MTH 101 Syllabus
Intermediate Algebra
University of Rhode Island
SUMMER 2023

Instructor Contact Information

Name: Meredith Boyajian

Office Hours: by appointment only (send me an email to set up a date/time)

Tutoring Hours: Please view the [tutoring schedules here](#).

E-mail: mboyajian524@uri.edu

Course Materials:

Text

Please click [here](#) for the free online textbook!

WebWork

Your weekly online homework will be administered using a free system WebWork.

Your username is your URI student ID number, and your default password is the first eight letters of your last name in all lowercase letters. Ignore spaces and characters other than letters. Use your entire last name if it contains eight or less letters. [WebWork Link](#) (make sure it says MTH101 ss1)

Some examples:

Tim Smith, Jr., password: smithjr

Bob Jones-Smith, password: jonessmi

John O'Sullivan, password: osulliva

Please change your password as soon as you log in.

MTH 101 Catalog Description

(3 crs.) Introduction to algebraic manipulation, solving equations and Inequalities in one variable. Plotting points and graphing elementary functions. Interpreting and expressing mathematics. Intended for STEM majors who are not prepared to take MTH 111. (Lec. 3) Pre: Credit for MTH099. **Not for credit for mathematics majors, not for general education credit, and not open to students with a C- or better in MTH131 or MTH141.**

About the Course

This course is intended for students to become proficient in algebra, in order to build a firm foundation in preparation for MTH 111 Precalculus. Problem solving and applications will be emphasized throughout. MTH 111 requires a C- or better in MTH 101.

Expectations

- View every lecture, and submit your work on time.
- Attend tutoring hours. Come prepared and be punctual.
- Ask questions when needed.
- It is your responsibility to communicate clearly when writing up solutions for assignments or exams. Your results must display your understanding well and be written in a correct, complete, coherent, and well organized fashion.
- The rules of language still apply in mathematics, and they apply even when symbols are used in formulas, equations, etc.
- The rapid pace of the class requires that you spend time every day doing homework, reviewing notes, reading the textbook, and working out extra problems, all in addition to the time spent in class.
- Be respectful of yourself and your classmates. This means the work that you submit must be your own (unless otherwise stated). In support of honest students, those discovered cheating on assignments or exams will receive a grade of zero on the assignment or exam.
- Use of unauthorized aids such as cheat sheets or information stored in calculator memories will be considered cheating. The Mathematics Department and the University strongly promote academic integrity. All class materials (e.g. notes, projects, exams, lectures, etc.) are property of URI and the instructor. Copying, video taping, taking pictures, or posting this material is not allowed without consent of the instructor and URI.
- There is no alternate or extra credit in this course.

Make-Up Policy

- Homework and the exams **will not be made up** unless you have a documented emergency that you have told me about **prior to the date of the homework or exam**. A make-up exam will be created for you that you must take within **one week** of the original exam date.
- The group project **will not be made up.**
- The final project **will not be made up.**
- *Being **punctual**, therefore, is **critical**.*

Grading Scale

I will use the following scale for your grade in this course:

A	93 – 100	C	73 – 76
A-	90 – 92	C-	70 - 72
B+	87 – 89	D+	67 – 69
B	83 – 86	D	63 – 66
B-	80 - 82	D-	60 - 62
C+	77 - 79	F	< 60

Grading Policy:

Category	Worth	Notes
Discussions	5%	You will need to participate in weekly discussions. **All discussions are due on Saturdays by 11:59pm.** The rubric can be found on the Brightspace site. *Please read below in order to find general directions for submitting a group presentation.*
Group Presentation	10%	You will be part of a group in which you need to submit one group presentation. **All presentations are due Thursdays by 11:59pm.** Your group assignments and rubric can be found on the Brightspace site. *Please read below in order to find general directions for submitting a group presentation.*
Homework	15%	Each homework assignment will be on WebWork *The homework must be completed in the time frame listed below:* **Homework due Sat 5/27 11:59pm** Sections 2.1, 2.5, 3.1, 4.1, 5.1, 5.2, 5.3 **Homework due Sat 6/3 11:59pm** Sections 5.4, 6.1, 6.2, 6.3, 6.5 **Homework due Sat 6/10 11:59pm** Sections 7.1, 7.2, 7.4 **Homework due Sat 6/17 11:59pm** Sections 8.1, 8.2, 8.3, 8.4, 8.5, 8.6
Midterm Exam	25%	The midterm exam will be on sections 2.1-6.5 You will take the exam on BrightSpace *The midterm exam must be completed in the time frame stated below:* **Wed 6/7 8:00am - Wed 6/7 11:59pm**
Final Project	20%	**The final project is due Thursday 6/22 by 11:59pm**. The rubric and directions can be found on the Brightspace site. *Please read below in order to find general directions for submitting your final project.*
Final Exam	25%	The final exam will be on sections 7.1 - 9.3 You will take the exam on BrightSpace *The final exam must be completed in the time frame stated below:* **Fri 6/23 8:00am - Fri 6/23 11:59pm**

NON-GROUP MEMBERS	GROUP MEMBERS	FINAL PROJECT - ALL STUDENTS
Group presentation Week '#' → Click the "Week '#' Chapter '#'" topic → Click "Chapter '#' Presentation" → Click on the shareable link to read the presentation → Go back and click the blue button that says "Start a New Thread" → Write a post reflecting on the presentation (rubric attached) by 11:59pm on Saturday each week	Group 'x' Presentation ■ Submit presentation → Go to "Discussions" → Click on "Week # Chapter #" topic → Click "Start a New Thread" → Write a brief description of your presentation in the post box → Add the shareable link to your presentation (google slides) → Click the blue "Post" button All presentations need to be posted by 11:59pm on Thursdays!	■ Submit project → Go to "Discussions" → Click on "Week 5 Applications Project" → Click "Start a New Thread" → Write your name in the subject line. → Write a brief description of your project in the post box. → Click on the arrow next to "Add Attachments" → Upload your project. → Click the blue "Post" button. → Comment on 5 other presentations before 11:59pm on Fri 6/23

MTH 101 Learning Objectives

At the end of the course you should be able to...

● Perform arithmetic operations on polynomials using the rules of exponents;

● Factor using GCF, difference of two squares, sum/difference of two cubes, trinomials and grouping;

● Solve quadratic equations by factoring;

● Perform arithmetic operations on rational and radical expressions and functions;

● Solve rational and radical equations and solve quadratic equations by the quadratic formula;

● Use the relationship between the equation of a line and its graph;

● Solve relevant applications (exponents, quadratic equations, rational expressions).

● Communicate effectively in written form mathematical ideas and solutions, by stating in a complete, clear, concise, and organized manner steps, calculations, solution strategy, conclusions, and when appropriate, interpreting results in practical or applied terms.

Religious Holidays:

Per policy of the URI, on an individual basis, the student has the opportunity to observe their traditional religious holidays. However, a written notification to each instructor is required.

Illness Due to Flu or COVID-19

If any of you develop flu-like symptoms, please stay home until the fever has subsided for 24 hours. So if you exhibit such symptoms, please do not come to class. Notify me at mboyajian524@uri.edu of your status, and we will communicate through email. We will work together to ensure that the course instruction and work is completed for the semester. The Centers for Disease Control and Prevention have posted simple methods to avoid transmission of illness. These include: covering your mouth and nose with a tissue when coughing or sneezing; frequent washing or sanitizing your hands; avoiding touching your eyes, nose, and mouth; and staying home when you are sick. For more information please view www.cdc.gov/flu or flu.gov . URI Health Services web page, www.health.uri.edu , will carry advice and local updates.

University of Rhode Island's Civility Policy

The University of Rhode Island is committed to developing and actively protecting a class environment in which respect must be shown to everyone in order to facilitate the expression, te4sting, understanding, and creation of a variety of ideas and opinions. Rude, sarcastic, obscene or disrespectful speech and disruptive behavior have a negative impact on everyone's learning and are considered unacceptable. The course instructor will have disruptive persons removed from class if necessary.

Accommodations

If you have a documented disability that may require individual accommodations, please make an appointment with me as soon as possible and provide written documentation so that, together, we may work out reasonable accommodations to support your success in this course. For further information or assistance, please contact URI's Disabilities Services for Students, Office of Student Life, Room 330 of the Memorial Union, or at (401) 874-2098.

URI's Academic Honesty policy

Students are expected to be honest in all academic work. A student's name on any written work, quiz or exam shall be regarded as assurance that the work is the result of the student's own independent thought and study. Work should be stated in the student's own words, properly attributed to its source. Students have an obligation to know how to quote, paraphrase, summarize, cite and reference the work of others with integrity. The following are examples of academic dishonesty.

- Using material, directly or paraphrasing, from published sources (print or electronic) without appropriate citation
- Claiming disproportionate credit for work not done independently
- Unauthorized possession or access to exams
- Unauthorized communication during exams
- Unauthorized use of another's work or preparing work for another student
- Taking an exam for another student
- Altering or attempting to alter grades
- The use of notes or electronic devices to gain unauthorized advantages during exams
- Fabricating or falsifying facts, data or references
- Facilitating or aiding another's academic dishonesty
- Submitting the same paper for more than one course without prior approval from the instructors.

WEEK #	WEEK OF	CHAPTER/SECTION/TOPICS	ASSIGNMENTS DUE
		MTH 101 PROPOSED CALENDAR SUMMER 2023	
1	5/22	**Course Intro** - Syllabus - Brightspace - Expectations **Ch 2.1 - Linear Equations** - Solve linear equations using a general strategy - Classify equations **Ch 2.5 - Linear Inequalities** - Graph inequalities on a number line - Solve linear inequalities **Ch 3.1 - Linear Equations in Two Variables** - Plot points in a rectangular coordinate system - Graph a linear equations - Find the x- and y-intercepts **Ch 4.1 - Systems of Equations** - Determine whether an ordered pair is a solution of a system of equations - Solve a system of linear equations by graphing, substitution, and elimination **Ch 5 - Polynomials (5.1, 5.2, 5.3)** - Determine the degree of polynomials - Add and subtract polynomials - Simplify expressions using the properties for exponents - Multiply polynomials	**ASSIGNMENT:** For group members only!! Group 1 Presentation due Th 5/26 by 11:59pm **DISCUSSIONS:** Course Introductions due Mon 5/22 by 11:59pm For non-group members only!! Group presentation Week 1 Chapter 5 due Sat 5/27 by 11:59pm **HOMEWORK:** WebWork due Sun 5/27 by 11:59pm Sections 2.1, 2.5, 3.1, 4.1, 5.1, 5.2, 5.3

2	5/29	**Ch 5 - Polynomials (5.4)**
		- Divide polynomials
		
		Ch 6 - Factoring (6.1, 6.2, 6.3, 6.5)
		- Find the greatest common factor
		   - Expressions
		   - Polynomials
		   - Grouping
		- Factor trinomials
		- Use the Zero Product Property
		- Solve polynomial equations by factoring
			ASSIGNMENT:
			For group members only!!
			Group 2 Presentation due Th 6/1 by 11:59pm
			
			DISCUSSIONS:
			For non-group members only!!
			Group presentation Week 2 Chapter 6 due Sat 6/3 by 11:59pm
			
			HOMEWORK:
			WebWork due Sat 6/3 by 11:59pm
			Sections 5.4, 6.1, 6.2, 6.3, 6.5

3	6/5	**Chapter 7: Rationals (7.1, 7.2, 7.4)**
		- Expression operations
		   - Multiply
		   - Divide
		   - Add
		   - Subtract
		- Solving equations
			MIDTERM EXAM:
			Midterm Exam opens on Wednesday 6/7 at 8:00am and closes at 11:59pm
			Sections 2.1, 2.5, 3.1, 4.1, 5.1, 5.2, 5.3, 5.4, 6.1, 6.2, 6.3, 6.5
			
			ASSIGNMENT:
			For group members only!!
			Group 3 Presentation due Th 6/8 by 11:59pm
			
			DISCUSSIONS:
			For non-group members only!!
			Group presentation Week 3 Chapter 7 due Sat 6/10 by 11:59pm
			
			HOMEWORK:
			WebWork due Sat 6/11 by 11:59pm
			Sections 7.1, 7.2, 7.4

4	6/12	**Chapter 8: Roots and Radicals (8.1, 8.2, 8.3, 8.4, 8.5, 8.6)**
		- Simplify expressions
		   - With roots
		   - By properties
		   - Radical expressions
		   - Rational exponents
		- Expression operations
		   - Add
		   - Subtract
		   - Multiply
		   - Divide
		- Solve equations
			ASSIGNMENT:
			For group members only!!
			Group 4 Presentation due Th 6/15 by 11:59pm
			Group 5 Presentation due Th 6/15 by 11:59pm
			
			DISCUSSIONS:
			For non-group members only!!
			Group presentation Week 4 Chapter 8a due Sat 6/17 by 11:59pm
			Group presentation Week 5 Chapter 8b due Sat 6/17 by 11:59pm
			
			HOMEWORK:
			WebWork due Sat 6/17 by 11:59pm
			Sections 8.1, 8.2, 8.3, 8.4, 8.5, 8.6

| 5 | 6/29 | **Chapter 9: Quadratics (9.1, 9.2, 9.3)**
- Solve equations
    - Square root property
    - Completing the square
    - Quadratic formula | **ASSIGNMENT:**
Final Applications Project due Thursday 6/22 by 11:59pm

DISCUSSIONS:
Final Applications Project Discussions due Thursday 6/22 by 11:59pm

FINAL EXAM:
Final Exam opens on Friday 6/23 at 8:00am and closes at 11:59pm
Sections 7.1, 7.2, 7.4, 8.1, 8.2, 8.3, 8.4, 8.5, 9.1, 9.2, 9.3 |