	Wednesday	Friday
Jan 25 - N Class Intro	Jan 27 - A 1.1 Algebraic Expressions, Real Numbers	Jan 29 - B Practice Quiz Due 1.2 Operations with Real Numbers
Feb 1 - A 1.3/1.4 Graphing, Solving Equations	Feb 3 - B 1.5 Problem Solving and Formulas	Feb 5 - A Quiz 1.6 Properties of Integral Exponents
Feb 8 - B 2.1/2.2 Functions and their Graphs	Feb 10 - A 2.3 The Algebra of Functions	Feb 12 - B Quiz 2.4/2.5 Linear Functions and Slope
Feb 15 - A 3.1 Systems of Equations	<i>Feb 17</i> <i>Break</i>	Feb 19 - N Exam 1
Feb 22 - B 4.1 Solving Linear Inequalities	Feb 24 - A 4.2 Compound Inequalities	Feb 26 - B Quiz 4.3 Absolute Value Equations
Mar 1 - A 4.3 Absolute Value Inequalities	Mar 3 - B 5.1 Polynomials	Mar 5 - A Quiz 5.2 Multiplication of Polynomials
Mar 8 - B 5.3 GCF, Factoring by Grouping	Mar 10 - A 5.4 Factoring Trinomials	Mar 12 - B Quiz 5.5 Factoring Special Forms
Mar 15 - A 5.6 Factoring Recap	Mar 17 - B 5.7 Polynomial Equations	Mar 19 - N Exam 2
Mar 22 - A 6.1 Rational Expressions and Functions	Mar 24 - B 6.2 Adding Rational Expressions	Mar 26 - A Quiz 6.3 Complex Rational Expressions
Mar 29 - B 6.3 Complex Rational Expressions	Mar 31 - A 6.4 Division of Polynomials	Apr 2 - B Quiz 6.6 Rational Equations
Apr 5 - A 7.1 Radical Expressions and Functions	<i>Apr 7</i> <i>Break</i>	Apr 9 - N Exam 3
Apr 12 - B 7.2 Rational Exponents	Apr 14 - A 7.3 Simplifying Radical Expressions	Apr 16 - B Quiz 7.3/7.4 Radical Expressions
Apr 19 - A 7.4 Adding, Subtracting, Dividing Radical Expressions	Apr 21 - B 7.5 Rationalizing Denominators	Apr 23 - A Quiz 7.6 Radical Equations
Apr 26 - B 7.7 Complex Numbers	Apr 28 - A 8.1/8.2 Quadratics	Apr 30 - B Quiz 8.1/8.2 Quadratics
May 3 - A 8.4 Equations in Quadratic Form	May 5 - N Exam 4	<i>May 7</i> <i>Reading Day</i>
May 10 - N Final Exam		

HOMEWORK LIST

Your homework will not be collected, but these problems (and similar questions) are likely to appear on quizzes and exams. Working on additional problems is highly recommended.

Sec.	Problems
1.1	17, 25, 49, 63, 65, 69, 73
1.2	1, 13, 19, 21, 37, 41, 49, 55, 59, 61, 85, 89, 91, 95, 99, 113, 123, 127, 129
1.3	3-9, 31, 43, 57-60, 61, 64
1.4	3, 11, 17, 19, 23, 25, 29, 31, 33, 37, 59, 65
1.5	7, 9, 35, 37, 41, 45, 61, 63, 71, 73
1.6	17, 21, 23, 27, 35, 37, 39, 47, 49, 55, 61, 65, 71, 81, 87, 97, 103, 107, 109, 111, 119, 121, 123
2.1	3, 15, 19, 21, 25, 31
2.2	3, 5, 11 - 18, 19, 23, 25, 29, 31, 37, 64 - 67
2.3	9, 13, 15, 31, 37, 39, 43, 49, 51, 52, 53, 59
2.4	1, 9, 17, 19, 23, 27, 31, 33, 37, 47, 51, 61, 62, 67, 75
2.5	3, 7, 11, 19, 21, 22, 23, 27, 33, 41, 45, 49, 53, 57
3.1	1, 3, 7, 17, 31, 39, 45, 49, 55, 63, 65, 69, 75, 81, 83
4.1	3, 7, 15, 19, 21, 25, 29, 33, 35, 43
4.2	1, 7, 9, 11, 13, 19, 21, 23, 27, 29, 31, 33, 41, 47, 49, 53, 55
4.3	3, 7, 15, 17, 21, 27, 41, 43, 45, 51, 55, 57, 59, 61, 63, 65, 67, 69, 71, 72, 73, 79, 81
5.1	1, 5, 11, 17, 19, 21-24, 25-28, 29, 39, 41, 49, 71, 105
5.2	3, 5, 7, 15, 19, 21, 22, 25, 29, 43, 49, 53, 55, 71, 81, 99, 101, 105
5.3	3, 7, 9, 21, 23, 31, 35, 39, 43, 47, 49, 55, 59, 61, 65, 67, 71, 73, 81
5.4	5, 9, 15, 21, 35, 37, 39, 49, 55, 57, 69, 73, 81
5.5	1, 3, 7, 13, 19, 21, 23, 29, 33, 35, 39, 41, 45, 47, 49, 55, 65, 75, 81, 85, 103
5.6	7, 11, 15, 17, 21, 37, 39, 47, 61, 63, 67, 69, 79
5.7	5, 11, 13, 15, 21, 25, 27, 29, 31, 35, 37, 43, 45
6.1	1, 9, 13, 31, 37, 43, 49, 55, 61, 65, 67, 79, 81, 83, 89
6.2	3, 7, 9, 11, 19, 23, 25, 29, 31, 39, 41, 47, 49, 51, 53, 55, 69, 71
6.3	3, 7, 9, 13, 15, 19, 23, 27, 29, 33, 39, 41, 43, 47, 49
6.4	3, 15, 25, 27, 33, 35, 45, 47
6.6	3, 5, 9, 11, 13, 15, 17, 19, 20, 21, 22, 23, 27, 29, 35, 39, 41, 47
7.1	1, 3, 5, 7, 9, 15, 17, 19, 33-53(odd), 61, 73, 77, 79, 81, 87
7.2	3, 5, 13, 15, 17, 27, 29, 31, 33, 37, 45, 47, 51, 53, 55, 57, 59, 61, 65, 71, 72, 73, 74, 75, 77, 78, 81, 87, 95, 96, 99, 101, 103, 104, 113, 114, 115, 116, 121, 122, 123, 124
7.3	1, 7, 11, 15, 17, 19, 21, 25, 27, 29, 33, 43, 49, 61, 65, 67, 69, 71, 75
7.4	5, 7, 11, 13, 15, 21, 23, 31, 37, 45, 49, 53, 57, 67, 71
7.5	3, 5, 9, 13, 17, 21, 23, 29, 31, 39, 47, 49, 65, 81, 83, 87, 101
7.6	7, 10, 11, 14, 17, 21, 25, 31, 39, 41
7.7	1, 7, 15, 19, 23, 39, 63, 67, 73, 81
8.1	1, 5, 35, 51, 55
8.2	3, 9, 13, 17, 37, 38, 41, 42, 45, 46, 47, 49
8.4	1, 5, 7, 9, 13, 15, 25, 27, 33, 37

UNIVERSITY RESOURCES AND POLICIES

ADA Accommodations/Academic Support

Mercyhurst University is committed to making reasonable accommodations for qualified students, and employees with disabilities as required by law. Please refer to the HUB <https://lakersmercyhurst.sharepoint.com/sites/StudentsHub> and select the Services tab, then ADA Accommodations from the dropdown for instructions to request an accommodation. You may also contact Susan Reddinger, ADA Coordinator, ADA@mercyhurst.edu, 814-824-2362, Egan Hall 200. For students with questions about Academic Support, please refer to the HUB <https://lakersmercyhurst.sharepoint.com/sites/StudentsHub> and select the Academic Resources tab, then Academic Support for more information.

TITLE IX Sexual Misconduct/Sexual Harassment Reporting

Mercyhurst is committed to providing an environment free from sex discrimination, including sexual harassment and sexual violence. Please refer to the HUB <https://lakersmercyhurst.sharepoint.com/sites/StudentsHub> and select the Resources tab, then Title IX – Sexual Respect from the dropdown for more information. If you would like to file a sexual misconduct complaint, please contact Dr. Laura Zirkle, Interim Title IX Coordinator and VP for Student Life, titleix@mercyhurst.edu, 814-824-2362, Egan Hall 314. Please be aware that in compliance with Title IX, educators must report incidents of sexual assault/harassment, stalking, and domestic/dating violence. If you disclose any of these situations in class, in papers, or to me personally, I am required to report it to the Title IX Coordinator (or any of the Deputy Title IX Coordinators).

Academic Honesty

Students are required to uphold academic integrity throughout the course. In particular, plagiarism of any sort including unauthorized collaboration on assignments and other incidences of academic dishonesty will be handled according to the policies set forth in the Student Handbook.

Course Evaluations

Near the end of the semester, you will be asked to complete an online course evaluation. The evaluation will be completed in class during the last two weeks of the semester using any laptop, tablet, or mobile device. The response tool allows you to note aspects of the course that helped you learn, as well as aspects that might be modified to help future students learn more effectively. You will receive an email letting you know when the evaluation window for our class is open. Please note that these course evaluations are anonymous and instructors do not see the results until after the grades for the course are submitted.

COVID-19 INFORMATION

This is sure to be an unprecedented semester! While we cannot know what the next few months will bring, we must all work together to keep our campus community safe and healthy. This page features information regarding policies of the University (in italics) as well as comments, suggestions, and requests that pertain to our class specifically.

A/B Meeting Schedule

As our class exceeds the maximum recommended capacity of our classroom under social distancing guidelines, we will be following the A/B schedule for our class meetings. This means that only half of you will attend in person classes each day, with the rest of you attending virtually through a live Zoom meeting. A schedule will be posted on Blackboard before the start of the semester indicating which group you're in and what days you should plan to come to the classroom.

Face Masks

As per the COVID-19 Prevention, Mitigation, and Response Policy, Mercyhurst University is requiring that all members of the campus community wear a cloth or disposable face covering over their nose and mouth when on campus. Please refer to the policy for specific details as to where and when face coverings are required. Students may use their own face coverings or those provided by the University. A student in need of a face covering should email covid19@mercyhurst.edu or call 814-824-3600 to find the nearest location where face coverings are available. The University's Mask/Face Coverings Policy will be enforced in this class.

Sanitation and Safety

In keeping with the COVID-19 Prevention, Mitigation, and Response Policy, students are expected to use hand sanitizer and to wipe down their desks using disinfectant wipes when they enter and exit the classroom. Classrooms have been provided with sanitizer and disinfectant wipes for student and faculty use.

Eating and Drinking in the Classroom

In light of the COVID-19 situation, Eating is not permitted in classrooms, labs, or other academic spaces. A water bottle or cup with a lid, and straw preferably, is permitted to be used in classrooms and labs to help prevent a student from becoming uncomfortably parched. Masks should be pulled only slightly away from the bottom of the face to take a quick drink and immediately replaced to covering the mouth and nose.

Class Dismissal and Congestion Prevention

In keeping with the COVID-19 Prevention, Mitigation, and Response Policy, faculty members and students should take steps to avoid crowding outside of classrooms, in hallways, and any enclosed area in university buildings. All rooms will be designated with signs indicating maximum capacity for specific instructional use. These must always be adhered to. Students waiting to enter classrooms or exiting classrooms should always maintain a minimum of 6 feet of distance from others. Class time endings may be adjusted when necessary to minimize overcrowding or congestion.

COVID-19 INFORMATION, CONTINUED

Seating Chart

In compliance with federal and state regulations, the University must be able to conduct contact tracing if there is a positive test or an outbreak; therefore, seating charts are mandatory for all in-person classes. Students will be required to sit in the same seat in the classroom each time they attend class. The seating chart will be available for review for purposes of contact tracing.

Paper Sharing Policy

We will not be exchanging paper this semester. Supplemental materials will be distributed and made available electronically. Assignments and exams will be submitted electronically as well. You are welcome to bring your own paper to class to take notes, but you may not pass paper to a classmate or to me.

Attendance and Missed Classes

Attendance at all classes is expected. However, it is important that students and course instructors adhere to the university's COVID-19 mitigation policies and strategies. As such, a student who misses class due to illness or suspected illness within the context of those policies will not be penalized and will be provided sufficient means to make up any missed course content or work and remain actively engaged in the class.

The word “attendance” has a broader definition than usual this semester. While attending class is preferred, please do not feel obligated to come if you are feeling ill. You are free to join and participate in the live Zoom meeting in lieu of attending a class meeting, regardless of your A/B schedule. If you're not up to joining in, please watch the recording of the class meeting and the associated video lectures when you're able to.

If you are unable to attend class (or join the live Zoom meeting) for more than a few days, please let me know as soon as possible. I am happy to work with you in building a plan that allows you the time off you need without risking your academic progress.

Potential Class Changes

It is my hope that we remain able to meet in person as scheduled for the entire semester. However, there is a very good chance that our plans will change, and without much notice.

If we are unable to continue meeting in person, you will still have the opportunity to “attend” class via Zoom during our regularly scheduled times. The course content on Blackboard was created to help fill in any unexpected gaps in meetings or attendance.

Our highest priority is to remain healthy and safe. We will all need to remain responsible, flexible, and understanding to make this semester a success, and I have full confidence that we will be able to achieve that goal.