Course Description: College Algebra (3-0-0-3; Prerequisite: Appropriate Degree Level Math Placement Test Score) Emphasizes techniques of problem solving using algebraic concepts. Topics include fundamental concepts of algebra, equations and inequalities, functions and graphs, and systems of equations; optional topics include sequences, series, and probability or analytic geometry.

Competencies/Student Learning Outcomes:
After completing this section, the student will be able to:

Fundamental Concepts of Algebra
1. Demonstrate the concept of sets and set notation.
2. Locate complements, unions, and intersections of sets.
3. Compute the value of expressions using the laws of exponents.
4. Simplify radicals and use them in arithmetic operations.
5. Perform arithmetic operations on polynomials.
6. Identify all factors of algebraic expressions.
7. Perform arithmetic operations on rational expressions

Equations and Inequalities
1. Solve linear equations.
2. Solve application problems involving linear equations
3. Solve quadratic equations.
4. Solve application problems involving quadratic equations.
5. Solve linear inequalities.
6. Solve quadratic inequalities.
7. Solve rational inequalities.
8. Solve exponential equations.
9. Solve application problems involving exponential equations.
10. Solve logarithmic equations.
11. Solve application problems involving logarithmic equations.

Functions and Graphs
1. Plot ordered pairs.
2. Define relations and functions.
3. Construct a graph of linear functions.
4. Construct a graph of quadratic functions.
5. Construct a graph of exponential functions.
6. Construct a graph of logarithmic functions.

Systems of Equations
1. Solve systems of linear equations with two unknowns.
2. Solve application problems involving linear systems.

Textbooks, Tools, and Supplies:
• An actual scientific calculator (not a cell phone) is required for this course. I use and recommend the Texas Instruments TI-30XIIS.
• This course requires use of a pencil at all times, graph paper, a straight edge (ruler), and a folder or binder with pockets for worksheets and tests.

**Evaluation and Grading:**

**Augusta Technical College Grading Scale**

- **A** = 90-100
- **B** = 80-89
- **C** = 70-79
- **D** = 60-69
- **F** = 0-59
- **WF** = 0-59 Signifies the student withdrew with a failing grade after mid-term. “WF” carries a grade point average of “0.”
- **W** Signifies the student withdrew before mid-term.
- **WP** Signifies the student withdrew after midterm with a passing grade.

**Course Grade:**
The final course grade will be based on the following:

- Tests/Quiz Average: 75% of grade
- Final Exam: 25% of grade

Tests include open-ended problems, which require students to show all of their work to receive credit, and various word/verbal problems relating to real-life problems in the various fields of work in which students are pursuing their higher education. Quizzes will be given on the web on Angel and will count as a single test grade at the end of the semester. You will be given a week to take each quiz, so quizzes will not be made up if missed.

**Make-up Policy:** There are no make-up tests or quizzes; take-home tests and other items are not accepted late. Instead, your lowest test grade will be dropped.

If you miss a test, that will be the test grade you drop. Homework will only be collected if a day’s notice is given in advance. In general, most homework is considered practice and will not be collected. If a homework assignment is collected, its completion or lack of completion will be factored into your grade by the addition or subtraction of points from your test average.

**Withdrawal/Drop Policy:**

**Attendance Policy:** To complete this class successfully, students are required to participate in class, complete assignments in a timely manner, and attend all scheduled classes. Students are expected to arrive on time and remain in class for the entire session. Students are allowed to miss 10% of the class without penalty. Failure to follow the attendance policy may result in suspension or withdrawal from class. Withdrawal or suspension from a class may affect a student’s present and future academic and financial aid status as well as the class work-ethics grade (if applicable). For this term, 10% of the class is two class periods.

**Student-Initiated Withdrawal from Course(s):** If a student decides to drop the class, the student will need to withdraw officially from the class by completing and submitting a Schedule Change Form to the Financial Aid Office.

**Instructor-Initiated Suspension or Administrative Withdrawal from Class:** If a student misses more than 10% of the scheduled class sessions, the student may be suspended or administratively withdrawn from class.

However, since it is your responsibility to drop yourself from any class you can no longer attend, it is possible that you may not get dropped from the class and receive an F instead. Both of these cases may affect your financial aid status.

5/19/2012
A student who has been suspended or administratively withdrawn for attendance reasons has the right to appeal to in writing to the Dean of Learning Support and General Education (Mr. John Richardson: jhrichar@augustatech.edu) and must remain in school during the appeal process. When the appeal process is completed, the final decision is made retroactive to the date of the original notice of suspension.

For additional information, refer to the Augusta Technical College Student Handbook and Wellness Guide.

**Disabilities and Counseling Policy:** If there is a student in this class who needs testing or classroom accommodations due to a disability, please meet with the instructor to discuss any testing or accommodation needs. Augusta Technical College has ADA coordinator/disability counselor services available to all students. Please contact the counseling and testing center, which is located on the second floor in the 1300 Building, at (706) 771-4067 or 4068 for additional details.

**Career Services:** Career Services offers assistance with resume and cover letter preparation, mock interviewing, career information, and a website of job leads from local employers. The website can be accessed by clicking the "Experience" logo on the Career Services webpage or through the URL http://augustatech.experience.com/er/security/login.jsp

**Warranty:** “If one of our graduates, who was educated under a standard program, and his or her employer agrees that the employee is deficient in one or more competencies as defined in the standards, Augusta Technical College will retrain that employee at no instruction cost to employee or employer.”

**Honor Pledge:** By attending classes at Augusta Technical College, you agree to abide by the honor code, which reads as follows:

It is my honor to be an Augusta Technical College student. I pledge to do honor to myself, my classmates, and my college by doing my best and by following the college’s honor code. I will not dishonor myself or my college by lying, cheating, stealing, or doing harm to another person or property. I understand that following an honor code is a reflection of my work ethics which is important to my success on the job and in life.

**Tutoring Center:** The Tutoring Center in the ITC is available every morning and some afternoons and is free of charge for students of Augusta Technical College. Their specific daily hours are posted on their door. They also are available by appointment, so please feel free to make an appointment if necessary.

**Other Items of Note:**
1. All cell phones and beepers should be turned off or on vibrate before class starts. Exceptions to this rule need to be discussed with the instructor prior to class time. Cell phones and beepers distract those who are trying to learn and especially those of us who have learning disabilities or ADD/ADHD, so please be considerate of those around you and take care of this before class starts. Texting during class will result in you being asked to leave the classroom.
2. Any note-taking during class on personal laptops or other electronic devices must be cleared with me ahead of time. Repeated violations may result in suspension from the class.

**MATH 1111 Homework Assignments:**
1.1 (p. 11): 21, 43 – 57, 65 – 71 odd  
1.2 (p. 20): 11 – 23, 35 – 45, 61 – 67, 79 – 85 odd  
1.3 (p. 29): 23 – 35, 41 – 47, 53 – 75 odd  
1.4 (p. 37): 11 – 37 odd
2.1 (p. 54): 11 – 43, 49 – 61 odd
2.2 (p. 62): 1 – 11 odd, 15, 17
2.5 (p. 99): 9 – 39, 47 – 53 odd
2.6 (p. 108): 7 – 14 all
3.1 (p. 144): 3 – 9, 13 – 31, 35 – 55 odd
3.2 (p. 156): 7 – 11, 15 – 21, 25 – 37, 41 – 79 odd
3.3 (p. 170): 7 – 21, 27 – 41, 45 – 61, 67 – 73 odd
3.5 (p. 189): 33 – 37, 43 – 53 [domain only]
3.6 (p. 194): 3 – 17, 37 – 51 odd
4.1 (p. 219): 9 – 37, 41 – 57 odd
4.3 (p. 241): 3, 5, 9, 11, 17, 19, 21, 33, 35
2.3 (p. 74): 7 – 17 odd, 29, 31, 33
2.4 (p. 85): 9 – 15 odd, 21, 25, 27, 41, 43; p.89: 1, 9, 13, 17, 19
5.1 (p. 274): 21 – 51, 69 – 121, 133 – 155 odd
5.2 (p. 282): 33 – 63, 81 – 85 odd
5.4 (p. 299): 5 – 23, 43 – 61 odd, 89, 93
6.1 (p. 324): 1 – 19, 33 – 43, 47 – 51 odd
6.2 (p. 332): 5 – 43, 59 – 63 odd
6.3 (p. 337): 7 – 15 odd, 21, 23
8.3 (p. 450): 37 – 45 odd
8.5 (p. 465): 99 – 104 all
6.5 (p. 350): 3 – 31 odd, 55, 58, 60
9.2 (p. 511): 5 – 15, 19 – 23 odd
9.5 (p. 536): 5 – 19 odd
10.2 (p. 562): 3 – 11, 21 – 35 odd
10.3 (p. 573): 5 – 13 odd; 23, 25
7.2 (p. 377): 23 – 39, 43 – 73, 77 – 81 odd
7.4 (p. 392): 15, 25 – 35 odd, 39
9.5 (p. 536): 31 – 41 odd
8.2 (p. 441): 11 – 33, 61 – 75 odd
8.3 (p. 450): 21 – 31 odd, 47 – 59 odd, 63, 67, 71
11.2 (p. 620): 5 – 11, 15 – 25 odd
11.3 (p. 626): 3 – 25, 29 – 43 odd, 47, 61, 63
11.6 (p. 654): 27 – 30 all

Schedule is subject to change.

Augusta Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, veteran status, or citizenship status (except in those special circumstances permitted or mandated by law). For information of Title IX, contact the Title IX Coordinator at 706-771-4081 in Room 129 in Building 100. For information on ADA/504, contact the ADA/504 Coordinator at 706-771-4067 in the 1300 Building.

For additional information about school policies and procedures, refer to the Augusta Technical College Catalog or Student Handbook.