

Precalculus II - Trigonometry

MTH112Z-NEWP01 | Fall 2026

Instructor Information

Name: Jenn Loseke

Email: jenn.loseke@oregoncoast.edu

Website: <https://oregoncoast.edu>

Office Room and Phone: Newport CC

Office Hours: **MW** 12:45 - 1:45 pm; **TR** 11:00 am - 12:00 pm; **Friday** 11:00 am - 12:00 pm

(via [Zoom](#) - Friday only or by appointment)

Secondary Contact:

Dr. Sarah Whiteford, Dean of Academic Pathways & Career Technical Education

sarah.whiteford@oregoncoast.edu,

Course Information

Classroom: Newport CC-32

Class Meeting time: MW 10:00 - 11:55 am

Textbook:

- We use an open education resource by OpenStax for this class. All course materials will be linked online in Canvas and are free of charge for student use.

Materials/Equipment:

- Amplify Classroom and MyOpenMath – These are free, online software systems that will be used extensively throughout the course. Students will need to create an account as outlined in the course Canvas shell for Amplify.
- Scientific Calculator (not app based or on a smart tool such as a phone or tablet)

Learning Management System:

All courses are web-enhanced and all students are required to have access to Canvas which can be accessed through the main OCCC website at OregonCoast.edu. All faculty must use Canvas gradebook so that students can easily track their grades.

Important dates

Last day to drop* with a refund in first week: See the [2026-2027 Academic Calendar](#)

Last day to withdraw* with a 'W': See the [2026-2027 Academic Calendar](#)

*Be aware that dropping/withdrawing from a course may affect your financial aid

Students are responsible for adding, dropping, and withdrawing from classes by published deadlines. The drop and withdraw deadlines are on the academic calendar. Beginning the second week, until the deadline published on the academic calendar each term, students may withdraw from classes. A mark of "W" will appear on their transcript. Tuition and fees remain on the student account when a student chooses to withdraw from a class.

Syllabus Changes:

This syllabus serves only as a guide to this course. The instructor reserves the right to change any part of this syllabus at any time due to any variety of circumstances. Methods and criteria used to evaluate student performance may also change. If and when changes occur, students will be informed in writing. Students are responsible to keep informed of syllabus changes as they occur by attending and participating in class and communicating with the instructor.

Student Conduct

Academic Integrity

Learning is built on the fundamental qualities of honesty, fairness, respect, and trust. At Oregon Coast Community College, academic integrity is a shared endeavor characterized by truth, personal responsibility and high academic standards. Any violation of academic integrity devalues the individual and the community. One important aspect of academic integrity is academic honesty.

Violations of academic honesty include:

- Plagiarism
- Collusion/Inappropriate Assistance
- Cheating
- Fabrication/Falsification/Alteration
- Unauthorized Multiple Submission
- Sabotage and Tampering

A student who violates academic honesty will be subject to disciplinary action according to Student Rights and Responsibilities.

Policy on Mobile Communication Devices

Students are not permitted to operate cell phones during class or laboratory sessions, as these devices disrupt learning and teaching activities. Students should use such communication devices only during class breaks outside the classrooms. Discuss exceptions with the instructor.

Students Rights and Responsibilities

The Student Rights and Responsibilities in the Student Handbook establishes students' freedom and protections as well as expectations of appropriate behavior and ethical academic work [<https://catalog.oregoncoastcc.org/student-handbook>].

Children on OCCC Property

Students are not allowed to bring children to classes or leave them unattended on campus. We expect compliance from both students and faculty regarding this policy.

Enrolled Minors

The college offers programs that allow minors (students under 18) to enroll in college courses. Students are advised to foster relationships that are age appropriate with classmates.

Course Information

Course Description

Examines right and oblique triangles, vectors, polar coordinates, parametric equations, A course primarily designed for students preparing for calculus and related disciplines. This course explores trigonometric functions and their applications as well as the language and measurement of angles, triangles, circles, and vectors. These topics will be explored symbolically, numerically, and graphically in real-life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology. Prerequisites: (MTH 111) and (RD 115 and WR 115) or equivalent placement. Recommended: MTH 111 taken within the past 4 terms. Audit available.

Course Outcomes

Upon completion of the course students should be able to:

- Translate among various systems of measure for angles including radians, degrees, and revolutions.
- Represent, manipulate, and evaluate trigonometric expressions in terms of sides of a right triangle and in terms of the coordinates of a unit circle.
- Graph, transform, and analyze trigonometric functions using amplitude, shifts, symmetry, and periodicity.
- Manipulate trigonometric expressions and prove trigonometric identities.
- Solve trigonometric equations using inverses, periodicity, and identities.
- Define, represent, and operate with vectors both geometrically and algebraically.
- Apply the law of sines and the law of cosines to determine lengths and angles.
- Use variables, trigonometric functions, and vectors to represent 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.

Attendance

Students are expected to attend all classes in which they are enrolled. Repeated absences will affect a student's grade. Students are responsible for dropping or withdrawing from registered classes by completing the official drop/withdrawal process. Students who stop attending and who fail to drop or withdraw from a class by the published deadline may earn a grade of F or NP according to the grade system option selected by the student. Students having excessive absences and who fail to drop or withdraw from a class by the published deadline may earn a grade of F or NP according to the grade system option selected by the student. Students who fail to attend or stop attending classes and fail to drop those classes by the published drop deadline will be responsible for the associated tuition and fees. Students may not attend classes they are not registered for.

Instructor's Overview of the Course

This course will be presented in an active learning environment. Your attendance and participation is critical to being successful in this course. The course is designed around competencies and outcomes and my role as the instructor is to facilitate lessons that will engage you as students in meaningful ways toward these outcomes. It is YOUR role, as the student, to take ownership of learning these competencies and outcomes and to actively engage with course material.

Course Activities and Design

All activities will follow the premise that formal definitions and procedures evolve from the investigation of practical problems. In-class time is primarily activity/discussion emphasizing problem solving techniques. Activities will include group work.

Use of AI (Gen AI)

The use of generative AI (GenAI) in this course is permitted or restricted based on the nature of each assignment.

- You may **not** use large language models (i.e., ChatGPT, Microsoft Copilot, Google Gemini, etc.) for any assignment completed in a non-classroom setting (Class Preps, MyOpenMath Assignments, missed work, projects, and reflection journals) unless otherwise outlined in the assignment itself.
- We may use AI to explore mathematical topics and content during some in-class activities. Each assignment will include a clear label stating whether AI use is allowed, and when it is, it may only be used for brainstorming and exploring ideas. All final submitted work must be your own original work, and you should be prepared to discuss your findings verbally.

If you have questions about this or any other policy, don't hesitate to reach out to your instructor for clarification or more details.

Grades

Graded Instructional Activities

- **Class Prep Assignments (10% of overall grade):** Class prep assignments are to be completed pre-class to assist you in connecting prior knowledge and vocabulary to course content. These assignments will allow you to fully engage with the class activities and use higher critical thinking in your learning. All class prep assignments will be due by 11:59 pm on the dates outlined on the course assignment schedule, but should be brought to class to serve as a resource.
- **Content Assignments via MyOpenMath (20% of overall grade):** These assignments aim to support consistent practice and engagement with course materials. All written work should be completed on notebook paper, brought to class for clarifications, and used for reference and studying. Content Assignments are due as specified in the course assignment schedule. Late submissions within a week of due date will incur a 50% grade penalty, and no work will be accepted more than one week past the due date.

- **In-Class Activities (20% of overall grade):** Each class will include activities that must be completed **in class** for full credit. Since these activities promote active participation - discussion, attendance, and participation is required and accounts for 30% of the in-class activities grade. If you miss a class, you may submit the activity via Canvas by the next class session, but the grade penalty will apply.
- **Daily Check for Understanding Quizzes (10% of overall grade):** Each class will conclude with a short check in on your learning of the material. These are closed-note, closed-book quizzes and will be graded on accuracy. Partial credit may be given on individual problems. These cannot be made up, but instead the lowest 2 quizzes will be dropped at the end of the term.
- **Proctored Exams (40% of overall grade):** There will be 2 progress exams and a final exam. Exams will be closed-book, closed note assessments and will focus primarily on free-response questions with limited multiple-choice and fill in the blank problems. Evaluation includes correct conclusions, notation, accurate and precise math terminology, and complete sentence answers for application problems. If you anticipate missing an exam, contact your instructor prior to the start of the exam to make arrangements.

Content and Class Prep assignments will be graded on completion and accuracy. **In-class activities** will be graded by work completed, discussion, and accuracy on selected problems.

Grading Scale

- A = 90% - 100%
- B = 80% - 89%
- C = 70% - 79%
- D = 60% - 69%
- F = 0% - 59%

Extra Credit Policy:

Extra credit is generally not offered. However, there may be some extra credit assignment(s) at the end of the term, and some assessments may include an optional bonus question. While these opportunities can provide a small boost, they will not significantly impact your overall grade. It is always in your best interest to focus on the required coursework to achieve your desired performance in the class.

Course Assignment Links and Due Dates

All assignments and due dates can be found in our Canvas shell posted in the modules under Course Assignment Schedule. You should plan to spend about **1-2 hours outside of class for every hour in class** to complete these assignments, seek out additional help, and study for upcoming assessments.

Summary of Content

Details for all assignments, content, and assessments can be found in the Canvas course shell.

Week 1: 9/21 & 9/23

Introduction to Trigonometric Functions
Angles

Week 2: 9/28 & 9/30

Unit Circle: Sine and Cosine Functions
The Other Trigonometric Functions

Week 3: 10/5 & 10/7

Right Triangle Trigonometry
Progress Exam #1

Week 4: 10/12 & 10/14

Graphs of the Sine and Cosine Functions

Week 5: 10/19 & 10/21

Graphs of the Other Trigonometric Functions

Week 6: 10/26 & 10/28

Inverse Trigonometric Functions

Week 7: 11/2 & 11/4

Simplifying and Verifying Trigonometric Identities
Progress Exam #2

Week 8: 11/9 & 11/1

Sum and Difference Identities; Double-Angle, Half-Angle
Veterans Day 11/1/26 - No School

Week 9: 11/16 & 11/18

Solving Trigonometric Equations

Week 10: 11/23 & 11/25

Non-Right Triangles: Law of Sines and Cosines
Polar Coordinates and Graphs

Week 11: 11/30 & 12/2

Parametric Equations and Vectors
Final Exam

Student Resources:

Americans with Disabilities Act

In compliance with the Americans with Disabilities Act (ADA), Oregon Coast Community College provides reasonable accommodation to students with disabilities. If you desire reasonable accommodation, please contact The Office of the Vice President Student Affairs (400 SE College Way, Newport, OR 97366) at 541-867- 8501, or you can email access@oregoncoast.edu. *Students are responsible for requesting accommodations in a timely manner and documenting the nature and extent of their disability.*

OCCC Email

OCCC email is the official form of communication of Oregon Coast Community College. If you have any difficulties accessing your OCCC email address please contact support at helpdesk@oregoncoast.edu

Emergency Funds

If you are experiencing challenges securing food, transportation, or housing, or have other financial issues that are affecting your ability to attend and succeed in class(es), we encourage you to apply for emergency funds. Please call, email, or visit Student Services for assistance (phone: 541-867-8544). If you are comfortable doing so, please let your instructor know about your situation. This will allow for a better understanding and could potentially lead to further support and/or resources.



Use this QR code to access the student resources webpage.

College Information

Land Acknowledgement

Oregon Coast Community College acknowledges that we reside within the ancestral homelands of the Yaquina (Yaqo'n) and Alsea (Wusi'n) Tribes. Today, those tribal descendants are represented by The Confederated Tribes of Siletz Indians. We are honored for the opportunity to teach, learn, and work on their ancestral lands. We also recognize the ongoing contributions they make to the community, Oregon Coast Community College, and the world.

Mission Statement

At Oregon Coast Community College, we equip students for success by providing educational pathways and support in response to the diverse needs of our community. Through accessible and engaging programs, we enrich the economic and civic vitality of Lincoln County and beyond.

Equal Opportunity and Non-Discrimination

Oregon Coast Community College does not discriminate on the basis of race, color, national origin, sex, disability, age, sexual orientation, gender identity, marital status, or religion in its programs and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies:

- Vice President Academic and Student Affairs, Dr. Kristina Holton, 541-867-8511
kristina.holton@oregoncoast.edu
- Director of Human Resources, Joy Gutknecht, 541-867-8515
joy.gutknecht@oregoncoast.edu

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