



MATH 1111/College Algebra COURSE SYLLABUS Web-enhanced / Lecture Summer Semester 2016

Semester: Summer Semester 2016

Course Title: College Algebra

Course Number: MATH 1111

Credit Hours/ Minutes: 3/2250

Class Location: Room 418 - Main Building – Vidalia Campus

Class Meets: M,W 8:00-10:15

CRN: 60173

Instructor: Dr. Bee Hart

Office Hours: TBD

Office Location: Room 324 – Main Building – Vidalia Campus

Email Address: bhart@southeasterntech.edu

Phone: 912-538-3131

Fax Number: 912-538-3156

Tutoring Hours: See office hours or by appointment

REQUIRED TEXT: Blitzer, Robert R. (2014). College Algebra (6th edition). New Jersey: Pearson Education, Inc. This textbook package includes the required MATHXL Access Code, the Student Solutions Manual, the CD Lecture Series, and the Prentice Hall Tutor Center.

A mathXL Access Code is required. The mathXL Access Code is packaged with the text from the bookstore. However, it may be purchased separately from the bookstore or can be purchased online at www.mathxl.com. Directions to register for Mathxl, including a Mathxl Course ID, will be provided on the first day of class. NOTE: Purchase a one access code if there is a chance that you will be taking pre-cal in the spring.

REQUIRED SUPPLIES & SOFTWARE: Supplies: 3-ring binder notebook, computer access, loose-leaf paper, pencils, notebook, highlighter, graphing calculator (TI-83 or 84 preferred), and graph paper. Required Software: Mathxl Access Code. Additional Requirements: Daily, MTWR, access to a reliable internet connection for use with Blackboard, Mathxl, mySTC, and college email.

Note: Although students can use their smart phones and tablets to access their online course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither BLACKBOARD nor GVTC provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to take an online course.

CALCULATOR USAGE: The use of cell phones or other internet capable devices are not allowed for calculator usage. Students are expected to bring a calculator appropriate for the course content each day of class. If calculator usage is not allowed for some topics, students are required to adhere to those expectations.

COURSE DESCRIPTION: This course emphasizes techniques of problem solving using algebraic concepts. Topics include: fundamental concepts of algebra; equations and inequalities; functions and graphs; systems of equations; optional topics including sequences, series, and probability; and analytic geometry.

MAJOR COURSE COMPETENCIES: Topics include: fundamental concepts of algebra; equations and inequalities; functions and graphs; systems of equations; optional topics including sequences, series, and probability; and analytic geometry.

PREREQUISITE(S): Appropriate Degree Level Math Placement Test Score

COURSE OUTLINE:

1. Fundamental Concepts of Algebra
2. Equations and Inequalities
3. Functions and Graphs
4. Systems of Equations
5. Optional Topics including Sequences, Series, Probability, and Analytical Geometry

GENERAL EDUCATION CORE COMPETENCIES: STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

All students pursuing a degree, a diploma, or a Technical Certificate of Credit with a General Education component will be required to pass the General Education Competency Exams prior to graduation.

ATTENDANCE GUIDELINES: Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of F and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an F in a course.

SPECIAL NEEDS: *Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact Jan Brantley, Room 1208 Swainsboro Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, to coordinate reasonable accommodations.*

SPECIFIC ABSENCES: Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

PREGNANCY: Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please advise me and make appropriate arrangements with the Special Needs Office. Swainsboro Campus: Jan Brantley, Room 1208, (478) 289-2274 -- Vidalia Campus: Helen Thomas, Room 108, (912) 538-3126.

WITHDRAWAL PROCEDURE: Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% portion of the semester (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" is assigned when the student completes the withdrawal form from the course.

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a "W" for the course. Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. All grades, including grades of 'W', will count in attempted hour calculations for the purpose of Financial Aid.

Remember - Informing your instructor that you will not return to his/her course does not satisfy the approved withdrawal

procedure outlined above.

MAKEUP GUIDELINES (Tests, quizzes, homework, projects, etc...): A grade of zero will be assigned for any missed assignment regardless of the reason.

ACADEMIC DISHONESTY POLICY: The STC Academic Dishonesty Policy states *All forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline.* The policy can also be found in the *STC Catalog and Student Handbook*.

Procedure for Academic Misconduct

The procedure for dealing with academic misconduct and dishonesty is as follows:

--First Offense--

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

--Second Offense--

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

--Third Offense--

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

STATEMENT OF NON-DISCRIMINATION: Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of Vietnam Era or citizenship status, (except in those special circumstances permitted or mandated by law). This school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

GRIEVANCE PROCEDURES: Grievance procedures can be found in the Catalog and Handbook located on STC's website.

ACCESS TO TECHNOLOGY: Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the STC website at www.southeasterntech.edu.

GRADING POLICY

25% Math XL
10% Quizzes
40% Tests
25% Comprehensive Final Exam

GRADING SCALE

A: 90-100
B: 80-89
C: 70-79
D: 60-69
F: 0-59

TCSG GUARANTEE/WARRANTY

STATEMENT: *The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.*

MATH 1111 HOMEWORK GUIDE AND LESSON PLAN – Subject to changes and updates College Algebra, 6th Edition

- You may have textbook homework, or mathxl homework, or a combination of both based on the requirements of your specific instructor. You have a Mathxl Access Code that will be used for such things as homework, quizzes, or tests. Your instructor will give you directions during class or in Blackboard on how to register for Mathxl. If you have an old mathxl access code that is less than a year old, you can just transfer your enrollment from your old course to your new course by logging in and using the new Course ID provided by your instructor.
- Textbook homework that may be assigned should be done on loose leaf notebook paper. Show details of the step-by-step work you use to solve each problem in order to receive any credit. Show high-quality work that you can be proud of. Your instructor will let you know when you have textbook homework. (*Sonya Wilson does require textbook homework*)
- Use the Mathxl Lecture Videos, Homework Tutorial Buttons, and the Mathxl Study Plan to learn the material.
- Watch the CD-Rom Lectures that came with your textbook package.** These are great! I **expect** you to watch these as you study each section. The lectures have a teacher that explains problems from each section!! If your textbook does not include these, there are plenty of other options for tutorials.
- If your instructor does not use mathxl, use the tutorial website www.interactmath.com. Look for your specific book title. This site includes tutorials for every section & chapter in your book. This website is almost exactly like Mathxl.
- Textbook Homework Expectations:** Always check answers as you complete each problem when doing textbook homework. Answers are in the back of the book and complete solutions are in the Student Solutions Manual. Do all textbook homework, in detail, on notebook paper. Homework will be graded a few times this semester. Finish each chapter's homework BEFORE the test on each chapter. Make sure you are showing YOUR ORIGINAL and DETAILED WORK on notebook paper for me to grade. See the book examples for examples of how detailed I expect your work to be in order for you to get credit when I grade it. Also, you should write the original problem, and then show the work that proves the final answer. You don't have to write out a word problem though!

HOURS/MINUTES 2250 min = 37.5 hours	CHAPTER/UNIT	OBJECTIVES	ASSIGNMENTS	COMP.
1-5	Chapter P Fundamental Concepts of Algebra	P.1: Algebraic Expressions, Mathematical Models, and Real Numbers P.2: Exponents and Scientific Notation P.3 Radicals and Rational Exponents P.4: Polynomials P.5: Factoring Polynomials P.6: Rational Expressions	Mathxl: Register for Mathxl and complete the Chapter P Assignments found under the Homework and Tests Button. Textbook Homework: P.1: 17, 19, 23, 25, 31, 33, 35, 37, 53, 57, 61, 63, 71, 93, 95, 97, 103, 107, 117, 119, 125, 129, 131, 133, 135, 137, 153, 154, 155 P.2: 1 – 105 EOO (means to do every other odd 1, 5, 9, etc.), and 123 P.3: 1 – 105 EOO, 119, 120 P.4: 13, 17, 29, 47, 57, 65, 73, 79, 81, 87, 89, 93, 103, 107 P.5: Important Section! 1 – 93 EOO, 115 P.6: 1 – 65 EOO, 81, 85, 87 ADDITIONAL: Your <u>course calendar</u> or instructor will detail how and when the following items are due. Homework Objective Quiz(zes) Competency Test(s)	1,2 *a,b,c
6-8	1 Equations and Inequalities	1.1: Graphs and Graphing Utilities 1.2: Linear Equations and Rational Equations 1.3: Models and Applications 1.4: Complex Numbers (opt) 1.5: Quadratic Equations 1.6: Other Types of Equations (opt)	MATHXL: Do the Ch. 1 Mathxl Requirements Textbook Homework: 1.1: 13 -27 odd, 29-45 odd, 51, 75,77, 79 1.2: 15, 17-77 EOO, 79, 93, 105, 111, 125 1.3: Use algebraic equations as shown in the book examples to solve all of these problems: 3, 7, 9, 21, 25,	2,3 *a,b,c

		1.7: Linear Inequalities and Absolute Value Inequalities (opt)	27, 29, 33, 35 – 45 odd, 49, 55 – 73 odd, 91 1.4: 1 – 53 EOO, 55, 58, 65, 66 1.5: 3, 9, 11, 19, 23, 35, 47, 55, 61, 67, 69, 71, 75 – 81 odd, 105, 107, 115, 139, 141, 143, 153 1.6: 1 – 37 EOO, 61 – 73 EOO, 115, 119, 122, 123 1.7: 1 – 57 EOO, 63, 79, 117 ADDITIONAL: Your <u>course calendar</u> or instructor will detail how and when the following items are due. Homework Objective Quiz(zes) Competency Test(s)	
9-12	2 Functions and Graphs	2.1: Basics of Functions and their Graphs 2.2: More on Functions and their Graphs 2.3: Linear Functions and Slope 2.4: More on Slope 2.5: Transformation of Functions 2.6: Combinations of Functions; Composite Functions 2.7: Inverse Functions 2.8: Distance and Midpoint Formulas; Circles	MATHXL: Do the Ch. 2 Mathxl Requirements Textbook Homework: 2.1: 1, 5, 9, 11-25 odd, 29, 33, 35, 39, 43, 45, 47, 49, 51-63 odd, 77-91 odd, 101, 109, 110, 112 2.2: 1, 3, 5, 17, 19, 21, 33, 37, 41, do #81 but do not graph it, 95, 100 2.3: 1-9 odd, 13, 17, 33, 35, use the correct method for 41 and 43, 49-57 odd, 63, 65, 67, 85, 86, 87 2.4: 1, 3, 5, 7, 9, 11, 27, 31, 32 2.5: 53-65 odd, 81-89 odd, 129-132 all 2.6: 1-11 odd, 17, 19, 31, 53, 61, 69, 73, 97 2.7: 3, 5, 15, 17, 29, 31, 33, to do 35 and 37 you switch (x,y) to (y,x) and graph this as the inverse, 73 2.8: 7, 15, 19, 21, 29, 31, 35, 37, 41, 45, 65, 81, 81 ADDITIONAL: Your <u>course calendar</u> or instructor will detail how and when the following items are due. Homework Work Ethics Math Discussion Board Objective Quiz(zes) Competency Test(s)	1, 3 *a,b,c
13-16	3 Polynomial and Rational Functions	3.1 Quadratic Functions 3.2: Polynomial Functions and Their Graphs 3.3: Dividing Polynomials: Remainder and Factor Theorems 3.6: Polynomial and Rational Inequalities 3.7: Modeling Using Variation	MATHXL: Do the Ch. 3 Mathxl Requirements Textbook Homework: 3.1: Explain how you know the answers for numbers 1-8 all by studying page 313, 19-21 odd, 27, 41, 45, 57, 65, 74, 75 3.2: For numbers 25-31 odd, just find the zeros of each one and explain what a zero of a function really represents (note you may have to factor some of these to find the zeros), and do 82. 3.3: 1, 11, 17, 25, 29, 35, 37, 43, 52 3.6: 1, 3, 5, 43, 45, 55 3.7: 1, 3, 21 ADDITIONAL: Your <u>course calendar</u> or instructor will detail how and when the following items are due. Homework	3 *a,b,c

			Objective Quiz(zes) Competency Test(s)	
17-22	4 Exponential and Logarithmic Functions	4.1: Exponential Functions 4.2: Logarithmic Functions 4.3: Properties of Logarithms 4.4: Exponential and Logarithmic Equations 4.5: Exponential Growth and Decay: Modeling Data	MATHXL: Do the Ch. 4 Mathxl Requirements Textbook Homework: 4.1: 1 – 13 odd, 19-24 all and explain why you made each choice, then on 25 – 31 odd you need to sketch a basically accurate graph and explain the transformations you had to use and you don't have to do the asymptotes, do the same for 35, 37, and 41, and also do 67 4.2: 1 – 41 odd and show proof for each one or write the definition or property that explains your answer, do 81 – 99 odd and show proof, and do 121 and 122 4.3: 1 – 13 odd, 41 – 57 odd 4.4: 1 – 13 odd, 23 – 35 odd, 49 – 63 odd, 117 4.5: 1, 5, and 9 ADDITIONAL: Your <u>course calendar</u> or instructor will detail how and when the following items are due. Homework Objective Quiz(zes) Competency Test(s)	1,3,5 *a,b,c
23-27	5 Systems of Equations and Inequalities	5.1: Systems of Linear Equations in Two Variables 5.2: Systems of Linear Equations in Three Variables 5.4: Systems of Nonlinear Equations in Two Variables 5.5: Systems of Inequalities	MATHXL: Do the Ch. 5 Mathxl Requirements Textbook Homework: 5.1: 1 – 41 EOO, 43, 45, 57, 61, 63, 83, 85, 86 5.2: 1, 5, 9, 13, 23, 39 5.4: 1, 5, 7, 9, 19, 21, 43, 45, 59 5.5: 1, 5, 9, 13, 19, 29, 35, 47, 90, 91, 96 ADDITIONAL: Your <u>course calendar</u> or instructor will detail how and when the following items are due. Homework Objective Quiz(zes) Competency Test(s)	2,4 *a,b,c
28-32	6 Matrices and Determinants	6.3: Matrix Operations and Their Applications 6.5: Determinants and Cramer's Rule	MATHXL: Do the Ch. 6 Mathxl Requirements Textbook Homework: 6.3: Do 1-15 odd, 27-35 odd 6.5: Do 1-25 odd ADDITIONAL: Your <u>course calendar</u> or instructor will detail how and when the following items are due. Homework Work Ethics Math Discussion Board Objective Quiz(zes) Competency Test(s)	4,5 *b,c
33-34	7 Conic Sections	7.1: The Ellipse 7.2: The Hyperbola 7.3: The Parabola	MATHXL: Do the Ch. 7 Mathxl Requirements Textbook Homework: 7.1: 1 & 5 (Graph the ellipse, but don't find the foci), 19 – 23 ODD	5 *b,c

			(Find the equation, but not the foci), 69, 70 7.2: 1 and 3 (Find the vertices, but not the foci), 70 7.3: 1 – 4 all (Just match each equation with its graph, and explain your choice. Do not find the focus and directrix.), 5 – 15 odd (Just Graph. Do not find the focus or directrix. Clearly mark and label the vertex, the x-intercept(s), and/or the y-intercept(s) in order to prove you have drawn the correct graph. Show the work that proves your graph.), 69, 71, 73 ADDITIONAL: Your <u>course calendar</u> or instructor will detail how and when the following items are due. Homework Objective Quiz(zes) Competency Test(s)	
35	8 Sequences, Induction, and Probability	8.1: Sequences and Summation Notation	MATHXL: Do the Ch. 8 Mathxl Requirements Textbook Homework: 8.1: 23, 25, 29 (Show work similar to the book examples.), and do 77. ADDITIONAL: Your <u>course calendar</u> or instructor will detail how and when the following items are due. Homework Objective Quiz(zes) Competency Test(s)	5 *b,c
36-37.5	Final Exam		Final Exam	
Students who have passed the course with an A, B, or C should contact their advisor regarding the WorkKeys Applied Mathematics Exam. Passing this exam is a requirement for graduation.				

COURSE OUTLINE:

1. Fundamental Concepts of Algebra
2. Equations and Inequalities
3. Functions and Graphs
4. Systems of Equations
5. Optional Topics including Sequences, Series, Probability, and Analytical Geometry

**General Core Educational Competencies

- a) The ability to utilize standard written English. (i.e. Explanations of answers, Writing Problems)
- b) The ability to solve practical mathematical problems. (i.e. Entire Course)
- c) The ability to read, analyze, and interpret information. (i.e. Entire Course, Applications)

****Instructor reserves the right to change the syllabus and/or lesson plan as necessary.****

TUTORING OPTIONS – You Have So Many Options!!

1. **Mathxl Provides a Study Plan Button which will allow you to work examples from each section of your book. It will provide hints and explanations. A few of my students have used this and have bragged about it. You must register for mathxl using your mathxl access code and my course id code before you can use this option. If your instructor does not use Mathxl, you can just use www.interactmath.com which looks the same as mathxl.**
2. **We have tutoring hours through an online program called SmartThinking. This connects you with a real online tutoring. We will have to get you a username and password through the General Education Dean of Instruction, Ms. Cheryl West.**
3. **Your textbook provides a tutorial website for your specific book at www.interactmath.com. The problems will look almost exactly like the Mathxl Study Plan problems. If your instructor requires mathxl, you should use the Study Plan instead.**
4. **STC provides tutoring. The tutors are usually campus instructors who have designated specific times they are available for tutoring. Math tutoring is available on the Swainsboro and Vidalia Campus. See Sonya Wilson for the Swainsboro Campus.**
5. **You may know a math tutor. As long as you are just getting help with homework and a basic learning of the material, it is fine to use your own tutor. It is not appropriate to use a tutor on things like quizzes and tests. Your complete honesty is expected. Academic Dishonesty is a serious offense. You do not want to be associated with cheating in any way. Your career could be at stake if you give in to the temptation.**
6. **We often have volunteer tutors within our classes. This option varies on the availability of the volunteer tutors.**
7. **Use the resources available on the Southeastern Technical College website, www.southeasterntech.edu, or just click the Tutorials Tab in Blackboard. In addition, use any resources that come with your textbook. You can also go to the library tab on our website to find more resources.**
8. **Use the resources available in Blackboard to help you learn the material. Your Blackboard course gives you access to power points and videos. You can find them in our Blackboard Course by going to the Course Work Tab. The Khan Academy Videos, available to you in Blackboard, provide an instructor who teaches many of the concepts we are learning. This is a great resource! Using these resources will help you become an “active learner” rather than a “passive learner” because you are taking charge of your learning by using additional resources. (Note: Please use the web browser Mozilla Firefox instead of Internet Explorer when trying to access the Khan Academy Videos.)**
9. **Swainsboro Students can see Ms. Jan Brantley to set up a PassKey Account. PassKey is a computer tutorial program you can use in Ms. Brantley’s lab.**
10. **Another way to gain access to tutorial help is to form a study group with some of your classmates. The college can assist by reserving a study room for your group. Please see Ms. Jan Brantley if you would like to reserve a room for your study group.**