

SOUTHEASTERN LOUISIANA UNIVERSITY
DEPARTMENT OF MATHEMATICS
MATH 162 SYLLABUS
Effective Summer 2022

COURSE TITLE: Plane Trigonometry

CREDIT: 3 semester hours

TEXT: *Trigonometry*, 12th Edition by Lial, Hornsby, and Schneider

PUBLISHER: Pearson Education

PREREQUISITE: MATH 161.

CATALOGUE DESCRIPTION: The study of trigonometric functions. Topics include the topics of sine and cosine, the trigonometric functions and their graphs, inverse trigonometric functions, trigonometric identities and equations, complex numbers, graphs of parametric equations, and graphs in polar coordinates. Trigonometry and trigonometric functions will be used to model and solve real world applications.

SPECIFIC COURSE CONTENT – the section numbers in the textbook covering these topics are given after the topic:

Angle measure (1.1)	Inverse trigonometric functions (6.1)
Definitions of six trigonometric functions (1.3)	Identities (1.4, 5.1, 5.2)
Right triangles (2.1)	Sum and difference formulas (5.3, 5.4)
Trigonometric functions of acute angles (2.1)	Double and half-angle formulas (5.5, 5.6)
Trigonometric functions of general angles (2.2)	Trigonometric equations (6.2, 6.3)
Finding trigonometric functions using a calculator (2.3)	Law of Sines (7.1)
Right triangle applications (2.4, 2.5)	Law of Cosines (7.3)
Radian Measure of an angle (3.1)	Areas of Triangles (7.1, 7.3)
Arc Length and area of a circular sector (3.2)	Vectors (7.4, 7.5)
Unit circle (3.3)	Polar Coordinates (8.5)
Graphs of trigonometric functions (4.1, 4.2, 4.3)	Polar equations and graphs (8.5)
Phase shift (4.2)	

NOTE: All sections of Math 162 will have a minimum of 3 regular examinations and a final examination, in addition to quizzes and/or homework.

EMAIL REQUIREMENT: According to Southeastern Louisiana University policy, your Southeastern email address is the only acceptable email address that I may use in communicating with you.

OFFICE OF DISABILITY SERVICES: If you are a qualified student with a disability seeking accommodations under the Americans with Disabilities Act, you are required to self-identify with the Office of Disability Services, Student Union, Room 1304. No accommodations will be granted without documentation from the Office of Disability Services. The deadline for registering or making accommodation changes is two weeks prior to the start of the Final Exam period. Any requests received after the deadline will generally be considered for the following semester.

ACADEMIC INTEGRITY: Southeastern Louisiana University expects students to maintain the highest standards of academic integrity at all times. Behavior that violates these standards is not acceptable. In this class, examples of *cheating* include the use of unauthorized material or communication with fellow students during a quiz or exam, attempting to benefit from the work of another student, and similar behavior that defeats the intent of a quiz or exam. I consider cheating as a very serious offense, and it will be grounds for disciplinary action as outlined in the current [General Catalogue](#).

FAMILY MEMBERS: According to Southeastern Louisiana University policy, students cannot bring children to any classroom for day care or baby-sitting.

VICTIMS OF SEXUAL MISCONDUCT: If you are the victim of a sexually oriented crime, please be aware that the University Policy regarding Victims of Sexual Misconduct is located online at

www.southeastern.edu/resources/policies/assets/sexual_misconduct.pdf

as well as at page 68 in the University Student Handbook at

http://www.southeastern.edu/admin/stu_affairs/handbook/index.html

The policy includes definitions of the various sexually oriented offenses prohibited by Southeastern as well as the reporting options for victims and the process of investigation and disciplinary proceedings of the university. For more information log onto

http://www.southeastern.edu/admin/police/victims_soc/index.html