

**SOUTHEASTERN LOUISIANA UNIVERSITY**  
**DEPARTMENT OF MATHEMATICS**  
**MATH 175 COURSE INFORMATION**  
**Effective January 2019**

**COURSE TITLE:** Pre-calculus with Trigonometry

**CREDIT:** 5 semester hours

**TEXT:** *Precalculus*, 10<sup>th</sup> Edition by Larson

**PUBLISHER:** Cengage

**PREREQUISITE:** Math 151 or 161 or ACT score in mathematics of 25 or higher.

**COURSE DESCRIPTION:** Topics will include function properties and graphs; inverse functions; linear, quadratic, polynomial, rational, exponential and logarithmic functions with applications; trigonometric functions and graphs; inverse trigonometric functions; fundamental identities and angle formulas; solving equations; and triangles with applications

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

Polynomials, factoring, and rational expressions (A.3, A.4)	Nonlinear Inequalities (2.7)
Solving Equations (A.5)	Exponential Functions (3.1)
Graphs of Equations (1.1, 1.2)	Logarithmic Functions (3.2)
Linear Equations in Two Variables (1.3)	Properties of Logarithms (3.3)
Functions (1.4)	Exponential and Logarithmic Equations and Models (3.4, 3.5)
Graphs of Functions (1.5)	Radian and Degree Measure, Trigonometric Functions, and Right Triangle Trigonometry (4.1, 4.2, 4.3)
Library of Functions (1.6)	Trigonometric Functions of Any Angle (4.4)
Transformations of Functions (1.7)	Graphs of Sine and Cosine Functions (4.5)
Composite Functions (1.8)	Graphs of Other Trigonometric Functions (4.6)
Inverse Functions (1.9)	Inverse Trigonometric Functions (4.7)
Quadratic Functions (2.1)	Trigonometric Identities (5.1, 5.2)
Polynomial Functions of Higher Degree (2.2)	Trigonometric Equations (5.3)
Polynomial Division (2.3, 2.5)	Sum and Difference Formulas (5.4)
Rational Functions (2.6)	Multiple-angle and Product-to-Sum Formulas (5.5)

**NOTE:** All sections of Math 175 will have 4–5 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](http://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](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](http://www.southeastern.edu/admin/police/victims_soc/index.html)