

Math 101 – 4T
College Algebra
Spring 2003

Instructor: Dr. Brian Heck

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Office Hours

M, F 8:30-3:00

Prerequisite: Math 003 (with a *C* or better) or satisfactory score on placement test.

Text: College Algebra (2nd ed.) by Blitzer (Prentice Hall)

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.

Course Description (Instructor): That about sums it up. The main goal of this course is learning to understand functions. Most of the topics we will cover this semester (if not all of them) will be covered to help us with functions, even if at the time, this use is not mentioned. Applications (or word problems) will be focused on often, since in the real world, everything is an application.

Course Objectives: To learn as much algebra as humanly possible in one semester. Ok, want more detail? A student who successfully completes this course will be able to:

- Solve linear, quadratic, radical, exponential, and logarithmic equations using a variety of methods
- Solve systems of linear equations
- Determine whether a relation is a function or not
- Evaluate functions
- Graph linear, quadratic, polynomial, exponential and logarithmic functions
- Graph circles
- Combine functions using addition, subtraction, multiplication, division, and composition
- Graph transformations of functions
- Find equations of functions with prescribed properties
- Evaluate logarithmic expressions
- Use algebraic techniques to convert word problems into mathematics and then solve them
- Explain the reasoning behind various methods of problem solving

Instructor Expectations: Come to class prepared (with text and fully aware). In order to understand what we are doing in class, it will be necessary for you to read sections and do problems outside of class. I will expect you to understand Chapter P (“Prerequisites”) in our text. If any of this material is either unfamiliar to you or difficult to you, I expect you to come see me so we can work on it.

Grading Policy:

Tests (4)	75%
Final Exam	25%

We will use the standard 10-point scale. A=90-100%, B=80-89%, 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.

Tentative Class Schedule: I will assume knowledge of Chapter P. You should look this chapter over, and if you get questions, please come see me. Below is a list of the sections we will attempt to cover this semester. If time allows, more sections may be added. If time does not allow, some sections listed may be skipped.

Chapter 1: Sections 1-6
Chapter 5: Section 1
****Test 1****

Chapter 2: Sections 1-6
****Test 2****

Chapter 3: Sections 1-4
****Test 3****

Chapter 4: Sections 1-5
****Test 4****

*****Final Exam*****

Closing Remarks:

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.

Important Date:

Final Date to Drop Courses With a *W* – **Friday, April 4, 2003**