

Math 1302.100 – College Algebra
MWF 4:00-4:50
Fall 2011 Syllabus

Disclaimer:

This syllabus is current and accurate as of its posting date, but will not be updated. For the most complete and up-to-date course information, contact the instructor.

Instructor Information:

Instructor: Mrs. Cynthia Bishop

Office: MCS 220B

Office Phone: (325) 942 – 2100 ext. 259

Fax: (325) 942 – 2503

e-mail: Cynthia.Bishop@angelo.edu

webpage: www.angelo.edu/faculty/cbishop/

Office Hours:

Monday-Thursday: 8:30am - 9:30am

Monday/Wednesday/Friday: 2:00pm - 4:00pm

The ASU Math Lab:

There is a free math lab where you can get help with your homework and reviews. It meets in C302, which is on the 3rd floor of the library. Here's the schedule:

Monday-Thursday: 9:00 – 4:00, 6:00 – 9:00

Friday: 9:00 – 4:00

Sunday: 5:00 – 8:00

There is also an online option for this lab. During the hours listed above, you can go to BlackBoard and click on the SmartOnline tab.

Textbook:

The course textbook is *College Algebra*, 2nd edition, Ratti & McWaters. Homework will be done using an online program called MyLab. You have several options for purchasing these materials:

- 1) At the ASU Bookstore, the textbook and the MyLab student access code are shrink-wrapped together and sold as one package. The textbook is in loose leaf binder form and cannot be resold to the bookstore. \$127.25
- 2) At the ASU Bookstore, you may purchase just the student access code. When you register for MyLab, you automatically get access to the ebook version of the textbook, so having the paper version is not required. \$93.75
- 3) You may start the registration process and purchase the student access code (and ebook) online. \$80.00

The prices listed above were correct as of August 15, 2011.

Here's the site that explains the registration process: <http://pearsonmylabandmastering.com/>
On the right side of the screen, click on the register link for students and then follow instructions.
You will need; a valid email address

the course ID: bishop12663

your student access code (or your credit card info)

I recommend that you keep a homework notebook where you do all the homework in a paper-and-pencil format, showing all the steps. When you're doing the homework, you are practicing the skills that you'll have to show come test time. MyLab has a help button and redo options that are wonderful for homework, but will not be available during the tests.

Daily Work:

Daily work will consist of homework problems completed on <http://pearsonmylabandmastering.com/> using the program, MyLab. It is your responsibility to check MyLab for the assignments between every class. Expect homework to be assigned after every class period by the end of the workday.

Quizzes:

Expect frequent homework quizzes in class. Quizzes may be given at the beginning or end of class. If I feel that we are rushed, the quiz may be a take-home grade. You must be present in class the day it is given to receive a grade on any quiz. The quizzes will assess your knowledge of the material studied in the homework exercises. These quizzes will also serve as a review for each exam. You will have access to the answer keys after quizzes are returned. A running total will be kept on quizzes (# correct over # counted). Your quiz score can be computed by that division X 100. Any 100+ grade will be averaged as 100.

Tests:

4 tests (Sept 16, Oct 10, Oct 28, and Nov 18)

1 comprehensive final exam (Mon. Dec 5th, from 6:00pm– 8:00pm)

Calculators will not be allowed on tests. All work must be shown on tests.

Grading:

Homework average.....10% of the semester average
Quiz average..... 10% of the semester average
Each test.....15% of the semester average
The final exam.....20% of the semester average

Your final exam score may replace your lowest exam, if it is to your benefit.

I use the standard: 100 – 90 A, 89 – 80 B, 79 – 70 C, 69 – 60 D, below 60 F.

Attendance:

Due to its importance, attendance will be kept. No points will be deducted for absences; however, absences will necessarily affect your grade due to material, quizzes, and/or exams missed. You may choose to make up a class by attending the other section unless this gets to be a problem. (Section 080 meets in MCS #214 MWF at 1:00 pm and Section 110 meets in MCS #110 MWF at 4:00 pm.)

Make-up Work:

Since an absence may be unavoidable, quizzes often contain bonus problems. This is the only provision for a missed quiz. Obtain new assignments by checking MyLab. Exams may be taken in advance with instructor approval or may be taken immediately after an absence for illness with a note from the doctor/clinic provided that the exams have not been returned to the rest of the class. There will be no retests. The final cumulative final exam may replace the lowest exam grade.

Absence for Religious Holy Day:

A student who intends to observe a religious holy day should make that intention known in writing to the instructor two weeks prior to the absence. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code 11.20. A student absent from classes for the observance of a religious holy day shall be allowed to complete work scheduled for that day prior to the absence.

Strategy:

Between class periods attempt enough related problems to be able to quickly work similar problems on a quiz. Just doing the homework on MyLab is not enough practice to do well on quizzes. You need to review your notes and practice additional problems in your textbook without using any 'helps.' Please refrain from any avoidable distracting behavior such as being tardy, talking during the lecture, leaving during class, wearing strong perfume/cologne, using tobacco, etc. Also, attempt to stay on the instructor's 'good side' by keeping all cell phones, iPods, mp3 players, etc. out of sight and on silent (not vibrate). Note: The most important information is often at the beginning of class so tardiness will make this class harder than it has to be.

Honor Code:

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is available on the web at <http://www.angelo.edu/forms/pdf/honorcode5.pdf>.

Special Needs:

Persons with disabilities which may warrant academic accommodations must contact the Student Life Office, Room 112 University Center, in order to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request early in the semester so that appropriate arrangements can be made.

If you have any simpler needs (like needing me to speak louder, seat you in a certain location, print with a larger font, use a certain color of paper, etc.), let me know immediately.

Drop Date:

The last day to drop a class is Thursday, October 27th.

Mathematics 1302 – College Algebra

Student Learning Outcomes

- 1. The students will demonstrate factual knowledge including the mathematical notation and terminology used in this course.** Students will read, interpret, and use the vocabulary, symbolism, and basic definitions used in college algebra including the real numbers, exponents, radicals, polynomials, factoring, functions, equations, inequalities, and graphs.
- 2. The students will describe the fundamental principles including the laws and theorems arising from the concepts covered in this course.** Students will identify and apply the laws and formulas that result directly from the definitions; for example, the quadratic formula, rules of exponents, and properties of logarithms.
- 3. The students will apply course material along with techniques and procedures covered in this course to solve problems.** Students will use the facts, formulas, and the techniques learned in this course to simplify algebraic expressions, graph functions, and solve inequalities, equations and systems of equations.
- 4. The students will develop specific skills, competencies, and thought processes sufficient to support further study or work in this field or related fields.** Students will acquire a level of proficiency in the fundamental concepts and applications necessary for further study in academic areas requiring college algebra as a prerequisite, or for work in occupational fields requiring a background in algebra. These fields might include education, business, finance, marketing, computer science, physical sciences, and engineering, as well as mathematics.

Course Content

Textbook: *College Algebra*, Second Edition by Ratti and McWaters. Content consists of the following topics, listed according to the corresponding chapters in the text. (See textbook “Contents.”) Individual instructors will supplement this core material with additional topics.

P. Basic Concepts of Algebra: The Real Numbers and Their Properties; Integer Exponents and Scientific Notation; Polynomials; Factoring Polynomials; Rational Expressions; Rational Exponents and Radicals.

1. Equations and Inequalities: Linear Equations in One Variable; Applications of Linear Equations; Complex Numbers; Quadratic Equations; Solving Other Types of Equations; Linear Inequalities; Equations and Inequalities Involving Absolute Value.

2. Graphs and Functions: The Coordinate Plane; Graphs of Equations; Lines; Relations and Functions.

3. Polynomial and Rational Functions: Quadratic Functions; Polynomial and Rational Inequalities.

4. Exponential and Logarithmic Functions: Exponential Functions; The Natural Exponential Function; Logarithmic Functions; Properties of Logarithms.

5. Systems of Equations and Inequalities: Systems of Linear Equations in Two Variables; Systems of Linear Equations in Three Variables.

The subject matter schedule listed below is tentative, and subject to change and adaptation. For current, updated information about course topics, contact the instructor.

<u>Course day</u>	<u>Topic</u>
1	Real numbers and their properties
2	Real numbers and their properties
3	Real numbers and their properties/Integer exponents and scientific notation
4	Integer exponents and scientific notation/ Polynomials
5	Factoring polynomials
6	Factoring polynomials/ Rational expressions
7	Rational expressions
8	Rational expressions/ Rational exponents and radicals
9	Rational exponents and radicals
10	Rational exponents and radicals
11	Test 1
12	Rational exponents and radicals
13	Linear equations
14	Linear equations/ Applications of linear equations
15	Applications of linear equations
16	Complex numbers
17	Quadratic equations
18	Quadratic equations
19	Other types of equations
20	Other types of equations
21	Test 2
22	Linear inequalities
23	Equations and inequalities with Absolute value/ The coordinate plane
24	Graphs of equations/Lines
25	Lines/Linear systems in two variables
26	Linear systems in two variables/Linear systems in three variables
27	Linear systems in three variables/Relations and functions
28	Relations and functions
29	Test 3
30	Relations and Functions/ Quadratic functions
31	Quadratic functions/ Polynomial and rational inequalities
32	Polynomial and rational inequalities
33	Exponential functions
34	Logarithmic functions
35	Properties of logarithms
36	Logarithm worksheet
37	Review
38	Test 4
39	Matrices
40	The Natural Exponential Function
41	Matrices
42	Cumulative review exercises
43	Review for final exam
44	Final exam

