Brazosport College
Syllabus for Math 1314 College Algebra

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Course Description and Prerequisites

Complex numbers; solution of equations and inequalities; graphing techniques; functions including polynomial, rational, exponential, and logarithmic; systems of equations; theory of equations; applications of algebra.

Course Goals

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

1. Perform arithmetic operations with complex numbers.
2. Find all complex solutions to a polynomial equation.
3. Solve equations containing radicals.
4. Solve non-linear inequalities.
5. State the domain of a function in interval notation.
6. Graph a function using transformations.
7. Find the composition of two functions.
8. Find the inverse of a one-to-one function.
9. Find the slope, intercepts, and graph of a linear function.
10. Find the intercepts of the graph of a polynomial function.
11. Find the domain and graph of an exponential function.
12. Evaluate a log function.
13. Use log properties to simplify an expression.
14. Solve exponential equations.
15. Solve log equations.
16. Solve exponential applications.

Textbook and Course Materials

In lieu of a textbook you need to purchase MYMATHLAB. This will provide you with an online version of the textbook, College Algebra by Michael Sullivan, Pearson 8th Edition. For this course, a graphing calculator is required. A TI-83, 84 or 86 will be fine. Other models may also be used provided they have the functions that we will be using in class. Check with me if you have any questions. There will be times when no calculator is allowed. You may not use a TI 89 or 92 or any calculator with a built in CAS system. Since the homework and quizzes will be done online, you must have access to high speed internet.

Students with disabilities

Brazosport College is committed to providing equal education opportunities to every student. Brazosport College 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 BC 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. If you are caught in an incident involving academic dishonesty, you will receive a zero for the assignment/quiz or test.

Course Requirements and Grading Policy

Homework Assignments:

You will have online homework through MyMathLab that will be prerequisites to the online quizzes and will contribute 10% to your grade. The online homework problems are parallel to the textbook. However, there are problems from the textbook that are not available for online homework, so you may be required to access these problems through the online textbook (multimedia textbook). If you need help with the assignment, come see me during office hours email me at cristina.bacica@brazosport.edu , and/or take advantage of the free tutoring provided in the LAC.

"One learns by doing; for though you think you know it, you have no certainty until you try."-
-SOPHOCLES

Quizzes:

Quizzes will be taken online through MyMathLab. You will have online homework that must be completed as a pre-requisite to take the online quizzes. I will drop your two lowest quiz grades at the end of the semester. It is possible that you will have some regular paper and pencil quizzes in class or for take home when the online component is insufficient for checking mastery of the objectives. It is also possible that there may be some EC quizzes when I have time and want to check your understanding. Your quiz grades will make up 15% of your average.

Online Due Dates:

Homework will be assigned as soon as a topic is covered in class and a due date will be assigned to that homework. A quiz will usually be assigned that also covers the same material. The quiz will have a due date too and the homework is a pre-requisite to take the quiz. All quiz due dates are firm. However, homework remains accessible throughout the semester. This means that you can go back and revisit homework assignments and eventually raise your grade to 100 if you choose. There is one exception to this. Some homework will not have a quiz associated with it and it will be called "Graded Homework". The deadline to complete this type of assignment is

firm. You will not be able to access it after the due date.

Grades will be assigned as follows:

A=90-100
B=80-89
C=70-79
D=60-69
F= below 60

Attendance and Withdrawal Policies:

Regular class attendance and punctuality is expected. More than 1 week of absences is considered excessive. I will take attendance but I will not drop you for not coming to class. If you miss a class, it is your responsibility to find out what you missed. You may also want to email me or a classmate through Course Compass/*MyMathLab*. The calendar portion of *MyMathLab* will help you keep up with assignments and quizzes. You are responsible for keeping up with the online quizzes. If you must wish to withdraw from the class, you must do so by the withdrawal deadline. The responsibility for this paperwork is yours.

Student Responsibilities

Check your MyMATHLAB calendar and home page often. Make sure you know when homework and quizzes have been posted and when they are due. Also check your email daily in order to receive announcements from me. Use your text that is available online as you would a hard copy.

Students are expected to fully participate in the course. The following criteria are intended to assist you in being successful in this course.

a. understand the syllabus requirements
b. use appropriate time management skills
c. communicate with the instructor
d. complete course work on time, and
e. utilize online components as required.

In addition, I expect each of you to behave in a way that provides for the most positive learning environment for all of the students in this class. This would include making every effort to be on time to class and prepared for class. Please turn off your cell phones during class and keep them put away. If your behavior detracts from the learning environment, you will be asked to leave the classroom and conference with me before being allowed back into the class.

Schedule

You will receive a tentative schedule for this class. The topics that we will cover each week are listed according to the section number of the textbook. The assignments for homework will be made during each class session and/or online.

Important Dates: Vary by Semester

Other student Services Information

To contact the Mathematics Department, call 230-3225 and speak to Connie Davis or Jeff Detrick.

Your course online http://www.coursecompass.com

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.

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 Help Desk at 979-230-3266

Other Notes:

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Math 1314 Tentative Schedule

DATE	Topic/Text
DATE	**Topic/Text**
Homework and Quizzes will be assigned online through MyMathLab	
DATE	**Topic/Text**
	Sets and the Real Number (R1)
	The Complex Numbers (1.3)
	Linear Equations (1.1)
	Quadratic Equations (1.2-1.3)
	Other Equations (1.4)
	Linear Inequalities and Interval Notation (1.5)
TEST UNIT ONE	
	Functions (3.1)
	The Algebra of Functions (3.1)
	The Graph of a Function (3.2)
	Properties of Functions (3.3)
	Library of functions (3.4)
	Transformation of Functions (3.5)
TEST UNIT TWO	
	Linear Functions(4.1 (2.3))
	Quadratic Functions (4.2)
	Polynomial Functions (5.1)
	Quadratic and Non-Linear Inequalities (4.5,5.4)
	Composition of Functions (6.1)
TEST UNIT THREE	
	One-to-One Functions and Inverses (6.2)
	Exponential Functions (Review of exponents) (6.3)
	Logarithmic Functions (6.4)
	Properties of Logarithms (6.5)
	Exponential and Logarithmic Equations (6.6)
	Applications of Exponential and Logarithmic Functions (6.7-8)
TEST UNIT FOUR	
	Other Topics Time permitting: Systems of Equations