INSTRUCTOR: Carolynn Campbell ReedWEBSITE: <a href="http://www.austincc.edu/creed">http://www.austincc.edu/creed</a>EMAIL: <a href="mailto:creed@austincc.edu">creed@austincc.edu</a>WEBSITE: <a href="http://www.austincc.edu/creed">http://www.austincc.edu/creed</a>EMAIL: <a href="mailto:creed@austincc.edu">creed@austincc.edu</a>MAILING ADDRESS:PHONE/OFFICE: <a href="mailto:223-5825/EVC9406">223-5825/EVC 9406</a>MAILING ADDRESS:OFFICE HOURS: <a href="mailto:wed:12pm-2pm">Wed: 12pm-2pm</a>Carolynn ReedOr by appointment3401 Webberville Road, Austin, TX 78702

**MATD 0370 ELEMENTARY ALGEBRA.** A course designed to develop the skills and understanding contained in the first year of secondary school algebra. Topics include review of operations on real numbers, graphing linear equations, solving linear and quadratic equations, solving systems of linear equations, polynomials, factoring, and applications.

**Course Prerequisite:** C or better in MATD 0330 or MATD 0332, C or better in NCBM 0270, TSI score of 336+, or any TSI score below 336 with an ABE score of 5 or 6.

**TEXT:** *Elementary Algebra, Concepts and Applications,* 10<sup>th</sup> Ed. by Bittinger & Ellenbogen, Pearson You have 2 options – choose ONE. **MyMathLab is required for this course. A physical textbook is not necessary since MyMathLab contains an eText.** 

- MyMathLab plus eText purchase at: <u>www.pearsonmylab.com</u>
- Student 3-hole punched with MyMathLab ISBN 9780134772370

MyMathLab is required for this course - Refer to the handout: Information about MyMathLab

CALCULATOR: Students need a scientific calculator. Graphing calculators are not allowed.

## **COURSE RATIONALE**

Elementary Algebra is designed to provide you with the mathematical foundation and personal confidence to enable you to use mathematics in your future life. MATD 0370 is designed to prepare you for the NCBM 0214/MATH 1314 corequisite, or for MATD 0390 (Intermediate Algebra) followed by MATH 1324 (Math for Business and Economics).

**If you need MATH 1332 (College Math),** take either NCBM 0185/MATH 1332 or MATD 0385/MATH 1332 corequisite options.

**If you need MATH 1342 (Elementary Statistics)**, take either NCBM 0142/MATH 1342 or MATD 0342/MATH 1342 corequisite options.

Successful completion of NCBM 0185, NCBM 0142, MATD 0385, MATD 0342, or MATD 0485 will make students TSI complete without retesting.

## INSTRUCTIONAL METHODOLOGY

This course is taught online as a distance learning course.

#### Communication

I will use your ACC email address to communicate with you. In a traditional class, you can ask questions and get an immediate answer. A distance learning class is different. You will have to take the initiative and ask questions if you do not understand the material. Send an email if you have questions - the response is usually not instantaneous, but I will answer as quickly as I can. Move on to other material if you can as you wait for my response. I will usually respond to emails within 24-48 hours.

## **GRADING SCHEME**

Online Homework – 6% Written Homework – 6% Quizzes – 8% Four Exams – 16% each (total of 64%) Comprehensive Final Exam – 16%

#### **GRADING SCALE**

A: 90 or more; B: 80-89; C: 70-79; D: 60-69; F: 59 or less

## HOMEWORK

Homework problems consist of two types: online homework in MyMathLab and written homework in the form of worksheets. Both are required and contribute to your homework grade. The deadline for each homework assignment is on the Weekly Schedule handout.

## **ONLINE HOMEWORK**

MyMathLab is interactive and will offer help and tutorials while you are working on the homework. Online homework is graded on correctness. You must complete each assignment with a 70% or better in order to move to the next assignment. You may attempt each problem as many times as necessary. Online homework can be completed late at no penalty.

## WRITTEN HOMEWORK

Written homework assignments, in the form of worksheets, will be due most weeks. Written homework is graded by completion and correctness. Guidelines, details and deadlines are on the Weekly Schedule handout. The worksheets are located on my website. Homework can be submitted electronically in Blackboard, in person, by campus mail or in my mailbox (time/date stamped), or by U.S. mail. Homework is not accepted by email or fax. The preferred method for submitting written homework is Blackboard. With this method, you will receive feedback more quickly. Written homework is accepted up to two weeks late with a 10% penalty.

## QUIZZES

Quizzes are online in MyMathLab. You must complete the online homework assignments with a 70% or better for each section covered in the quiz before you can take the quiz. Each quiz may be taken up to three times. The highest score out of the three attempts will be recorded. You must use at least one of your quiz attempts before you will be allowed to move on to the next online homework assignment.

The deadline for each quiz is on the Weekly Schedule handout. Any quiz taken 2 or more days before the due date will receive a 10% bonus. Any quiz taken after the due date will have 10% deducted from the score.

## EXAMS

There will be four exams plus a comprehensive departmental final exam. All exams are paper and pencil and will be given in the Testing Center. The exam deadlines are on the Weekly Schedule handout. You need an ACC ID to take an exam in the Testing Center. Please read the handout on Testing Center guidelines. **There are no retests, late or make-up exams.** 

## MISSED EXAM

Your lowest exam grade will be replaced with your grade on the Final Exam (if it's higher). This includes a 0 from a missed exam. You can only replace one exam grade and you cannot replace your grade on the final exam. If you miss the final exam, you will receive a 0 on the exam.

# HOW TO PROGRESS THROUGH THE COURSE

**1) Videos and eText In MyMathLab**: Each section contains online video lectures and example problems. This is where you should start. View the lectures and pause as needed to work through examples before working any homework problems. Read through the pages in the textbook for a more thorough explanation. The eText includes animations and You Try It problems.

**2) Online Homework:** After viewing the video lectures, start on the online homework problems from the corresponding sections in MyMathLab. These problems often have instructional aides and give immediate feedback. You must complete each assignment with a 70% or better before continuing to the next section. You may attempt each problem as many times as necessary. If you are stuck, get help from me or from the Learning Lab. See the Weekly Schedule for deadlines.

**3) Online Quizzes:** Take the online quiz shortly after completing the homework for all of the sections covered in the quiz. You must complete all of the online homework in the corresponding sections with a score of 70% or better before attempting the quiz. See the Weekly Schedule for deadlines.

**4) Written Homework:** Start on the written homework after completing some of the online homework for the week. You must show your work and work each problem correctly to receive full credit. Homework can be submitted electronically in Blackboard, in person, by campus mail (time/date stamped) or by U.S. mail. See the Weekly Schedule for details, due dates and guidelines.

**5) Exam Reviews:** A review sheet (including answers) for each exam is available on my website and in Blackboard. You may turn in Exam Reviews for up to 5 points extra credit applied to the corresponding exam. Reviews are graded on completion. You must show your work for credit since answers are given. Reviews are due on the exam deadline and should be submitted in the same manner as Written Homework. **Scanned reviews are only accepted as ONE pdf document.** 

**6) Exams:** No notes or books are allowed for the exams. Four-function calculators are allowed for Exam 1. Scientific calculators are allowed for the remaining exams. Take the exam in the ACC Testing Center you indicated in your orientation by the deadline in the Weekly Schedule.

## **TESTING CENTER POLICY**

Students using the Academic Testing Center must govern themselves according to the Student Guide for Use of ACC Testing Centers and should read the entire guide before going to take the exam. To request an exam, one must have:

- ACC Photo ID
- Course Abbreviation (MATD), Course number (0370), synonym (62160), section (148)
- Instructor's Name (Carolynn Reed)

Do NOT bring cell phones to the Testing Center. Having your cell phone in the testing room, **regardless of whether it is on or off**, will revoke your testing privileges for the remainder of the semester. ACC Testing Center policies can be found at: <u>http://www.austincc.edu/support-and-services/services-for-students/testing-services/instructional-testing/testing-center-guidelines</u>

## LEARNING LABS

ACC main campuses have Learning Labs that offer free first-come first-serve tutoring. Software and videotapes to support this text are also available in the Learning Lab. The hours, contact information and locations are located at <u>http://www.austincc.edu/support-and-services/tutoring-and-academic-help/learning-lab-services</u>.

## Student and Instructional Services

ACC strives to provide exemplary support to its students and offers a broad variety of opportunities and services. Information on these services and support systems is available <u>here</u>.

## **COMPUTER LAB**

ACC main campuses have Computer Labs available for students with an ACC ID. For hours, locations, and contact information: <u>http://irt.austincc.edu/ict/computer/studentdescript.php</u>

## ATTENDANCE/WITHDRAWALS - last day to withdraw is Monday, July 29

Since this is a distance learning course, there is no class meeting time. So attendance is monitored by student progress.

- If you are more than 1 week behind in the class, you may be withdrawn from the course.
- If you miss more than one exam, you may be withdrawn from the course.

It is the student's responsibility to initiate all withdrawals in this course. I may withdraw students for lack of progress, but make no commitment to do this for the student. After the withdrawal deadline, neither the student nor the instructor may initiate a withdrawal.

Students who enroll for the third or subsequent time in a course taken since Fall 2002, may be charged a higher tuition rate, for that course.

State law permits students to withdraw from no more than six courses during their entire undergraduate career at Texas public colleges or universities. With certain exceptions, all course withdrawals automatically count towards this limit. Details regarding this policy can be found in the ACC college catalog.

## REINSTATEMENT

Students who withdrew or were withdrawn will not be reinstated unless they have completed all course work, projects, and tests necessary to place them at the same level of course completion as the rest of the class. Reinstatement is up to the instructor's approval.

## IN PROGRESS GRADES (rarely given)

To earn an "IP" grade, the student must be doing all assigned work, but not earning a grade of C or higher in the course. Students who are given an IP grade must register and pay tuition for the same course again to receive credit and should not go on to the next course. A maximum of 2 IP grades can be awarded in any one course.

## **INCOMPLETES** (rarely given)

To receive a grade of "I", a student must have taken all examinations, be passing, and after the last date to withdraw, have a personal tragedy occur which prevents course completion.

## TSI Warning for students who are not TSI complete\*

Students who are not TSI complete in math are not allowed to enroll in any course with a math skill requirement. All students are required to be "continually in attendance" in order to remain enrolled in this course. If this is the only developmental class you are enrolled in, and you withdraw yourself from this course or are withdrawn by your instructor, then:

a) You may be withdrawn from courses that you should not be enrolled in, such as any class with a math skill requirement.

b) You will continue to face more serious consequences, up to being restricted to only registering for developmental courses, until you complete the required developmental math course or satisfy the TSI requirement in another way. More information can be found at

https://sites.google.com/a/austincc.edu/math-students/choose/matd/tsi

\* If you are unsure whether or not this warning applies to you, see an ACC advisor immediately.

## **Importance of Completing Developmental Course Requirements**

The first steps to achieving any college academic goal are completing developmental course requirements and TSI requirements. The first priority for students who are required to take developmental courses must be the developmental courses. TSI rules state that students are allowed to take college credit courses, if they are fulfilling their developmental requirements. Because successful completion of dev courses is so important, ACC will intervene with any student who is not successfully completing developmental requirements. This intervention can mean a hold on records, requiring developmental lab classes, and monitoring during the semester.

**Statement on Students with Disabilities:** Each ACC campus offers support services for students with documented disabilities. Students with disabilities who need classroom, academic or other accommodations must request them through the Student Accessibility Services (SAS). Students are encouraged to request accommodations when they register for courses or at least 3 weeks before the start of the semester, otherwise the provision of accommodations may be delayed.

Students who have received approval for accommodations from SAS for this course must provide the instructor with the 'Notice of Approved Accommodations' from SAS before accommodations will be provided. Arrangements for academic accommodations can only be made after the instructor receives the 'Notice of Approved Accommodations' from the student. Students with approved accommodations are encouraged to submit the 'Notice of Approved Accommodations' to the instructor at the beginning of the semester because a reasonable amount of time may be needed to prepare and arrange for the accommodations. Additional information can be found <u>here</u>.

**Statement on Scholastic Dishonesty:** A student attending ACC assumes responsibility for conduct compatible with the mission of the college as an educational institution. Students have the responsibility to submit coursework that is the result of their own thought, research, or self-expression. Students must follow all instructions given by faculty or designated college representatives when taking examinations, placement assessments, tests, quizzes, and evaluations. Actions constituting scholastic dishonesty include, but are not limited to, plagiarism, cheating, fabrication, collusion, and falsifying documents. Penalties for scholastic dishonesty will depend upon the nature of the violation and may range from lowering a grade on one assignment to an "F" in the course and/or expulsion from the college. See the <u>Student Standards of Conduct</u> and <u>Disciplinary Process</u>.

**Student Discipline Policy:** Classroom behavior should support and enhance learning. Behavior that disrupts the learning process will be dealt with appropriately, which may include having the student leave class for the rest of that day. In serious cases, disruptive behavior may lead to a student being withdrawn from the class. See the <u>Disciplinary Process</u>.

**Student Rights and Responsibilities:** Students at the college have the rights accorded by the U.S. Constitution to freedom of speech, peaceful assembly, petition, and association. These rights carry with them the responsibility to accord the same rights to others in the college community and not to interfere with or disrupt the educational process. Opportunity for students to examine and question pertinent data and assumptions of a given discipline, guided by the evidence of scholarly research, is appropriate in a learning environment. This concept is accompanied by an equally demanding concept of responsibility on the part of the student. As willing partners in learning, students must comply with college rules and procedures.

**Academic Freedom:** Institutions of higher education are conducted for the common good. The common good depends upon a search for truth and upon free expression. In this course the professor and students shall strive to protect free inquiry and the open exchange of facts, ideas, and opinions. Students are free to take exception to views offered in this course and to reserve judgment about debatable issues. Grades will not be affected by personal views. With this freedom comes the responsibility of civility and a respect for a diversity of ideas and opinions. This means that students must take turns speaking, listen to others speak without interruption, and refrain from name-calling or other personal attacks.

## Use of ACC email

All College e-mail communication to students will be sent solely to the student's ACCmail account, with the expectation that such communications will be read in a timely fashion. ACC will send important information and will notify you of any college related emergencies using this account. Students should only expect to receive email communication from their instructor using this account. Likewise, students should use their ACCmail account when communicating with instructors and staff. Instructions for activating an ACCmail account can be found <u>here</u>.

**Safety Statement:** Austin Community College is committed to providing a safe and healthy environment for study and work. You are expected to learn and comply with ACC environmental, health and safety procedures and agree to follow ACC safety policies. Additional information on these can be found <u>here</u>. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the Emergency Procedures poster and Campus Safety Plan map in each classroom. Additional information about emergency procedures and how to sign up for ACC Emergency Alerts to be notified in the event of a serious emergency can be found <u>here</u>. Please note, you are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities.

**Concealed Handgun Policy:** The Austin Community College District concealed handgun policy ensures compliance with Section 411.2031 of the Texas Government Code (also known as the Campus Carry Law), while maintaining ACC's commitment to provide a safe environment for its students, faculty, staff, and visitors. Beginning August 1, 2017, individuals who are licensed to carry (LTC) may do so on campus premises except in locations and at activities prohibited by state or federal law, or the college's concealed handgun policy. It is the responsibility of license holders to conceal their handguns at all times. Persons who see a handgun on campus are asked to contact the ACC Police Department by dialing 222 from a campus phone or 512-223-7999. *Refer to the concealed handgun policy <u>here</u>.* 

#### Learning Outcomes

Upon successful completion of this course, a student will be able to:

- 1. Perform operations involving integers, fractions, decimals, percents, signed exponents, scientific notation, ratios and proportions.
- 2. Solve problems involving geometric figures including perimeter, area, similarity, and the Pythagorean Theorem. Analyze, interpret, and solve problems from line graphs, bar graphs, pictographs, and pie charts.
- 3. Use appropriate forms of linear equations to identify slope, intercepts, and to graph lines. Find linear equations from given points and graphs of lines. Find solutions to systems of two equations by graphing.
- 4. Solve applied problems by defining variables, writing equation(s), solving equation(s), and writing an answer to the question in context. Problems requiring quadratic equations are included as well as problems requiring single linear equations and systems of linear equations.
- 5. Factor and perform operations to combine and/or simplify expressions and solve equations including numerical, some polynomial, and some rational expressions and equations. Simplify some radical expressions.
- 6. Use mathematical language, symbols, and notation to communicate mathematical concepts, demonstrate reasoning, and solve problems.

#### **Course Objectives:**

These can also be found at: https://sites.google.com/a/austincc.edu/math-students/documents/objectives

#### **Overall objectives:**

- A. Students will feel a sense of accomplishment in their increasing ability to use mathematics to solve problems of interest to them or of use in their chosen fields. Students will attain more positive attitudes based on increasing confidence in their abilities to learn mathematics.
- B. Students will learn to understand material using standard mathematical terminology and notation when presented either verbally or in writing.
- C. Students will improve their skills in describing what they are doing as they solve problems using standard mathematical terminology and notation.

1. Description and classification of whole numbers, integers, and rational numbers using sets and the operations among them

- a. identify and use properties of real numbers
- b. simplify expressions involving real numbers
- c. evaluate numerical expressions with integral exponents
- 2. Polynomials
  - a. distinguish between expressions that are polynomials and expressions that are not

- b. classify polynomials in one variable by degree and number of terms
- c. simplify polynomials
- d. add, subtract, multiply (including the distributive law), and divide polynomials (including division by monomials, but excluding long division)
- e. factor polynomials in one or more variables (including factoring out the greatest common factor, factoring by grouping, factoring trinomials in which the leading coefficient is one, factoring trinomials in which the leading coefficient is not one, and factoring the difference of two squares)
- f. understand and use the exponent laws involving integer exponents
- g. convert numbers into and out of scientific notation and perform multiplication and division with numbers written in scientific notation
- 3. Solve linear equations in one variable involving integral, decimal, and fractional coefficients and solutions
- 4. Solve and graph linear inequalities
- 5. Application problems
  - a. write and evaluate linear expressions from verbal descriptions
  - b. solve application problems which lead to one of the following types of equations: linear equations in one variable, systems of two linear equations in two variables, quadratic equations, and rational equations with monomial numerators and denominators)
  - c. solve literal equations for a specified variable using addition and multiplication principles
  - d. use given data to estimate values and to evaluate geometric and other formulas
  - e. solve problems involving the Pythagorean theorem, similar triangles, and proportions
- 6. Linear equations in two variables
  - a. identify the relationship between the solution of a linear equation in two variables and its graph on the Cartesian plane
  - b. understand and use the concepts of slope and intercept
  - c. determine slope when two data points are given
  - d. graph a line given either two points on the line or one point on the line and the slope of the line
  - e. write an equation of a line given one point on the line and the slope of the line, or two points on the line
  - f. identify lines given in standard, point-slope, or slope-intercept forms and sketch their graphs
  - g. solve systems of linear equations
- 7. Quadratic equations
  - a. find solutions to quadratic equations using the technique of factoring and using the principle of square roots
  - b. recognize a need to use the quadratic formula to solve quadratic equations and solve quadratic equations by using the quadratic formula when some simplification of square roots is needed
- 8. Description and classification of irrational numbers
  - a. simplify radical expressions
  - b. use decimal approximations for radical expressions
- 9. Rational expressions
  - a. determine for which value(s) of the variable a rational expression is undefined
  - b. simplify rational expressions containing monomials, binomials, and trinomials
  - c. multiply and divide rational expressions containing monomials, binomials, and trinomials
  - d. add and subtract rational expressions with like denominators and rational expressions with unlike denominators (only monomials and binomials that do not require factoring)
- 10. Geometry
  - a. understand the difference between perimeter and area and be able to use formulas for these appropriately
  - b. solve application problems involving angles and polygons