

Syllabus for UWX MA113: Trigonometry

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

This is a 2-credit course. It is a continuation of College Algebra/Algebra Calculus. The course content include: Degrees and radians; Arc length and sector area; Similar triangles; Trig ratios and right triangles; Special angles; Right triangles and applications; Standard position; quadrants; fundamental identities; Trig functions; Inverse trig functions; Trig equations; Basic graphs and graphing; Double- and half-angle identities; Laws of sines and cosines; Area of Triangles.

Prerequisite(s)

Grade of C or better in UWX MA116 or placement into UWX MA113.

Course Outcomes

Upon completing this course, you will be able to do the following:

- Identify special triangles and their related angle and side measures.
- Evaluate the trigonometric function of an angle in degree and radian measure.
- Use trigonometric functions and their inverses in applications involving right and oblique triangles.
- Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs.
- Solve trigonometric equations in various triangles problems and its applications.
- Use non-fundamental identities/formulas to evaluate, simplify, rewrite, and solve trigonometric expressions and equations.
- Use Law of sines and Law of Cosines to solve oblique triangles and find the areas of the oblique triangles.

Course Requirements/Components

Written Assignment

- Full **working out** must be shown for all solutions and the solutions should be well organized so that any reader can follow the process and the logic you have used. Answer sheets serve no purpose.
- **Do not** combine more than one assignment set on the same paper. Each assignment set should display your **name** (on each sheet), the **date** and the **assignment number**.

- You may confer with each other about the homework problems and you may compare answers, but you may not simply copy someone else's work. Your final write-up needs to be your own.
- If your work is to be handwritten, please give yourself plenty of space in which to write solutions. Be careful of the edges since scanners may crop the page.
- Your efforts to hand in neatly and carefully done work will be greatly appreciated when it is returned to you with written comments. Your own work, when carefully done, will serve you well when you review for exams.

Quizzes

There will be **one quiz** assigned online through Pearson MyLab Math for each lesson. You should refer to the Course Calendar for the dates and time requirements for these quizzes. You only have 4 tries for each quiz. Only the higher quiz score will be used for grade calculation. The instructor **will not** be collecting any written work used to obtain the solutions to the quizzes and partial credit **will not** be applied to online quizzes.

Exams

There will be two term exams (covering 1 chapter each) during the semester. These exams must be completed within the specified time frame and proctored through Proctorio, our online proctoring program. Refer to the Course Calendar for the dates, times and other requirements for the term exams. Please note: The exams must be completed without the use of books, or any other online reference materials, for example, Google or Wolfram math. However, the students may have **two** 3x5 inch note cards for use on the exam. Both sides of each card may be used. There is a scientific calculator available in Proctorio (the proctoring program), and this will be the only calculator you will be allowed to use during the exam.

Cell phones are not allowed to be present during the taking of an exam. The instructor will examine the student's submitted scanned sheets for possible partial credit. You must show all your work and upload your work into Canvas written exam for full credit. A correct answer with no work shown maybe worth no points, but an incorrect or partial answer with some work shown *may* be worth partial credit.

You should ensure your webcam is properly placed in your work area, so your eyes, hands, face, mouse, and work area are mostly visible.

Final Exam

The scheduled date for the final exam is provided in the Course Calendar. The final exam will be a comprehensive, two-hour exam. These exams must be completed within the specified time frame and proctored through Proctorio, our online proctoring program. The final exam is required, and you are responsible for ensuring you take it at the scheduled time. The exam must be completed

without the use of books, or any other online reference materials, for example, Google or Wolfram math. However, the students may have SIX (four are from the previous two exams) 3x5 inch note cards for use on the exam. Both sides of each card may be used. You may use your own regular scientific calculator to take your exam. You **cannot** use machines capable of performing symbolic operations in calculus (e.g. TI-92, and laptop computers).

Cell phones are not allowed to be present during the taking of an exam. The instructor will examine the student's submitted scanned sheets for possible partial credit. You must show all your work and upload your work into Canvas written exam for full credit. A correct answer with no work shown maybe worth no points, but an incorrect or partial answer with some work shown *may* be worth partial credit.

You should ensure your webcam is properly placed in your work area, so your eyes, hands, face, mouse, and most of your work area are visible.

- **You are NOT to work with each other when completing quizzes, tests or examinations. If ANY collaboration occurs, all parties involved will receive a zero for that exam, and you will be strongly encouraged to drop the class.**

Any violation of the rules will subject you to possible disciplinary action, including a zero for that exam or an F for this class.

Grading

The following grading scale will be used to evaluate all course requirements and to determine your final grade: (examples below)

Grade	Percentage Range
A	93% - 100%
A-	90% - 92%
B+	87% - 89%
B	83% - 86%
B-	80% - 82%
C+	77% - 79%
C	73% - 76%
C-	70% - 72%
D+	67% - 69%
D	60% - 66%
F	59% and under

Assignment	Points
Homework 17 @ 100 points	1700

Quizzes 17 @ 100 points	1700
Written Assignments 2 @ 50 points	100
Exams 2 @ 100 points	200
Final Exam	100
Total Points	2100