



CENTRAL OREGON
community college

MTH 112Z Syllabus

Course Information:

Course Title: MTH 112Z: PRECALCULUS 2: Trigonometry

Course Number and CRN: MTH 112 CRN: _____

Course Credits: 4 credits

Course Date: Trimester 1, 2, and 3

Course Location: Rm 212

Instructor: Kelsy Forrester

Phone (541) 416-6900

e-mail kelsy.forrester@crookcountyschools.org

Office Hours 3:45-4:45 or by appointment

Recommended preparation:

MTH 111Z passing score of C or better.

Course Description

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.

Course learning outcomes

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

8. Use variables, trigonometric functions, and vectors to represent quantities, create models, find solutions, and communicate an interpretation of the results.
9. Determine the reasonableness and implications of mathematical methods, solutions, and approximations in context.

Instructional Methods:

Methods: This course uses a variety of instructional methods including lecture, class discussions, engaging activities, and small group work.

Textbook & Materials:

Textbook Title: *Precalculus, by Ron Larson-Fall and Spring*

Materials:

- Pencils (PLENTY) and an Excellent Eraser - Mistakes are part of the process.
- Spiral Notebook.
- Lined Paper and Graph Paper.
- Ink Pen and Highlighter.
- Textbook (checked out from library)
- ***Graphing Calculator Highly Recommended*** (TI-83 or TI-84) Desmos is also great.
Calculators are available for rental from the Media Center.

Google Classroom (REQUIRED): a place to find out what we do in class each day, pictures of the notes, copies of handouts, solutions to homework problems, etc.

Code: _____

Expectations:

- Please be in class on time.
- Once you enter the room, please sit down and complete the daily opener.
- Come to class prepared with notebook, chromebook, and calculator
- No cell phone use (with some teacher-directed exceptions). Please leave cell phones out of sight.
- Be **Respectful, Reasonable, Responsible, and Safe** at all times.
- Complete work on time and keep an organized notebook
- Collaborate and persevere.

Assignments and Grading: Assignment Requirements:

Homework: Homework will be completed weekly

- Title, date, problem numbers
- Write neatly and legibly.
- Graphs and sketches always include scale numbers.
- Justify your answers. On written assignments and during class discussions, you will be expected to tell how you solved the problem, why you solved it that way, and why your

answer makes sense. The objective is not to just do the math correctly and get the answer, but also to effectively communicate the problem-solving process.

Grading Policy:

Your grade for the class will be calculated from the following categories for both trimesters:

- 50%** Standards Assessments - **NO** test retakes or test corrections for college credit students
- 25%** Homework, Classwork
- 25%** Comprehensive Final Exam (The last week of the trimester)

Corresponding Letter Grade Proficiency Scale Percentage Scale:

- A** Exceptional Mastery 90 - 100%
- B** Mastery 80 - 89%
- C** Proficient 70 - 79%
- D** Minimal Proficiency 60 - 69%
- F** Does Not Meet Below 60%

There will be no extra credit offered.

Math 112Z at COCC is a one trimester long course. CCHS Math 112Z A/B is a two trimester long course. Therefore your student's grade issued to COCC will be an average of their Math 112Z A and Math 112Z B grades at CCHS. CCHS transcript grade will be consistent with the grade given each trimester for Math 112Z A and Math 112Z B

Final Exams:

See the [Academic Calendar and Exam](#) Schedule page for the final exam schedule, policies for rescheduling final exams, and information about the final exam requirement. Rescheduling final exams is available only in specific circumstances and requires advance planning

Americans With Disabilities Act (ADA) Statement:

Students with documented disabilities who may need accommodations, who have any emergency medical information the instructor should know of, or who need special arrangements in the event of evacuation should make an appointment with the instructor as early as possible but no later than the first week of the term. Students may also wish to call [Disability Services](#) in Barber Library at 541-383-7583 or email disabilityservices@cocc.edu.

Non-Discrimination Policy:

It is the policy of the Central Oregon Community College Board of Directors that there will be no discrimination or harassment on the basis of age, disability, sex, marital status, national origin, ethnicity, color, race, religion, sexual orientation, gender identity, genetic information, citizenship status, veteran or military status, pregnancy, or any other protected classes under federal and state statutes in any educational programs, activities, or employment. Persons having questions about equal opportunity and nondiscrimination should contact the Equal Employment Officer c/o COCC's Human Resources office at 541- 383-7216 or hr@cocc.edu.

Title IX Statement:

The goal of Central Oregon Community College is to provide an atmosphere that encourages faculty, staff, and students to realize their full potential. To assist in this, the College adheres to federal Title IX and state of Oregon sexual harassment laws, noting that this includes sexual harassment, sexual assault, domestic or dating violence, or stalking.

The College's [policies](#) and [procedures](#) related to Title IX and State of Oregon sexual harassment laws are included in the College's Policies and Procedures. Individuals wanting more information or who need to report a Title IX or sexual harassment should contact the College's Title IX coordinator at 541-383-7211 or to file an [incident report](#).

Acceptable Use of Technology:

COCC computers and networks provide access to resources on and off campus, as well as the ability to communicate with other users worldwide. Such open access is a privilege and requires that individual users act responsibly. Users must respect the rights of other users, respect the integrity of systems and related physical resources, and observe all relevant laws, regulations, and contractual obligations. For more information, check [this policy document](#)

Students Rights and Responsibilities:

All students should review the [Student Rights](#) and Responsibilities documentation, which lays out expectations for acceptable student behavior, disciplinary procedures, and your rights as a student as a student at COCC.

Americans with Disabilities Statement:

Students with documented disabilities who may need accommodations, who have any emergency medical information the instructor should know of, or who need special arrangements in the event of evacuation, should make an appointment with the instructor as early as possible, no later than the first week of the term. Students may also wish to contact the COCC Disability Services Office in the Boyle Education Center, (541) 383-7583.

Dropping a Class/Audits:

The end of the 7th week of the term is the last day to change from a grade to an audit, or vice versa. This date is also the last day to drop a course without receiving a W on your transcript. After the 7th week and by the end of the Wednesday prior to finals week, you may drop a course and receive a W on your transcript only with permission from your instructor. COCC Important Dates and [Academic Calendar](#)
These dates are different for each high school. Please contact College Now for your dates.

CCHS Citizenship, Classroom Rules, Behavior Expectations: Citizenship, Classroom Rules, Behavior Expectations:

- Come to class prepared with notebook, calculator, and writing utensil
- Complete weekly HW/Openers on a daily basis
- Turn in assignments, HW's, and reviews on time (before or on unit test day)
 - **Once a unit is completed, any late work from that unit will be deducted points**
- Be present and attentive: take notes, ask questions, do the practice!

- Technology use:
 - Cell phones are put away (see cell phone policy below)
 - Chromes will be allowed during class when directed by teacher
- When absent, check google classroom and complete the daily assignment(s) posted.

The Board expects student conduct to contribute to a productive learning climate. Students shall comply with the district's policies, administrative regulations, school and classroom written rules, pursue the prescribed course of study, submit to the lawful authority of teachers and school officials and conduct themselves in an orderly manner during the school day and during district-sponsored activities.

Careful attention shall be given to procedures and methods whereby fairness and consistency without bias in discipline shall be assured to each student. The objectives of disciplining any student must be to help the student develop a positive attitude toward self-discipline, realize the responsibility of one's actions and maintain a productive learning environment.

See [CCSD Board Policy JFC](#) for more details.

CCHS Cell Phone Policy: "NO CELL FROM BELL TO BELL"

- Students may use their cell phone before school starts, between classes, at lunch time, and after school.
- Students may not use their cell phone in any way during class time.
- Cell phones will be put in the pocket organizer at the front of the classroom or in the student's backpack.
- Students may not use headphones during class time. These should remain in the student's backpack unless otherwise noted in a student's 504 Plan or IEP*.
- If a parent/guardian has an urgent message for their student, please contact the main office (541-416-6900) and we will deliver the message to your student.
- In the case of a school emergency, students will be permitted to use their phone

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Please sign and date confirming you have read and understood the syllabus. Return this page only to Mrs. Forrester!

Student Printed Name: _____ Date: _____

Student Signature: _____

Parent/Guardian Printed Name: _____ Date: _____

Parent/Guardian Signature: _____