

# MATH 101

## COLLEGE ALGEBRA

Nicholls State University, Summer Intersession 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 after class. 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 003 or advance placement.

**Text:** *A Graphical Approach to College Algebra* (3<sup>rd</sup> ed.) by Hornsby, Lial, and Rockswold (Addison-Wesley)

**Calculator:** You will need a graphing calculator. I will use a TI-83 Plus exclusively in class, but any similar model will be fine.

**Course Description (catalog):** Linear equations and inequalities, linear applications, systems of linear equations, quadratic equations and inequalities, absolute value equations and inequalities, radical equations, functions and graphs, polynomial and exponential and logarithmic functions.

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

- Solve equations of many types using a variety of methods including, but not limited to, the graphing calculator.
- Solve inequalities and express answers in several notations.
- Determine whether a relation is a function or not.
- Evaluate a function and find its domain.
- Add, subtract, multiply, divide, and compose functions.
- Graph polynomial functions analytically and using the graphing calculator.
- Interpret the data given in the graph of a function.
- Evaluate logarithmic expressions.
- Convert a word problem into a mathematical problem and solve it.
- Explain the reasoning behind various methods of problem solving.

**Grading Policy:** We will have two exams, a midterm and a final. Each test will count for 150 points. We will also have many unannounced quizzes. Your quizzes will account for 100 points. Your semester grade will be figured by dividing your total points earned by 400 and assigning a letter based on the usual 10-point 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.

### **INTERSESSION WARNING !!**

**Every class meeting is equivalent to a week of a normal semester. It is therefore very important that you do not miss class. We will cover a lot of material every day.**

**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).

**Closing Remarks:** I am here to help you learn this material, and I will do all that I can to achieve that goal. However, whether or not you succeed in this course is entirely up to you. If you don't do the work required (attend class, pay attention, and do the homework), it is unlikely that you'll do well. Even if you have always struggled with mathematics, this is a new semester. Give yourself every opportunity to succeed, and chances are you'll do fine.

## Math 101 – College Algebra Summer Intersession 2006 Class Schedule

Below I have listed the homework assignments for each day, the sections of our text that may serve as reference, and the tentative dates of our exams. If time does not allow, some topics may be skipped. All homework assignments are **odd problems only** (unless otherwise noted).

<b>Date</b>	<b>Section(s)</b>	<b>Homework</b>
Wed 5-17-06	1.1, 1.2, 1.3	pg. 8: 29-75; pg. 20: 1-53; pg. 33: 1-57
Thu 5-18-06	1.4, 1.5	pg. 46: 1-39; pg. 63: 1-11, 19-75
Fri 5-19-06	1.6	pg. 73: 1-53
Mon 5-22-06	2.1, 2.4, 2.5	pg. 100: 11-47; pg. 133: 25-45; pg. 145: 5-8 <i>all</i>
Tue 5-23-06	2.6, 5.1	pg. 156: 7-41; pg. 349: 15-71
Wed 5-24-06	MT Review	-----
<b>Thu 5-25-06</b>	<b>***Mid Term Exam...10:00 a.m.***</b>	
Fri 5-26-06	3.1, 3.2	pg. 178: 1-47; pg. 189: 15-45
Mon 5-29-06	3.3, 3.4	pg. 205: 5-63; pg. 212: 1-23
Tue 5-30-06	3.5, 3.6	pg. 228: 17-35, 41-71; pg. 240: 1-39
Wed 5-31-06	5.2, 5.3	pg. 363: 35, 43-59; pg. 374: 1-53, 68-95
Thu 6-01-06	5.4, 5.5	pg. 385: 45-55; pg. 393: 5-29
Fri 6-02-06	5.6	pg. 404: 1-53
Mon 6-05-06	Final Review	-----
<b>Tue 6-06-06</b>	<b>***Final Exam...10:00 a.m.***</b>	