Welcome to Intermediate Algebra, MATD 0390. To ensure your success in this course, you will need to read and understand all the information provided here and in the attached pages. Mathematics, and more specifically algebra, does not come naturally to most of us. To learn the topics and techniques presented in this course, you will need to work many problems to practice these skills. You should be prepared to spend a considerable amount of time and energy on the material. Please feel free to contact me at anytime during the semester if you need help. I will make every effort to be available to you for assistance.

Course Description (MATD 0390 Intermediate Algebra): A course designed to develop the skills and understanding contained in the second year of secondary school algebra. Topics include review of properties of real numbers, functions, algebra of functions, inequalities, polynomials and factoring, rational expressions and equations, radical expressions and equations, quadratic functions and their graphs, solving quadratic equations, and exponential functions. The same course is sometimes offered in a one hour (0190) and two hour (0290) format.


- You can access the chapters from the textbook covered in the first few days online at http://www.austinecc.edu/mthdept2/text/ password acc0390 before you buy your text.

MyMathLab access: In some sections of Intermediate Algebra, MyMathLab is required, and in others it is optional. Check with your instructor to find out if it is required for your section. All new textbooks purchased at an ACC bookstore include MyMathLab access. It is not included with the purchase of a used book, and may not be included with a new book purchased at a different bookstore. Refer to the handout Information about MyMathLab.

Supplemental Materials: Scientific calculator

Instructional Methodology: This class is conducted in a computer lab setting.

Course Rationale: This course is designed to prepare students for various college-level science and mathematics courses. After succeeding in this course, students may enroll in a number of courses in science, mathematics and various technical areas. These include General College Physics, General Chemistry, Magnetism and DC Circuits, AC Circuits, Manufacturing Materials and Processes, Math for Business and Economics, and College Algebra.

Prerequisite: C or better in Elementary Algebra, MATD 0370, or its equivalent knowledge, or a passing score on the MATD 0390 placement test. Additional information about ACC's mathematics curriculum and faculty is available on the Internet at http://www.austinecc.edu/math/.
COURSE EVALUATION/GRADING SCHEME:

Grades: Your final grade will be based on the standard ten point scale: A = 90-100, B = 80 – 89, C = 70 – 79, D = 60 – 69, F = below 60. See below for information on I and IP grades.

Written Homework: You will be required to complete all assigned problems listed on the weekly schedule. Due dates for each assignment are also listed. No late homework will be accepted without prior permission from me. The answers to many of the assigned problems can be found in the back of your book. You are encouraged to check your problems and ask questions, but in order to receive full credit for each problem you are required to show all your work. Your written homework average will account for 10% of your course grade.

MML Homework: You will also have online homework lessons in MyMathLab. Due dates for online homework are the same for the written homework. In order to move on to the next section, you must score 80% or better on the previous MML homework assignment. Due dates for each section of the online homework are the same as for the written homework. See the weekly schedule below for due dates. Your online homework average will account for an additional 10% of your course grade.

MML Quiz Average: You will have quizzes in MyMathLab. Each quiz will cover multiple (2-4) sections from your textbook. In order to take a quiz you must have completed the homework for the sections covered on the quiz. You must score 80% or higher to move on to the next section. You will have up to 3 attempts to take each quiz. If you do not score 80% or higher in one of your three attempts, see me immediately. Your MML quiz average will account for 10% of your course grade.

Tests: You will have a total of five tests for this course, including the final exam. Each test will be taken in the testing center. For details on testing center hours and policies see http://www.austincc.edu/testctr. The final exam will be a cumulative exam and may be used to replace your lowest test grade provided you score higher on the final. Therefore, no retests will be given. If for some reason you miss a test, you may request a make-up test or receive a zero and have the final exam count for the missed test. Make-up tests will be limited to one per semester and must be requested within 24 hours of the deadline of the missed test. There will be no make-up test for the final exam. All tests will be averaged equally, and the average will account for 70% of your course grade. Dates for the tests are listed below:

- Test 1 (Sections R.2 - 2.3) by Monday, September 19
- Test 2 (Sections 2.4 - 4.2) by Monday, October 10
- Test 3 (Sections 4.3 - 6.2) by Monday, November 7
- Test 4 (Sections 6.3 - 7.5) by Monday, November 28
- Final Exam by Monday, December 5

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 have a hold placed on your registration for the following semester. The Hold will require that you register for the next semester in person with an advisor or counselor and that you work with the Developmental Math Advisor during that semester.

c) 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 http://www.austincc.edu/math/tsiwarning.htm.

* 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, working with the Dev Math Advisor, and monitoring during the semester.

**Attendance:** Attendance in all developmental mathematics courses is required. Since we do not meet for class, attendance will be monitored by your progress in the software program. If you fall more than two weeks behind or have not done any work online in two weeks, you will be dropped from the course.

**Withdrawal Policy:** *(Last day to withdraw is Thursday, November 17.)* It is the student's responsibility to initiate all withdrawals in this course. The instructor may withdraw students for excessive absences (4) but makes no commitment to do this for the student. After the withdrawal date, neither the student nor the instructor may initiate a withdrawal.

**Reinstatement Policy:** Students who withdrew or were withdrawn generally 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.

**Incomplete Grade Policy:** Incomplete grades (I) will be given only in very rare circumstances. Generally, 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.

**In Progress Grades:** A student who is regularly attending, doing all assigned work but is still not earning a grade of C or higher, might be eligible for the IP (in progress) grade. An IP is a neutral grade with respect to the student’s GPA (it is not counted), but it might be treated like a W (non-completion) for the purposes of financial aid. Students who receive an IP grade are expected to retake (register and pay for) the course in the next semester they are enrolled at ACC. Students may not receive more than 2 IPs in this course (or in any given developmental course.)

**Course-Specific Support Services**

- **Learning Lab:** ACC main campuses have Learning Labs that offer free tutoring (first-come first-serve) in mathematics courses. The locations, contact information, and hours of availability of the Learning Labs are available from [http://www2.austincc.edu/tutor](http://www2.austincc.edu/tutor). Software and videotapes to support this particular text are available in the Learning Labs. Students who need regular tutoring are encouraged to use the Learning Labs before they get very far behind.

- **Software:** See description of MyMathLab under “Required Materials” in this handout.

- **Pearson tutoring:** Pearson has a tutoring center that is available by phone for students using any of their texts. Information about the service can be found at [www.aw-bc.com/tutorcenter/](http://www.aw-bc.com/tutorcenter/). Hours of operation are Sun-Thur: 4 PM - 11 PM Central time.
  
  Students toll-free: 1.800.877.3016
  
  Instructor info: 1.800.666.8801
  
  Fax: 1.877.262.9774
  
  Email Questions: mtutor@pearson.com

- **Videos on DVD:** These are available for viewing in the LRS and are recommended for students who miss class.

**Statement on Student Discipline:** 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. ACC’s policy on student discipline can be found in the Student Handbook page 32 or on the web at: [http://www.austinecc.edu/marketing/handbook/student_handbook_02-03.pdf](http://www.austinecc.edu/marketing/handbook/student_handbook_02-03.pdf).
Statement on Scholastic Dishonesty: Acts prohibited by the college for which discipline may be administered include scholastic dishonesty, including but not limited to, cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, work, research or self-expression. Academic work is defined as, but not limited to, tests, quizzes, whether taken electronically or on paper; projects, either individual or group; classroom presentations; and homework.

Statement on Scholastic Dishonesty Penalty: Students who violate the rules concerning scholastic dishonesty will be assessed an academic penalty which the instructor determines is in keeping with the seriousness of the offense. This academic penalty may range from a grade penalty on the particular assignment to an overall grade penalty in the course, including possibly an F in the course. ACC's policy can be found in the Student Handbook page 33 or on the web at: http://www.austincc.edu/marketing/handbook/student_handbook_02-03.pdf.

Statement on Students with Disabilities: Each ACC campus offers support services for students with documented physical or psychological disabilities. Students with disabilities must request reasonable accommodations through the Office of Students with Disabilities on the campus where they expect to take the majority of their classes. Students are encouraged to do this three weeks before the start of the semester. Students who are requesting accommodation must provide the instructor with a letter of accommodation from the Office of Students with Disabilities (OSD) at the beginning of the semester. Accommodations can only be made after the instructor receives the letter of accommodation from OSD.

Statement on 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.

Testing Center: ACC Testing Center policies can be found at: http://www.austincc.edu/testctr/  
Cypress Creek – CYP Room 1139  
Phone: 512.223.2075  
Hours: Monday – Friday: 8:00 am – 8:00 pm, Saturday: 9:00am – 4:00 pm, and Sunday 12:00pm – 5:00pm

Student Services: The web address for student services is: http://www3.austincc.edu/evpcss/rss/Default.htm. The ACC student handbook can be found at: http://www3.austincc.edu/evpcss/handbook/  

Instructional Services: The web address is: http://www3.austincc.edu/evpcss/newsemester/, then click on “Campus Based Student Support Overview”.

**Additional information about ACC's mathematics curriculum and faculty is available on the Internet at http://www.austincc.edu/math/*
Common Course Objectives for MATD 0390
(revised July 2009)

The following objectives are listed in a sequence ranging from the simple to the more complex. As such, this document should not be viewed as a chronological guide to the course, although some elements naturally will precede others. These elements should be viewed as mastery goals which will be reinforced whenever possible throughout the course.

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 useful 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.

Computational:

1. Evaluate a function using function notation.
2. Find the domain of a function.
3. Perform elementary arithmetic operations with functions.
4. Perform division of polynomials
5. Perform elementary arithmetic operations with rational expressions that require factoring up to and including the sum or difference of cubes.
6. Simplify a complex fraction, including one with negative exponents.
7. Simplify an expression with fractional exponents.
8. Simplify a radical expression, including rationalizing a monomial or binomial denominator.
9. Perform elementary arithmetic operations with complex numbers.

Equation and Inequality Solving:

1. Solve an absolute value equation.
2. Solve a rational equation, including one with a quadratic expression in the denominator.
3. Solve an equation with one radical.
4. Recognize an extraneous root.

Using Forms and Formulas

1. Graph a function, such as a simple absolute value or rational function, by completing a table and plotting points.
2. Solve a quadratic equation with real or non-real solutions.
3. Find the midpoint and the distance between two points.
4. Complete a square to rewrite an equation for a circle in standard form and identify its center and radius.
5. Determine if a formula, correspondence, table or graph represents a function.

Graphing:

1. Graph a linear inequality on the Cartesian plane.
2. Graph a system of linear inequalities on the Cartesian plane.
3. Graph and analyze a linear and quadratic function.
4. Sketch a quadratic function, written in the form f(x)=a(x-h)^2+k, using transformations.
5. Sketch a circle from its standard form.

Applications:

1. Represent English descriptions of numerical relationships in algebraic form.
2. Solve application problems including, but not limited to, linear and quadratic models, direct and inverse variation, and those requiring 2x2 systems of linear equations