Course Syllabus

Portland Community College | 12000 SW 49th Ave, Portland, OR 97219 | (971) 722-6111

This syllabus introduces you to the goals of the course and how we will be working together this term. Please read it carefully and contact me if you need further clarification.

Course Information

- Course Title: Intermediate Algebra
- Course Number: MTH 95
- CRN: 30438
- Credits: 4
- Term and Year: Summer 2025
- Prerequisites: (MTH 63 or MTH 65 or MTH 70) and (RD 90 and WR 90) or IRW 90 or equivalent placement. Recommended: MTH 63 or MTH 65 or MTH 70 be taken within the past 4 terms. The PCC math department recommends that students take MTH courses in consecutive terms.
- Class Meetings & Times: Tuesday/Thursday, 9:00 AM to 12:20 PM
- Modality / Location: In Person, Sylvania Campus, SCB 205

Instructor Information

- Instructor: Miranda Ramsey
- Email: miranda.ramsey@pcc.edu
- Phone: 971-722-3542 (Voicemail)
- Office Location: Sylvania Campus
- Office Hours: Tuesdays 1:00 PM to 2:00 PM, in the Social Science building room 201, or by appointment
- School Address: Portland Community College, 12000 SW 49th Ave., Portland, OR 97219

Course Description

Introduces algebraic concepts and processes with a focus on factoring, functions, rational expressions, solving equations (quadratic, rational, radical, absolute value), and solving inequalities. Emphasizes number-sense, applications, graphs, formulas, and proper mathematical notation. Recommended: MTH 63 or MTH 65 or MTH 70 be taken within the past 4 terms. The PCC math department recommends that students take MTH courses in consecutive terms. Audit available.

Learning Outcomes

Upon completion of the course students should be able to:

- Factor expressions and use factoring to simplify rational expressions and solve quadratic equations.
- Solve absolute value, quadratic, rational, radical equations, and compound inequalities both symbolically and graphically.
- Understand the definition of a function and use it to distinguish between function and non-function relationships.
- Interpret information provided in function notation given a function expressed in graphical, symbolic, numeric, or verbal form.
- Use variables to represent unknown quantities, create a function to model a situation, and use algebra and/or technology to find and interpret a result.
- Interpret properties of functions and relations, such as the meaning of ordered pairs, domain and range, maximum and minimum values, and intercepts.

The complete Course Content and Outcome Guide can be found at www.pcc.edu/ccog.

Instructional Materials

Textbook(s)

- ORCCA (Online Resources for Community College Algebra), by PCC Faculty, Chapters 10-13. You have a few options for obtaining this textbook:
  - Free access to an interactive online edition.
  - Free access to a black and white PDF edition (for printing) and a color PDF edition (for screen viewing).
  - Purchase a paperback version on Amazon or at the PCC Bookstore for approximately $16 (make sure to get Part 3 to get the correct chapters).

Worksheets

Students are responsible for printing and bringing worksheets to class. The worksheets are available on D2L individually as well as collected into a single document, so that you may print them all at once or day-to-day.

You do not need to print the worksheets from home! Free printing options include:

- PCC Printing: Each registered student is allocated $10 (the equivalent of 100 double-sided pages or 142 single-sided pages) per term in print credit that you can use at campus Libraries. If you print the entire 77-page packet as single-sided pages, this will use $5.39 of your credit.
- Multnomah County Public Library Printing: With a library card you are allocated 100 pages of free printing per day! The Capitol Hill library is just up the road from PCC Sylvania.

Supplies

- Pencils and erasers
- Ruler

- Graph paper (My favorite is Engineering Paper or Dot Grid Paper for a clean appearance, but simple graph paper is acceptable.)

Software/Hardware/Equipment

The specific software/hardware/equipment used in this course are:

- WeBWorK for homework assignments
- D2L for additional materials and assignment submissions

Please visit the technology support section of Student Support Resources for a complete list of apps and tools for PCC students.

Technical Expectations

The technical requirements for the course include:

- Technology Requirements for taking an online course at PCC
- A recommended Internet Browser installed
- Ability to use Google Drive and Google Docs
- Webcam and/or microphone for meetings and online appointments

Accessibility

This course uses digital courseware, software, or texts that may cause barriers for those using assistive, or accessibility-related technologies. If you encounter barriers, please contact the Access Tech Team at access-tech-group@pcc.edu or by calling 971-722-TECH (971-722-8324).

Instructional Approach

Mathematics has an unfortunate reputation for being a challenging subject that only some people are capable of engaging with. I strongly believe that this is not true, and that more people are capable of mathematics than we give credit to. My goal is to facilitate creativity and discovery, rather than simply dictating facts and procedures to memorize. In my lectures I set out to establish a question that can ground us and give us context for the math we are working with, and through group work students will be encouraged to talk through problems, ask for help, and lift each other up.

Weekly Structure

Each week, we will cover a few sections from the textbook, at a pace of about one chapter every two weeks. You will be assigned two homework assignments, one set of WeBWorK problems and one set of problems to write out by hand, which will correspond to the material we cover in class. On Thursdays, there will be a quiz covering material you should be comfortable with.

Attendance & Participation

Group work is a large component of this course, so students are expected to attend class and collaborate with each other. However, I understand that perfect attendance is not a practical

expectation. If you must miss class, please email me to let me know, and I'll work with you to make sure you keep up and that your grade is not impacted.

First Week Activities

During the first week of the term, instructors must:

- Identify students who are enrolled but not engaged in a class. These are referred to as "No Show" students and will be dropped from the class as per PCC's G302 Grading Guidelines policy.
- In order to avoid being dropped as a "No Show" student, you must complete the following activities by their deadlines:
    - Attend class on Tuesday, June 24, 2025
    - Complete the Student Introduction form before class Thursday, June 26, 2025.

Communication Guidelines

I highly encourage you to exchange contact information with your peers, especially those you are working with in groups, to work together outside of class. Email, group chats, and Discord servers are all excellent ways to connect and collaborate.

Best Way to Contact Me

I check my email often! If you need anything, please contact me at miranda.ramsey@pcc.edu. Emails sent on weekdays will be answered within 24 hours. Emails sent over the weekend or holiday will be answered the following scheduled school day.

Graded Assignments & Feedback

For more information, please go to the PCC Grading Guidelines.

Problem Sets (20%)

There are 7 problem sets assigned for the class, due on Tuesdays at the start of class. The problem sets are available as PDFs on D2L; you may print the problem set out and fill it in, or use a digital tool to fill it in on your computer.

Paper homework will be graded on the following:

- 2 points: Work is complete, with a solution presented for each problem (partial credit for at least 50% finished).
- 1 point: Work process is shown for each problem, so that if you made a mistake I can see where it happened and offer corrections.
- 1 point: Work is organized and presented in the proper format.
- 1 point: Work is generally correct. Small errors are okay.

These should be submitted in person in class, but you may submit them digitally through D2L. If you do, your submission must be combined into a single document, in order, and oriented correctly to receive full credit.

WeBWorK Assignments (10%)

There are 25 total assignments on the WeBWorK platform: one for each of the 24 sections of the textbook that we will be covering, plus one Orientation. They are due on Fridays at 7PM, covering the material from the week. Late WeBWorK may be turned in for 75% credit until the following Friday.

- Aim to complete the WeBWorK problems BEFORE the class when we cover the topics. This will give you a preview of the material, and give you a chance to ask helpful and relevant questions in person.
- Watch the embedded videos in WeBWorK for additional demonstration of the material,
- Use the "Show Me Another" option to get extra practice for challenging problems,
- Use the "Email Instructor" button when you are stuck. This will let me see your problem and identify what the application is expecting from you.

WeBWorK is notoriously pretty picky about input formatting. If it feels like your answer is correct but the application is still marking it wrong, do not panic! Email me and I'll help you troubleshoot.

Group Work (10%)

Each class you will be able to get into groups to work on the worksheets together. There are four roles: Manager, Recorder, Outreach, and Presenter. These roles will be defined and clarified in class.

Your attendance and participation in class with your group will be graded as follows:

- 1 point: Arrive to class on time.
- 3 points: Fully engage in class: Sign up for and perform the duties of your group role, share ideas and questions with your group and with the class.
- 1 point: Remain in class until class ends.

If you must be absent, email me before class starts to earn 2 points for the day.

Interviews (10%)

From week 3 onward, I will offer short 1-on-1 interviews in class while the class is working on group work. You will be given 5 minutes to solve a problem, then spend a few minutes explaining your process to me verbally. You will be given a grade based on yoru performance as follows:

- 0: No grade. Student did not attend, or could not engage with the problem at all.
- 1: Does Not Meet. Student made a good faith attempt, assessment indicates a need for further instruction and practice.
- 2: Developing. Student shows near understanding of the material that can be corrected with review or practice.

- 3: Proficient. Student shows a satisfactory understanding of the material, with only small errors that are easily addressed during the interview.
- 4: Excelling: Student shows a sophisticated understanding of the material with an excellent demonstration and discussion.

There will be three interviews total, covering Factoring, Functions, and Rational Functions. Students will have opportunities to repeat interviews to improve their scores.

Midterm Exam (20%)

The midterm will be held on Thursday, July 17 in class. This is a closed book, closed notes, no calculator exam. This exam will cover factoring strategies and functions.

Final Exam (30%)

The final exam will be held on Thursday, August 14 in class. This is a cloed book, closed notes, no calculator exam. This exam will cover all material in the class, with emphasis on rational and quadratic functions and inequalities.

Feedback

I will do my best to return all graded work to you by the next class meeting, so that we can go over it in class, and grades will be recorded in the D2L gradebook within a week.

The deadline for me to submit your final grade is March 24, 2025 (Monday) at 5:00 PM.

For more information, visit Viewing instructor feedback.

Late Work & Make-up Policy

Mathematics is a subject that builds on itself, so it is crucial that you stay on top of your work at the pace of the class. However, I understand that life does not always line up with college schedules and deadlines. If you need more time to complete a homework assignment, or if you need to miss class, please contact me to work out an extension, or another way to make up work, before the assignment is due. I am very generous with extensions if you communicate with me, but I am less inclined to accept late work that has accumulated without communication.

Grading Criteria

Please read over all assignments in advance and reach out if you have any questions or if you want to confirm you understand them correctly. Clarifying questions will help you avoid deductions in your grades. Learn more about the Grading Guidelines at PCC.

Activities	%
Problem Sets	20%
WeBWorK Assignments	10%
Group Work	10%
Interviews	10%
Midterm Exam	30%
Final Exam	30%
Total	100%

Grading Scale

Letter Grade	Grading Scale by Percentage	Interview Score
A	90 - 100%	4: Excelling
B	80 - 89%	3: Proficient
C	70 - 79%	2: Developing
D	60 - 69%	1: Does Not Meet
F	< 59%	0: No Grade

PCC Policies and Deadlines

Visit the PCC Policies page for information on:

- Academic Integrity Policy
- Accessibility Statement & Resources
- Drop/Withdraw Deadlines
- Grading Policy
- Internet Etiquette
- PCC Payment Policy

- PCC Registration Policy
- Sanctuary College
- Student Rights and Responsibilities

Drop/Withdraw Deadlines

A student is responsible to add/ drop/ withdraw classes. Please review PCC Registration Policy for more information.

Add and Drop Deadlines

- Students need to register online via MyPCC. Please review the Online Registration Instructions to find out how.
- For 8-12 week classes, students need to drop out by the end of the first week of classes. Students can view course specific deadlines from the MyPCC Home tab, 'View My Drop & Withdraw Dates' link.
- For late add, students must add within two business days of the course drop deadline.

Accommodations and Services

PCC is committed to supporting all students. If you plan to use academic accommodations for this course, please contact your instructor as soon as possible to discuss your needs. Accommodations are not retroactive; they begin when the instructor receives the “Approved Academic Accommodations” letter from you (submitted in person for courses on campus; via email for Online Learning courses). To request academic accommodations for a disability, please contact an Accessible Education & Disability Resources counselor on any PCC campus. Office locations, phone numbers, and additional information may be located on the Accessible Education & Disability Resources website.

Student Rights and Responsibilities

Students are required to complete this course in accordance with the Student Rights and Responsibilities Handbook. The Handbook establishes students' freedoms and protections as well as expectations of appropriate behavior and ethical academic work. The Handbook includes items such as the Policy on Student Rights, and the Student Code of Conduct Policy and Procedures.

Generative AI Statement

The use of generative AI in this course such as, but not limited to ChatGPT, should be used only if it does not otherwise violate the Academic Integrity Policy of the College. Such violations include turning in work that is not your own.

In this class specifically, while generative AI and language learning models can be excellent tools for summarizing and presenting information, they are not themselves capable of mathematical reasoning and are prone to errors - sometimes in very comical ways! Leaning on such tools when you are yourself trying to learn something, even in ways that seem to be academically honest, can instill a dependency

that is really challenging to let go of later. **I highly recommend avoiding the use of tools like ChatGPT, even as a study assistant!** Please ask me for help instead.

Academic Integrity (rules about cheating, plagiarism, or sharing work)

The handbook contains the Code of Student Conduct and the Academic Integrity Policy. Cheating includes any attempt to defraud, deceive, or mislead the instructor in arriving at an honest grade assessment, and may include copying answers from other students or using unauthorized notes during tests. Plagiarism is a particular form of cheating that involves presenting as one's own the ideas or work of another and may include using other people's ideas without proper attribution and submitting another person's work as one's own. Dishonest activities such as cheating on exams and submitting or copying work done by others will result in disciplinary actions including but not limited to receiving a failing grade. For further information, review the institution's Academic Integrity Policy.

Internet Etiquette (or Netiquette)

Click here for more information about Netiquette.

Sanctuary College Statement

PCC is a sanctuary college. For more information and resources, see the resources for undocumented students page.

Inclement Weather Statement

Our course is typically unaffected by college campus and facility closures or delayed class start times. Our regular due dates [and Zoom class meeting times (if a remote class)] apply. However, if PCC must close all operations, our regular due dates will be adjusted accordingly. Please check your email for my instructions and continue to check Brightspace during closures.

Flexibility Statement

The instructor reserves the right to modify course content and/or substitute assignments and learning activities in response to institutional, weather, or class situations.

Title IX

In accordance with PCC Board Policy 216, PCC prohibits sex or gender-based harassment. Any concerns about sex or gender-based harassment should be reported to the Title IX office here. PCC is committed to providing supportive measures and a fair process for all parties. The Title IX office can provide more information about supports and options. You may contact the Title IX Office at titleix@pcc.edu. For more information or to report an incident, visit https://www.pcc.edu/title-ix/

Course Calendar

Note that the specific dates of material and assignments in this calendar are subject to change. Any significant changes will be communicated to students in writing.

Week	Monday	Wednesday	Assignments
1	June 24 Introduction Syllabus 10.1 and 10.2 Factoring	June 26 10.3 and 10.4 Factoring Trinomials	Intro Form WeBWorK Orientation, 10.1-10.4 (due 6/27) Prob. Set 1 (due 7/1)
2	July 1 10.5 and 10.6 Factoring Strategies	July 3 10.7 and 11.1 Intro to Functions	WeBWorK 10.5-11.1 (due 7/7) Prob. Set 2 (due 7/8)
3	July 8 11.2 and 11.3 Exploring Functions	July 10 11.4 and 11.5 Function Notation	WeBWorK 11.2-11.5 (due 7/11) Prob. Set 3 (due 7/15)
4	July 15 Interviews Review	July 17 Interviews Midterm Exam	Prob. Set 4 (due 7/22)
5	July 22 12.1 and 12.2 Rational Functions	July 24 12.3 and 12.4 Rational Function Arithmetic	WeBWorK 12.1-12.4 (due 7/25) Prob. Set 5 (due 7/29)
6	July 29 12.5 and 13.1 Graphing	July 31 13.2 and 13.3 Quadratic Graphs	WeBWorK 12.5-13.3 (due 8/1) Prob. Set 6 (due 8/5)
7	August 5 13.4 and 13.5 Absolute and Mixed Equations	August 7 13.6 and 13.7 Inequalities	WeBWorK 13.4-13.7 (due 8/8) Prob. Set 7 (due 8/12)
8	August 12 Interviews Review	August 14 Interviews Final Exam	