

## MATH 1111 College Algebra

# COURSE SYLLABUS Summer Semester 2019

## **COURSE INFORMATION**

Credit Hours/Minutes: 3/2250 Campus/Class Location: Room 323 Class Meets: Monday, Tuesday and Wednesday 5:00-6:25 Course Reference Number (CRN): 60113

## INSTRUCTOR CONTACT INFORMATION

Instructor Name: Dr. Bee Hart Email Address: <u>Bee Hart</u> (<u>bhart@southeasterntech.edu</u>) Campus/Office Location: Vidalia/Room 323 Office Hours: 3:00-4:30 Monday, Tuesday, Wednesday, Thursday Phone: 912.538.3131 Fax Number: 912.538.3156 Tutoring Hours: 2:30-3:30 Wednesday

## SOUTHEASTERN TECHNICAL COLLEGE'S (STC) CATALOG AND HANDBOOK

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's <u>Catalog and Handbook</u> (<u>http://www.southeasterntech.edu/student-affairs/catalog-handbook.php</u>).

## NO REQUIRED TEXT

Purchase of a textbook is optional. The course uses: Blitzer, R. <u>Introductory Algebra (seventh edition)</u>. New Jersey: Prentice Hall.

## **REQUIRED SUPPLIES & SOFTWARE**

Software: MathXL is the software required for the course. The MathXL Access Code may be purchased from the bookstore or from the MathXL Website (www.mathxl.com) after the course has started and you have the MathXL Course ID needed to register. The student will be given instructions to register for MathXL during class. The student will need to register for MathXL by obtaining the MathXL Course ID from the instructor.

Supplies: Three (3) ring binder notebook, computer access, loose-leaf paper, pencils (all math problem work must be done in pencil), highlighter, graphing calculator (TI-83 or TI-84), and graph paper. ). Cellphones or other electronic devices cannot used be in the course. Daily access to a reliable internet connection for use with Blackboard, Mathxl, mySTC, and Student Email is advisable.

Students should not share login credentials with others and should change passwords periodically to maintain security.

## **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.

#### STUDENT REQUIREMENTS

Students are expected to attend all classes and proactively engage themselves in the learning process. Students are expected to seek help and clarification for topics/assignments for which they need additional support and to make gainful contributions during group work. Students are also expected to complete all assignments by the given due date. Students should anticipate spending 1-2 hours each day outside of class working on the course.

#### TRADITIONAL 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" (Failing 0-59) 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.

## STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services **Swainsboro Campus**: Macy Gay <u>mgay@southeasterntech.edu</u>, 478-289-2274, Building 1, Room 1208 **Vidalia Campus**: <u>Helen Thomas hthomas@southeasterntech.edu</u>, 912-538-3126, Building A, Room 108

## 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 make arrangements with the appropriate campus coordinator.

Swainsboro Campus: Macy Gay <u>mgay@southeasterntech.edu</u>, 478-289-2274, Building 1, Room 1208 Vidalia Campus: <u>Helen Thomas hthomas@southeasterntech.edu</u>, 912-538-3126, Building A, Room 108

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **MAY NOT** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

## 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.

## WITHDRAWAL PROCEDURE

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (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" (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of "F" (Failing 0-59) being assigned.

Informing your instructor that you will not return to his/her course, does not satisfy the approved withdrawal procedure outlined above.

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 accessed due to the withdrawal. A grade 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. If the instructor is informed of a scheduled absence ahead of time, an assignment date may be rescheduled at the discretion of the instructor.

## ACADEMIC DISHONESTY POLICY

The Southeastern Technical College Academic Dishonesty Policy states that 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 Southeastern Technical College Catalog and Handbook.

## PROCEDURE FOR ACADEMIC MISCONDUCT

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

1. 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.

## 2. Second Offense

Student is given a grade of "WF" (Withdrawn Failing) 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.

3. 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 third 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

The Technical College System of Georgia (TCSG) and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member, or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, federally financed programs, educational programs and activities involving admissions, scholarships and loans, student life, and athletics. It also applies to the recruitment and employment of personnel and contracting for goods and services.

All work and campus environments shall be free from unlawful forms of discrimination, harassment and retaliation as outlined under Title IX of the Educational Amendments of 1972, Title VI and Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act of 1967, as amended, Executive Order 11246, as amended, the Vietnam Era Veterans Readjustment Act of 1974, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities Act of 1990, as amended, the Equal Pay Act, Lilly Ledbetter Fair Pay Act of 2009, the Georgia Fair Employment Act of 1978, as amended, the

Immigration Reform and Control Act of 1986, the Genetic Information Nondiscrimination Act of 2008, the Workforce Investment Act of 1998 and other related mandates under TCSG Policy, federal or state statutes.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer	Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer
Helen Thomas, Special Needs Specialist	Lanie Jonas, Director of Human Resources
Vidalia Campus	Vidalia Campus
3001 East 1 <sup>st</sup> Street, Vidalia	3001 East 1 <sup>st</sup> Street, Vidalia
Office 108 Phone: 912-538-3126	Office 138B Phone: 912-538-3230
Email: <u>Helen Thomas</u>	Email: <u>Lanie Jonas</u>
hthomas@southeasterntech.edu	ljonas@southeasterntech.edu

## ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

## **GRIEVANCE PROCEDURES**

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College'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 <u>Southeastern Technical</u> <u>College (STC) Website (www.southeasterntech.edu</u>).

## TECHNICAL COLLEGE SYSTEM OF GEORGIA (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.

#### **GRADING POLICY**

Assessment/Assignment	Percentage
Exams	40%
Quiz Average	10%
Homework Average	25%
Final Exam	25%

#### **GRADING SCALE**

Letter Grade	Range
А	90-100
В	80-89
С	70-79
D	60-69
F	0-59

# MATH 1111 College Algebra

# Summer Semester 2019 Lesson Plan

Hours/Minutes 37.5 hrs = 2250 min.	Chapter	Content/Objectives	Assignments The instructor will determine exact dates during class time.	Competency Area
1-5 Instructional Hours (Chapter P: 5 X 2 = +/-10 more working hours may be required to complete and learn all expectations for Chapter P.	Chapter P Fundamenta I Concepts of Algebra	<ul> <li>P.1: Algebraic Expressions, Mathematical Models, and Real Numbers</li> <li>P.2: Exponents and Scientific Notation</li> <li>P.3 Radicals and Rational Exponents</li> <li>P.4: Polynomials</li> <li>P.5: Factoring Polynomials</li> <li>P.6: Rational Expressions</li> </ul> Once determined each week, official due dates will be documented in MathXL with the assignment. If students are working after each class day as expected, due dates will not be an issue. Tests are given in a variety of formats such as online, paper/pencil, Part1/Part2, etc. Students will be informed as a part of class. Some chapters may be grouped and students may have cumulative tests as determined by the instructor.	MathXL Homework Chapter P: Register for Mathxl and complete the Chapter P Homework found under the Homework and Tests Button. Whatever is discussed in class is the homework to be done in MathXL by the next class day. Final due dates will be set in MathXL. We will discuss registration for MathXL during day 1 of class. <b>Textbook Homework</b> Chapter P: Students are expected to read the text to add detail to class notes. The textbook will be referenced during classroom lectures. The instructor may require additional homework from the text exercises. Students should practice odd problems, on their own, that reflect the material lectured in class and the material covered in Mathxl. <b>Quiz(zes):</b> Class quizzes are determined based on need each week. MathXL quizzes should be done as scheduled.	1,2 *a,b,c

Hours/Minutes 37.5 hrs = 2250 min.	Chapter	Content/Objectives	Assignments The instructor will determine exact dates during class time. Due Date determined by	Competency Area
			the instructor as determined by class progress.	
6-9	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 (opt) 1.7: Linear Inequalities and Absolute Value Inequalities (opt)	MathXL Homework Chapter 1: Complete the Chapter 1 Homework found under the Homework and Tests Button. Whatever is discussed in class is the homework to be done in MathXL by the next class day. Final due dates will be set in MathXL. Textbook Homework Chapter 1: Students are expected to read the text to add detail to class notes. The textbook will be referenced during classroom lectures. The instructor may require additional homework from the text exercises. Students should practice odd problems, on their own, that reflect the material lectured in class and the material covered in Mathxl. Quiz(zes): Class quizzes are determined based on need each week. MathXL quizzes should be done as scheduled. Chapter 1 Test: Determined weekly by the instructor.	2,3 *a,b,c

Hours/Minutes 37.5 hrs = 2250 min.	Chapter	Content/Objectives	Assignments The instructor will determine exact dates during class time.	Competency Area
10-13	2 Functions and Graphs	<ul> <li>2.1: Basics of Functions and their Graphs</li> <li>2.2: More on Functions and their Graphs</li> <li>2.3: Linear Functions and Slope</li> <li>2.4: More on Slope</li> <li>2.5: Transformation of Functions</li> <li>2.6: Combinations of</li> <li>Functions; Composite</li> <li>Functions</li> <li>2.7: Inverse Functions</li> <li>2.8: Distance and Midpoint</li> <li>Formulas; Circles</li> </ul>	MathXL Homework Chapter 2: Complete the Chapter 2 Homework found under the Homework and Tests Button. Whatever is discussed in class is the homework to be done in MathXL by the next class day. Final due dates will be set in MathXL. Textbook Homework Chapter 2: The instructor will assign specific text homework during class time. Quiz(zes): Class quizzes are determined based on need each week. MathXL quizzes should be done as scheduled. Chapter 2 Test: Determined weekly by the instructor.	1, 3 *a,b,c
14-17	3 Polynomial and Rational Functions	<ul> <li>3.1 Quadratic Functions</li> <li>3.2: Polynomial Functions and Their Graphs</li> <li>3.3: Dividing Polynomials: Remainder and Factor Theorems</li> <li>3.6: Polynomial and Rational Inequalities</li> <li>3.7: Modeling Using Variation</li> </ul>	MathXL Homework Chapter 3: Complete the Chapter 3 Homework found under the Homework and Tests Button. Whatever is discussed in class is the homework to be done in MathXL by the next class day. Final due dates will be set in MathXL. Textbook Homework Chapter 3: Students are expected to read the text to add detail to class notes. The textbook will be	3 *a,b,c

Hours/Minutes 37.5 hrs = 2250 min.	Chapter	Content/Objectives	Assignments The instructor will determine exact dates during class time.	Competency Area
			referenced during classroom lectures. The instructor may require additional homework from the text exercises. Students should practice odd problems, on their own, that reflect the material lectured in class and the material covered in Mathxl.	
			Quiz(zes): Class quizzes are determined based on need each week. MathXL quizzes should be done as scheduled.	
			<b>Chapter 3 Test:</b> Determined weekly by the instructor.	
18-23	4 Exponential and Logarithmic Functions	<ul> <li>4.1: Exponential Functions</li> <li>4.2: Logarithmic Functions</li> <li>4.3: Properties of Logarithms</li> <li>4.4: Exponential and</li> <li>Logarithmic Equations</li> <li>4.5: Exponential Growth and</li> <li>Decay: Modeling Data</li> </ul>	MathXL Homework Chapter 4: Complete the Chapter 4 Homework found under the Homework and Tests Button. Whatever is discussed in class is the homework to be done in MathXL by the next class day. Final due dates will be set in MathXL.	1,3,5 *a,b,c
			Textbook Homework Chapter 4: Students are expected to read the text to add detail to class notes. The textbook will be referenced during classroom lectures. The instructor may require additional homework from the text exercises. Students should practice	

Hours/Minutes 37.5 hrs = 2250 min.	Chapter	Content/Objectives	Assignments The instructor will determine exact dates during class time.	Competency Area
			odd problems, on their own, that reflect the material lectured in class and the material covered in Mathxl.	
			Quiz(zes): Class quizzes are determined based on need each week. MathXL quizzes should be done as scheduled.	
			<b>Chapter 4 Test:</b> Determined weekly by the instructor.	
24-28	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 Homework Chapter 5: Complete the Chapter 5 Homework found under the Homework and Tests Button. Whatever is discussed in class is the homework to be done in MathXL by the next class day. Final due dates will be set in MathXL. Textbook Homework Chapter 5: Students are expected to read the text to add detail to class notes. The textbook will be referenced during classroom lectures. The instructor may require additional homework from the text exercises. Students should practice odd problems, on their own, that reflect the material lectured in class and the material covered in Mathxl.	2,4 *a,b,c

Hours/Minutes 37.5 hrs = 2250 min.	Chapter	Content/Objectives	Assignments The instructor will determine exact dates during class time.	Competency Area
			Quiz(zes): Class quizzes are determined based on need each week. MathXL quizzes should be done as scheduled.	
			<b>Chapter 5 Test:</b> Determined weekly by the instructor.	
29-33	6 Matrices and Determinant s	6.3: Matrix Operations and Their Applications 6.5: Determinants and Cramer's Rule	MathXL HomeworkChapter 6:Complete the Chapter 6Homework found underthe Homework and TestsButton. Whatever isdiscussed in class is thehomework to be done inMathXL by the next classday. Final due dates willbe set in MathXL.Textbook HomeworkChapter 6: Students areexpected to read the textto add detail to classnotes. The textbook will bereferenced duringclassroom lectures. Theinstructor may requireadditional homework fromthe text exercises.Students should practiceodd problems, on theirown, that reflect thematerial lectured in classand the material coveredin MathXl.Quiz(zes): Class quizzes aredetermined based on needeach week. MathXLquizzes should be done asscheduled.	4,5 *b,c

34-35       7       7.1: The Ellipse       MathXL Homework       5         7.2: The Hyperbola       7.3: The Parabola       Chapter 7:       Complete the Chapter 7       Homework found under the Homework and Tests Button. Whatever is discussed in class is the homework to be done in MathXL by the next class day. Final due dates will be set in MathXL.       Textbook Homework       Textbook Homework         7.3: The Parabola       Textbook Homework and Tests Button. Whatever is discussed in class is the homework to be done in MathXL by the next class day. Final due dates will be set in MathXL.       Textbook Homework         Textbook Homework       Chapter 7: Students are expected to read the text to add detail to class notes. The textbook will be referenced during classroom lectures. The instructor may require additional homework from the text exercises.       Students should practice odd problems, on their own, that reflect the material lectured in class and the material clocured in MathXl.         Quiz(zes): Class quizzes are determined based on need each week. MathXl.       Quiz(zes): Class quizzes are determined based on need each week. MathXl.         36-37.5       8       8.1: Sequences and       MathXL Homework       5	Hours/Minutes 37.5 hrs = 2250 min.	Chapter	Content/Objectives	Assignments The instructor will determine exact dates during class time. Chapter 6 Test: Determined weekly by the instructor.	Competency Area
36-37.5         8         8.1: Sequences and         MathXL Homework         5	34-35	Conic Sections (Optional per discretion of	7.2: The Hyperbola	<ul> <li>Chapter 7: Complete the Chapter 7 Homework found under the Homework and Tests Button. Whatever is discussed in class is the homework to be done in MathXL by the next class day. Final due dates will be set in MathXL.</li> <li>Textbook Homework Chapter 7: Students are expected to read the text to add detail to class notes. The textbook will be referenced during classroom lectures. The instructor may require additional homework from the text exercises. Students should practice odd problems, on their own, that reflect the material lectured in class and the material covered in Mathxl.</li> <li>Quiz(zes): Class quizzes are determined based on need each week. MathXL quizzes should be done as scheduled.</li> <li>Chapter 7 Test: Determined weekly by the</li> </ul>	
	36-37.5	8	8.1: Sequences and	MathXL Homework	5

Hours/Minutes 37.5 hrs = 2250 min.	Chapter	Content/Objectives	Assignments The instructor will determine exact dates during class time.	Competency Area
Instructional hours (X 2+ for additional learning requirements)	Sequences, Induction, and Probability (Optional per discretion of instructor)	Summation Notation	Chapter 8: Complete the Chapter 8 Homework found under the Homework and Tests Button. Whatever is discussed in class is the homework to be done in MathXL by the next class day. Final due dates will be set in MathXL. Textbook Homework Chapter 8: Students are expected to read the text to add detail to class notes. The textbook will be referenced during classroom lectures. The instructor may require additional homework from the text exercises. Students should practice odd problems, on their own, that reflect the material lectured in class and the material covered in Mathxl. Quiz(zes): Class quizzes are determined based on need each week. MathXL quizzes should be done as scheduled. Chapter 8 Test: Determined weekly by the instructor.	*b,c
	Final Exam	Final Exam	Final Exam	ALL

## 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.
- b) The ability to solve practical mathematical problems.
- c) The ability to read, analyze, and interpret information. \*\*\*\*Instructor reserves the right to change the syllabus and/or lesson plan as necessary.\*\*\*\*