

MATH 165 - CALCULUS I

Nicholls State University, Fall 2009

Instructor: Dr. Brian Heck
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My office hours are 9:00-12:00 M-TH. Please contact me (phone, email, or in person) during these times if you have any questions. If you need assistance at a different time, let me know and we'll work something out.

Prerequisite: Math 102 or 108 (with a C or better) or advanced placement.

Course Materials: Our required text is *Calculus* (9th ed.) by Varberg, Purcell, and Rigdon (Prentice Hall). You will also need to have (at least) a scientific calculator.

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

Course Objectives: Several years ago, a group of the brightest minds of our time got together to discuss the greatest achievements of mankind. Their choice for the number one achievement was not the wheel, relativity, or computers. It was the calculus. My goals this semester are to teach you enough calculus to prepare you for Calculus II (or whatever course you will take next) and also to help you understand why this subject is so great. At the conclusion of the semester, a student should understand limits, continuity, transcendental functions, derivatives, antiderivatives and definite integrals. For even more specificity, a student should be able to:

- evaluate limits including limits at infinity
- find the slope of the tangent line to a function
- find derivatives, antiderivatives, and/or partial derivatives of functions of one or more variables
- 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 of a given function
- calculate volumes of solids of revolution

Grading Structure: We will have four exams and a comprehensive final. The four exams will be worth 100 points each and the final will be worth 200 points. If your average on the five exams is 90% or better, you will be exempt from the final (although you may elect to take it anyway). If you know in advance of a scheduled test that you will be absent due to a school-sponsored function, or a scheduled appointment, then you

may take a make-up test provided arrangements are made sufficiently in advance with the instructor and documentation of the absence is produced. In order to be eligible to take a make-up for other reasons, such as medical emergencies and illnesses, the student must supply for verification purposes *appropriate documentation and relevant phone numbers* upon the first day returning to class. The instructor will judge what is or is not appropriate.

At the conclusion of the semester, you will be assigned a letter grade based on the usual 10% scale (A: 90-100%, B: 80-89%, etc). The schedule for our exams is as follows:

Chapter 1: Sections 1-6
Chapter 2: Sections 1-2
Exam #1...Thursday, September 10

Chapter 2: Sections 3-8
Chapter 3: Section 1-4
Exam #2...Monday, October 5

Chapter 3: Sections 5-8
Chapter 4: Sections 1-5
Exam #3...Thursday, October 29

Chapter 5: Sections 1-3
Chapter 6: Sections 1-5
Chapter 12: Sections 1-2
Exam #4...Thursday, November 19

*****Final Exam...TBA*****

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 class everyday. You are responsible for all material covered in class.

Instructor Expectations: Come to class prepared to learn. In order to understand what we are doing in class, it will be necessary for you to do problems outside of class, and it would be beneficial to you to read the text prior to our covering the material in class. I also expect you to take responsibility for your achievement (or lack thereof) in this class. I am more than happy to help you succeed, but it will take effort on your part as well. I firmly believe that if you (1) come to class and pay attention, (2) do your homework, and (3) ask questions when you get confused, you will do very well in this course. 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.

Important Dates

'W' Day – Wednesday, October 28, 2009

Academic Grievances: The proper procedure for filing grade appeals or grievances related to academic matters is listed in Section 5 of the *Code of Student Conduct* and at the following link: www.nicholls.edu/documents/student_life/code_of_conduct.pdf.

Continued Learning following an Extreme Emergency: In order to make continued learning possible following an extreme emergency

students are responsible for:

- reading regular emergency notifications on the NSU website;
- knowing how to use and access Blackboard (or university designated electronic delivery system);
- being familiar with emergency guidelines;
- evacuating textbooks and other course materials;
- knowing their Blackboard (or designated system) student login and password;
- contacting faculty regarding their intentions for completing the course.

faculty are responsible for:

- their development in the use of the Blackboard (or designated) software;
- having a plan for continuing their courses using only Blackboard and email;
- continuing their course in whatever way suits the completion of the course best, and being creative in the continuation of these courses;
- making adjustments or compensations to a student's progress in special programs with labs, clinical sequences or the like only in the immediate semester following the emergency.

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).