

**SOUTHEASTERN LOUISIANA UNIVERSITY**  
**DEPARTMENT OF MATHEMATICS**  
**MATH 163 SYLLABUS**  
**Effective Summer 2022**

**COURSE TITLE:** Applied Calculus

**CREDIT:** 3 semester hours

**TEXT:** *Calculus for the Life Sciences*, 2<sup>nd</sup> Edition, Greenwell/Ritche/Lial

**PUBLISHER:** Pearson

**PREREQUISITE:** MATH 161.

**COURSE DESCRIPTION:** An introduction to differential and integral calculus designed for non-STEM majors. Topics will include limits, the derivative, applications of the derivative, antiderivatives, and the definite integral. Polynomial, rational, radical, exponential, and logarithmic functions will be studied.

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

Polynomial and Rational Functions (1.5)	Derivative of Logarithmic Functions (4.5)
Exponential Functions (2.1)	Increasing and Decreasing (5.1)
Logarithmic Functions (2.2)	Relative Extrema (5.2)
Applications: Growth and Decay (2.3)	Concavity (5.3)
Limits (3.1)	Absolute Extrema (6.1)
Continuity (3.2)	Implicit Differentiation (6.3)
Rates of Change (3.3)	Antiderivatives (7.1)
Definition of Derivative, equation of tangent line, graph of a derivative (3.4)	Substitution (7.2)
Computing derivatives (4.1)	Area and Definite Integral (7.3)
Derivative of Product and Quotient (4.2)	Fundamental Theorem of Calculus (7.4)
Chain Rule (4.3)	Area between Two Curves (7.5)
Derivative of Exponential Functions (4.4)	

**NOTE:** All sections of Math 163 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](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)