

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: Precalculus I: Functions
- Course Number: MTH 111
- CRN: 43461
- Credits: 4
- Term and Year: Fall 2025
- Prerequisites: MTH95, and (RD115 and WR115) or IRW115, or equivalent placement.
- Class Meetings & Times: Tuesdays and Thursdays, 10:00 AM - 12:50 PM
- Modality / Location: In Person, Sylvania Campus, SS 116

Instructor Information

- Instructor: Miranda Ramsey
- Email: miranda.ramsey@pcc.edu
- Phone: 971-722-3542 (Voicemail)
- Office Location: Southeast Campus, SCOM 214
- Office Hours: By Appointment
- School Address: Portland Community College, 12000 SW 49th Ave., Portland, OR 97219

Course Description

Provides preparation for trigonometry or calculus. Focuses on functions and their properties, including polynomial, rational, exponential, logarithmic, piecewise-defined, and inverse functions. Explores topics symbolically, numerically, and graphically in real-life applications and interprets them in context. Emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology. This course is part of Oregon Common Course Numbering. MTH 111 and MTH 111Z are equivalent. The PCC Mathematics Department recommends that students take MTH courses in consecutive terms. Audit available.

Learning Outcomes

Upon completion of the course students should be able to:

- Explore the concept of a function numerically, symbolically, verbally, and graphically and identify properties of functions both with and without technology.

- Analyze polynomial, rational, exponential, and logarithmic functions, as well as piecewise-defined functions, in both algebraic and graphical contexts, and solve equations involving these function types.
- Demonstrate algebraic and graphical competence in the use and application of functions including notation, evaluation, domain/range, algebraic operations and composition, inverses, transformations, symmetry, rate of change, extrema, intercepts, asymptotes, and other behavior.
- Use variables and functions to represent unknown quantities, create models, find solutions, and communicate an interpretation of the results.
- Determine the reasonableness and implications of mathematical methods, solutions, and approximations in context.

Instructional Materials

Textbook(s)

- Openstax Algebra and Trigonometry, 2nd Edition. We will be covering chapters 3 through 6.
 - Digital version available at [openstax](https://openstax.org).
 - [Additional resources](#) are also available if you would like to download a PDF or purchase a print copy.

Supplies

- Pencils and erasers
- Ruler
- 1-inch 3-ring binder for organizing your workbook activities and notes, unless using a digital alternative.
- Graph Paper for notes and assignments. My favorite choice is [Engineering Paper](#), which is constructed to have faint lines on the front for a clean appearance, but any [graph paper](#) will do.

Software/Hardware/Equipment

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

- D2L for additional materials and assignment submissions

A personal graphing calculator (such as a TI-84+) may be helpful for the class but is not required. All proctored assessments will be done without a calculator. Where technology is required for the class, a free online tool such as [Desmos](#) can be used.

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. You will be assigned a Problem Set with exercises from the textbook, as well as activities from the [Lab Manual](#). Activities will have a "Preparation" worksheet that should be completed before class, and an "Exit" worksheet that will be completed after the activities are finished.

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, September 23, 2025
 - Complete the [Student Introduction](#) form before class Tuesday, September 30, 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%)

Each week will have a Problem Set corresponding to the material we cover in class. These will be mostly problems taken from the book. Paper homework will be due in class on the following Tuesday.

Lab Manual (15%)

After each lecture portion of the class, we will have a Lab portion of the class to work on the [Lab Manual](#) individually and in groups. Students are expected to print the activities from the workbook or from D2L before coming to class. Worksheets can be printed at home, at the PCC library, or at a public library.

Interviews (10%)

Starting in week 3, students will be invited to conduct short, 5-10 minute interviews during the Lab portion of the class. Students will be given a short problem that reflects topics that we've covered in class, and asked to demonstrate their understanding of the problem through written or verbal discussion with the instructor. Students must complete at least two interviews, but may repeat them to improve their grade.

Interview grades will use the following rubric:

F - 0 points	D - 2 points	C - 3 points	B - 4 points	A - 5 points
No basis for a grade - student did not conduct the interview or otherwise could not participate.	Unsatisfactory - student did not demonstrate an understanding of the material and needs additional	Developing - student shows a developing understanding of the material but made critical	Proficient - student demonstrated a confident understanding of the material.	Mastery - Student demonstrated a strong understanding of the material. Any minor errors are

	instruction and study.	errors or needed support from the instructor, and needs additional practice.	Small errors are corrected with minimal support from the instructor.	easily self-corrected.
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Exams (15% + 15% + 25%)

There will be three exams.

- Exam 1 will cover Functions (chapter 3 from the text).
- Exam 2 will cover Exponential and Logarithmic functions (chapter 6 from the text).
- Exam 3 will be comprehensive, with particular focus on Polynomials and Rational Functions (chapter 5 from the text).

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.

For more information, visit [Viewing instructor feedback](#).

Late Work & Make-up Policy

- Work may be submitted late *with approval granted on a case by case basis*. If you need extra time I am very happy to be flexible, but unplanned late work is difficult to fit into my schedule and may not be accepted. Please talk with me ahead of time if you are falling behind on your work.

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%
Labs	15%
Interviews	10%
Exam 1	15%
Exam 2	15%

Final Exam	25%
Total	100%

Grading Scale

Letter Grade	Grading Scale by Percentage
A	90 - 100%
B	80 - 89%
C	70 - 79%
D	60 - 69%
F	< 59%

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
- Title IX/Non-Discrimination

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.

I also promise that **I will not use AI in my role as your instructor**. All communication, feedback, or instruction that you receive will be from me as a human being.

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.

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	Tuesday	Thursday	Assignments
1	September 23 Section 3.1	September 25 Section 3.2	Student Intro Form Prob. Set 1
2	September 30 Section 3.3	October 2 Sections 3.4	Prob. Set 2
3	October 7 Section 3.5	October 9 Section 3.7	Prob. Set 3
4	October 14 Section 6.1	October 16 Section 6.2 Exam 1: Functions	Prob. Set 4
5	October 21 Section 6.3	October 23 Section 6.4	Prob. Set 5
6	October 28 Section 6.5	October 30 Section 6.6	Prob. Set 6
7	November 4 Section 6.7	November 6 Catch Up, Interviews	Prob. Set 7
8	November 11 No Class (Holiday)	November 13 Section 5.1 Exam 2: Exp + Logs	
9	November 18 Section 5.2	November 20 Section 5.3	Prob. Set 8
10	November 25 Section 5.6	November 27 No Class (Holiday)	Prob. Set 9
11	December 2 Section 5.7	December 4 Catch Up, Interviews	
12	December 9 No Class (Finals Week)	December 11 Final Exam	