

# MATH 165 CALCULUS I

Nicholls State University, Summer 2006

**Instructor:** Dr. Brian Heck. My office is 106-E Peltier Hall and my office phone number is 448-4383. I will be available in my office before each class (starting around 8:30 a.m.) as well as from 10:30-12:00. Please come by if you have any questions. Also, my email is [brian.heck@nicholls.edu](mailto:brian.heck@nicholls.edu).

**Prerequisite:** A grade of a 'C' or better in Math 102/108 or advanced placement.

**Text:** *Calculus* (8<sup>th</sup> ed.) by Varberg, Purcell, and Rigdon (Prentice Hall)

**Course Description (catalog):** Limits, derivatives and integrals of algebraic functions, applications of derivatives and integrals.

**Goals of the course:** A student who completes this course will be able to:

- evaluate limits including limits at infinity
- find the slope of the tangent line to a function
- find the derivative and/or antiderivative of a given function
- interpret the meaning of a derivative
- graph a function using derivatives
- find the maximum and/or minimum value of a function
- solve application problems using derivatives and antiderivatives
- find the area under a curve or the area between two curves
- find the volume of a solid of revolution
- find function values, derivatives, and antiderivatives of exponential and logarithmic functions

**Grading Policy:** We will have three 100-point tests throughout the semester and a 200-point comprehensive final exam. If you have an 'A' average prior to the final you are exempt from the final. Your semester grade will be determined by dividing your total points by 500 (300 if you skip the final) and assigning a letter based on the usual 10% scale (A=90-100%, B=80-89%, C=70-79%, etc...)

**Attendance:** I will not include attendance as part of your course grade. I am not your mother or your parole officer, and this is not high school. I do, however, expect you to attend everyday. You are responsible for any and all material covered in class. If you miss any class, it is up to you to meet with me (if necessary) and catch up on the material you missed.

**Class Schedule:** Below is a list of the sections we will cover this semester as well as the approximate dates of our exams. This list is tentative. If changes are made, you will be informed in class.

Chapter 2: Sections 4-9  
Chapter 3: Sections 1-4  
**Test #1 (Wed, June 21)**

Chapter 3: Section 5-10  
Chapter 4: Sections 1-7  
**Test #2 (Fri, July 7)**

Chapter 5: Sections 1-8  
Chapter 6: Sections 1-4  
Chapter 7: Sections 1-5  
**Test #3 (Fri, July 21)**

**Final Exam (Tue, July 25)**

**Expectations:** You are at a university, not a trade school. The goal is intellectual development and knowledge for knowledge sake. If you want to only learn what you need to get a job, go somewhere else.

Do not ask me why you need to learn the material we are currently learning. The answers are (1) because it will be on the final (2) because this is what algebra is, and any course called College Algebra should cover this, and (3) because I say so. If during the semester you get the urge to ask me why we are learning something, re-read this paragraph. If you are still unsure, see (3) above.

It is assumed that you are attending this university because you have a desire for higher learning. It is therefore expected that you will pay attention, be respectful of your instructor and fellow students, and follow the Code of Student Conduct. Instances of academic dishonesty will be dealt with severely. If you are caught cheating, you will fail this course. Similarly, if you are a disruptive presence in the classroom, you will be dropped from the class.

**Disability:** If you have a documented disability that requires assistance, you will need to register with the Office of Disability Services for coordination of your academic accommodations. The Office of Disability Services is located in Peltier Hall, Room 100-A. The phone number is (985) 448-4430 (TDD 449-7002).