

Math 1314 College Algebra Brazosport College – Fall 2015
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Office hours: MW 11-noon, 2-4; TTH 10-11, 2:30-5 and by appointment
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Course Outcomes

Upon completion of the course, the student will be able to:

1. Find solution sets for compound open sentences.
2. Perform arithmetic operations with complex numbers.
3. Find all complex solutions to a polynomial equation.
4. Solve equations containing radicals.
5. Solve non-linear inequalities.
6. State the domain of a function in interval notation.
7. Graph a function using transformations.
8. Find the composition of two functions.
9. Verify if two given functions are inverses.
10. Classify a function as one-to-one and find the inverse of that function.
11. Find the slope, intercepts, and graph of a linear function.
12. Find the end behavior, intercepts and graph of a polynomial function.
13. Find the domain and graph of an exponential function.
14. Evaluate a log function and state the domain of a log function.
15. Use log properties to simplify an expression.
16. Solve exponential equations.
17. Solve log equations.
18. Apply exponential and log functions to real world situations.

Prerequisites

Completion (with a passing grade!) of 0408 or high school Algebra II, or the required placement test scores, or the consent of the instructor and department head.

Textbook

College Algebra

Carl Stitz, Lakeland Community College

Jeff Zeager, Lorain County Community College

This is an open source College Algebra book. You can obtain it by going to:

<http://stitz-zeager.com/>

That will take you to a page where you can download the pdf file of the book (for free!).

You need to download both of the following PDF files:

“Chapter 0, corrected August 2013”

“College Algebra 3rd Edition, corrected July 2013”.

These are the first and third links on the page. If you right-click the links you can save the PDF files to your computer or to a flash drive. If you have trouble come see me, and I'll copy the files to a flash drive for you (bring flash drive with you).

You can order a printed book from that page as well, but we will not use the whole book in this class, so it's likely that you can print the book here for less than it would cost to order it from the web site.

You can print the book off a chapter at a time as we use it, or you can just keep it on a computer or tablet and read it and do the problems from there. If you want to bring a tablet or laptop to class so you can access the book in class, please see me first.

I'm also going to print off some additional problems, since I think some of the practice problems in the book are not varied enough. I'll hand those out in class as we need them. If you'd like electronic copies please email me for them, and I'll send them to you.

Calculator

This is a calculator-required class. The TI-83 and TI-84 Graphing Calculator are recommended, and are what I will demonstrate the keystrokes in class with. The TI -86 is fine, but will differ a bit in the keystrokes. The TI-85 or TI-82 are not recommended, unless you are already very familiar with their use. You may not use a TI-89, 92 or any model that allows symbolic manipulation or has a built in CAS or equivalent system during a test. I may require you to purge the memory of your calculator before a test, so if you have a program you don't want to lose you should back it up off the calculator. If you want to use a Casio, HP, or other oddball calculator in this class, for example because it is required in future engineering classes at another school, please check with me first, and please bring the manual for your calculator with you when you do. I don't want to surprise you on the day of a test by telling you that you can't use the calculator you're familiar with.

Grading

The grade ranges are:

A: 90 -100%
B: 80 – 89%
C: 70 – 79%
D: 60 - 69%
F: Below 60%

My grading method is:

4 tests worth 15% each
Final exam worth 20%
A number of quizzes, which together are worth 20%

Lab Requirements

None

Students with Disabilities

Brazosport College is committed to providing equal education opportunities to every student. BC offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact Phil Robertson, Special Populations Counselor, 979-230-3236 for further information.

Academic Honesty

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the Brazosport College Student Guide for more information, this is

available online at <http://www.brazosport.edu>, click on the link found on the left side of the homepage.

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and may, at a minimum, result in an F in this course. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

Attendance and Withdrawal

Attendance is taken each class day but is not part of your grade. This is not a developmental math class, I am not required to drop you if you stop coming to class, and very likely will not drop you if you do so; if you stop coming and fail to drop it is therefore very likely you will make an F. If you know you will be missing class you can let me know by either phone or e-mail, and I will be happy to keep you up to date on any assignment or date changes.

The last day to drop this semester is October 30.

Please come to class on time. Walking in late every day is rude. Also, please turn off your cell phone before class, or, if you need to be accessible, switch to vibrate or some other method which won't disturb us all when it rings, and leave the class to answer the phone.

Don't text in class, don't listen to an mp3 player in class, don't play with any sort of electronic entertainment in class.

Come to class. It's very hard to pass a class like this if you don't attend. Really.

Testing

As stated above, we will have four tests and a final exam. I anticipate allowing you to have one page of notes to refer to during each test, though I reserve the right to adjust this policy, and you should of course have your calculator; the tests are written with the assumption that they will be taken with a graphing calculator. You can try to get by without one, but I will not adjust the test to accommodate you not having a calculator, or you having forgotten it that day. I will be glad to help you with using the calculator during the class, but I cannot help you with anything during the test, including how to enter a problem into the calculator or how to interpret the result. Use of the calculator is part of what I'm testing.

We will have quizzes on some days we don't have tests. I often allow you to work with another student on a quiz, or to refer to your book or to other resources. Please don't confuse my quiz standards with my testing standards.

You may do test corrections on **one** test during the semester. The rules for test corrections are:

- The corrections are due one week after you get the test back. I will not take them late.
- Corrections may not be done on the test, they must be on separate pages stapled to the back of the test
- The standard for grading the corrections is **higher** than the standard for grading the tests. You have longer to do the corrections, and have help in the Math Lab and from other sources. To get credit the corrections must be **perfect**.
- I reserve the right to ask you to come in and explain part or all of your corrections to me after you hand them in. You may get help with the corrections, but you have to work the

problem yourself, and you have to understand the answer. Your goal should be to convince me that if you took the test now you would make a 100.

- If you do the corrections perfectly I will give you half the points you missed on the test back. So, if you made an 70 on the test, you missed 30 points. If your test corrections are perfect, you would get 15 of those back. Now you would have an 85 on the test.
- If your test corrections are, for example, 70% correct, I will give you 70% of half the points you missed back.

Makeup Policy

If you miss a test and do not have a verifiable excuse, you get a zero. With a verifiable excuse, I will either write you a make up test or, in some very unusual cases, allow your final grade to count as the missing test grade. Make up tests are usually somewhat harder than the original test was, since I used up all the “obvious” questions on the original test, and the average grade on make up tests is lower than the average grade on tests taken in class. It’s to your advantage to take the test with the rest of the class.

I do not allow you to make up quizzes, but I do drop your lowest quiz grade. You should expect to have about ten quiz grades by the end of the semester.

Honors

It is possible to take this class for honors credit. Briefly, that entails some extra work on your part, and gets you an “Honors” designation on your transcript, and a chance to stand out some if you’re trying to get into a competitive program or win a scholarship.

I don’t consider honors projects for the first two weeks. Get settled into your schedule and then we’ll talk about it the second or third week of class. Honors students meet with me once a week, and should expect two to three hours extra work per week outside of class. You must make at least a B in the class to get honors credit. You can drop your honors project at any time if it’s too much to keep up with, there’s no penalty for that.

Other Student Services Information

Information about the Library is available at www.brazosport.edu/~lib/Information.htm or by calling 979-230-3310.

Information about study skills and tutoring for math, reading, writing, biology, chemistry, and other subjects is available in the Learning Assistance Center (LAC), see www.brazosport.edu/~lac or call 979-230-3253.

To contact the Math Department call 230-3225.

The Student Services provides assistance in the following:

Counseling and Advising	979-230-3040
Financial Aid	979-230-3294
Student Activities	979-230-3355

To reach the Information Technology Department for computer, email, or other technical assistance call the Helpdesk at 979-230-3266.