Section Synonym Meeting time Meeting place
035 05124 MTWTh 12:15 – 2:50 pm SAC 1301

Instructor Christy Dittmar
Office 1313.11
Office hours* SAC 1313.11 MTWTh 11:40 – 12:10
3:00 – 3:40
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*Office hours are also available by appointment. To schedule an appointment, please send me an email or talk to me at the end of class.

Course description
MATD 0390 INTERMEDIATE ALGEBRA (3-4-0). 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.

Required materials
You can access the material from the first two chapters online at http://www.austincc.edu/mthdept2/text/. You will need: the following:
  ◦ password: acc0390
Optional: Shrink-Wrapped Bundle with Text and My Math Lab 0-321-28669
MyMathLab is an optional interactive online course that accompanies the text. You may purchase access to MyMathLab online from Addison Wesley for $39.95 at: www.mymathlab.com/buying.html
MyMathLab includes:
  ◦ Online access to all pages of the textbook
  ◦ Multimedia learning aids (videos & animations) for select examples and exercises in the text
  ◦ Practice tests and quizzes linked to sections of the textbook
  ◦ Personalized study guide based on performance on practice tests and quizzes
Visit www.mymathlab.com for more information. To use MyMathLab, you'll need:
  ◦ Course ID*: ID ACC16946
  ◦ Student access number: provided with purchase of MyMathLab access.
  ◦ Supplemental Materials: Rectangular coordinate graphing paper, scientific calculator.
Prerequisites:
Please make sure you have the necessary prerequisites for this course. That means you need a C or better in Elementary Algebra (MATD 0370) or its equivalent knowledge, or appropriate score on the ACC Mathematics Assessment Test taken before enrolling in ACC mathematics courses. If I feel you are not prepared for this course, I may choose to withdraw you. If you have any questions about your preparation for the course, please come and talk to me about it.

Grading:
There will be 4 exams and a comprehensive final during the term, each of which will count equally towards your grade. If the final exam score is higher than your lowest test score, I will replace that test score with your final exam score. Points will be assigned as follows for your grade:

| Test 1, 2, 3, and 4 | 100 points each (400 points total) |
| Final exam: | 100 points |
| Homework and In-class work: | 100 points (percent of total) |
| Total: | 600 points |

Grades will be assigned as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90% to 100%</td>
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<tr>
<td>B</td>
<td>80% to 89%</td>
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<tr>
<td>C</td>
<td>70% to 79%</td>
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<tr>
<td>D</td>
<td>60% to 69%</td>
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<tr>
<td>F</td>
<td>Below 60%</td>
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<tr>
<td>W</td>
<td>Withdrawn by student or instructor prior to July 31</td>
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</tbody>
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In-Progress Grade
If a student is regularly attending, doing all assigned work but is still not earning a grade of C or higher, may be eligible for the IP (in progress) grade. Students who receive an IP grade are expected to register and pay for the course again in the following semester. A maximum of 2 IP grades can be awarded in any one course.

Missed tests
The final exam score will count as a test grade and, in addition, may replace a missed test or the lowest test score (thus counting as two tests).

All tests will be given in class. In the event of an official, documented emergency preventing a student from taking a test or the final exam, a makeup may be arranged. I must be notified no later than the day and hour of the missed test. If I am not notified in time, or documentation is not available, the student will receive a score of 0 for the missed test. Up to one missed test may be replaced by the final exam.

The final exam will be given in class, on the last day of the term.

Homework

Homework assignments will be collected every day in class, according to the Homework Schedule. Assignments can be turned in during class or before class in the faculty mailroom, on or before the due date. It is your responsibility to make sure I have received it.

Homework is graded strictly according to completeness and accuracy. No late assignments will be accepted, regardless of the reason and of whether you attend class. The lowest 5 homework scores will be dropped to calculate your grade.
Attendance, Withdrawal, and Reinstatement

It is important to attend class regularly. An excess of 4 absences throughout the semester may result in your being dropped from the course. Protect your position in the class by saving absences for real emergencies or illness. While I may drop a student for various reasons, bear in mind that it is always the student's responsibility to make sure you have dropped the course. Never assume any ACC instructor has dropped you from a course until you have checked with administration.

The deadline for withdrawal is July 31. After that date no withdrawals may be initiated by the student or by the instructor.

TSI Warning: If you are relying on this course to meet a requirement that you be in mandatory remediation in mathematics this semester*, then

i. if you are not "continually in attendance" in this course, you should be withdrawn from the course by your instructor,

ii. if you withdraw yourself from this course or are withdrawn by your instructor, you will be automatically withdrawn from all of your other college courses if this is the only TSI-mandated course you are taking.

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

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.

How to succeed in Intermediate Algebra:

Always show your work:

Here's the process I follow for each problem when I'm grading an exam.

フル credit is given for a problem with thorough, logical steps and a correct answer in the correct form.

Partial credit may be given for demonstration of relevant knowledge. Work through the problem as well as you can. Explain what you think went wrong. Make it as clear as possible what approach you took.

Whether the answer is correct or incorrect, if insufficient work is provided or if the work does not demonstrate knowledge of the problem, no credit is given for the entire problem.

Don't fall behind in class!

If material in class is unclear, or if you have difficulty with the homework, do one or more of the following immediately and persist until you can work out problems with comfort.

Ask questions in class when you don't understand something

See me in office hours to go over the material one-on-one. Students who seek help in office hours are often surprised at how much it helps, and even start to enjoy working through problems that once seemed difficult.

Get free first-come-first-serve tutoring in the Learning Lab. For hours and information for learning labs at all campuses, visit their website, at http://www.austincc.edu/tutor/

Read through the textbook again and work on problems from that section. Start with the simplest and work your way up.

Do not let an entire week go by before getting help. New material often relies on material from previous weeks as essential building blocks, without which you will almost surely feel lost.

Do your own work

All work done on exams must be your own work and with only the permitted resources present (i.e. calculator, notes if allowed). Have the proper respect for yourself and your education to learn the material and accurately represent your own knowledge on all work done for class.
Course Rationale

As with all developmental math courses, Elementary Algebra is designed to provide you with the mathematical foundation and personal confidence to enable you to use mathematics in your future life. This course is designed to prepare you for MATD 0390 Intermediate Algebra and the algebra-based courses which follow it. It also may provide you with sufficient preparation to be able to pass the math portion of the THEA test. It also offers you one way to prepare for MATH 1332 and 1342, after you have passed the math portion of the THEA test.

Additional services and policies at ACC.

Testing Center Policies can be found at: http://www.austincc.edu/testctr/

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/handbk/toc.htm.

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

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.

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/marketng/handbook/student_handbook_02-03.pdf.

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.austincc.edu/marketng/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.

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.
Common Course Objectives for MATD 0390

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 elementary arithmetic operations with rational expressions that require factoring up to and including the sum or difference of cubes.
5. Simplify a complex fraction, including one with negative exponents.
6. Simplify an expression with fractional exponents.
7. Simplify a radical expression, including rationalizing a monomial or binomial denominator.
8. Perform elementary arithmetic operations with complex numbers.
**Equation and Inequality Solving:**

1. Solve an absolute value equation.
2. Solve an absolute value inequality of the form $|x|<5$ or $|z|>6$.
3. Solve a rational equation, including one with a quadratic expression in the denominator.
4. Solve an equation with one radical.
5. 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. Graph exponential functions using tables.
6. 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.