

## Math 128 – WvEB Trigonometry

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**Note:** When sending an e-mail, include “WvEB Trig” in the subject.

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**Pre-requisite:** C or better in WvEB Math 126.

**Objectives:** The general goals of this course are common to all the courses in the Institute for Math Learning at WVU:

- **APPLICATIONS AS CENTRAL FOCUS:** use mathematics to model and solve more realistic problems
- **PROBLEM SOLVING:** gain experience as a problem solver, to use a heuristic to analyze problems in an organized manner
- **CONCEPTUAL UNDERSTANDING:** rather than just rote memorization of algorithms
- **MULTIPLE APPROACHES:** to examine problems from analytical, geometric and numeric perspectives, to make judgments about the appropriateness of the choice of formal or approximate methods of solution
- **TECHNOLOGY AS A TOOL:** use technology as an integral part of the process of formulation, solution, and communication, to gain experience in selecting the proper tool for a given problem
- **ACTIVE STUDENT LEARNING:** to engage in the exploration and discovery of concepts and to learn to work cooperatively to solve problems
- **COMMUNICATION OF IDEAS:** to demonstrate understanding by explaining in written or oral form the meanings and applications of concepts
- **HISTORY OF MATHEMATICS:** to learn about mathematics as a human endeavor

The specific goals of the trigonometry course are to stress an algebraic, graphic, and numeric approach to:

- the concept of function, especially trigonometric functions arising from the study of circular motion
- right angle trigonometry and trigonometric functions of general angles
- the application of trigonometric functions in modeling problems
- trigonometric equations, inequalities, and identities
- graphing trigonometric functions
- applying trigonometric functions to polar coordinates, complex numbers, and vectors

To accomplish these goals, the class incorporates interactive laboratories using technology and student activities that emphasize writing and student cooperation as integral parts of the class.

**Evaluation:** Multiple forms of assessment will be used to measure your understanding of trigonometry. The point distribution of these assessments is:

Assessment	Number	Points	Percent of Grade
1   Participation	?	60	7.5%
2   Homework	10	80	10%
3   Labs	10	100	12.5%
4   Tests	4	400	50%
5   Comprehensive Final	1	160	20%
TOTAL		800	100%

Grading Scale: 90% – 100%    A  
80% – 89%            B  
70% – 79%            C  
60% – 69%            D  
0% – 59%             F

**Homework and Content:** Check <https://math.wvu.edu/~mrschraeder/WvEBTrig/WvEB128.htm>.

**Post-ACT Test:** The Post-ACT Test is worth up to 10 points of Extra Credit.

1 ≤ number correct ≤ 21, earn 1 bonus point	40 ≤ number correct ≤ 41, earn 6 bonus points
22 ≤ number correct ≤ 28, earn 2 bonus points	42 ≤ number correct ≤ 44, earn 7 bonus points
29 ≤ number correct ≤ 31, earn 3 bonus points	45 ≤ number correct ≤ 47, earn 8 bonus points
32 ≤ number correct ≤ 34, earn 4 bonus points	48 ≤ number correct ≤ 49, earn 9 bonus points
35 ≤ number correct ≤ 39, earn 5 bonus points	50 ≤ number correct ≤ 60, earn 10 bonus points

**Grade Disputes:** If you feel that a question was graded incorrectly on a Quiz, Lab, or Test, then you **MUST** contact Dr. Schraeder within 2 weeks of the release of the score (when it is posted on eCampus). Any dispute brought up after 2 weeks will **NOT** be considered. Check your grades often to make sure that they are accurate.

**HELP:** On an average, you should expect to spend six hours per week outside of class and lab time working on this class. If you are spending more, then you may need to seek help! There are several excellent sources for such help. First, seek help from your classmates. Often they can explain the problem clearly since they have been working on it. Second, seek assistance from your facilitator. A few well asked questions may clarify the problem. West Virginia University is committed to social justice. I concur with that commitment and expect to foster a nurturing learning environment based upon open communication, mutual respect, and non-discrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with [Accessibility Services](#) (293-6700).