

**Voice Mail:**

**Text:** Intermediate Algebra, 7<sup>th</sup> Edition by Bittinger and Ellenbogen

**Prerequisites:** Completion of Math 050, or equivalent, with a grade of "C" or better, or appropriate score on the assessment or placement test.

**Materials:** Textbook, notebook with paper, graph paper, ruler, pencil, and eraser.  
**Work done in pen will not be accepted. NO CALCULATORS**

**Course Description:**

The successful Mathematics 90 student can distinguish between members of the natural, whole, integer, rational, real and complex number sets, solve quadratic, rational, absolute value and radical equations, related applications and inequalities, factor polynomials, graph quadratic and square root expressions as well as simplify expressions containing radicals or rational exponents. This student can also evaluate function notation, utilize the vertical line test, determine the domain and range of a function from its graph, compare equations of conic sections and construct their graphs, graph exponential functions and formulate their logarithmic equivalents and simplify utilizing properties of logarithms.

**Course Objectives:** Upon successful completion of this course, the student will be able to do the following:

1. Distinguish between members from the sets of natural, whole, integer, rational, real and complex numbers (1.1, 7.8);
2. Solve quadratic (8.1, 9.2), rational (6.4), absolute value (4.3) and radical (7.6) equations;
3. Solve quadratic (8.3) and rational (6.5) applications;
4. Solve quadratic inequalities and absolute value inequalities of the form  $|ax + b| > n$ ,  $|ax + b| < n$ ,  $|ax + b| \leq n$  and  $|ax + b| \geq n$ , where  $n$  can be positive, negative or zero (4.3);
5. Factor polynomials of the form  $u^3 + v^3$  and  $u^3 - v^3$  where  $u = ax$  and  $v = cx$  (5.6);
6. Simplify complex fractions (6.3);
7. Graph quadratic functions (8.6, 8.7);
8. Simplify expressions containing integer (1.6) and rational (7.2) exponents and radical expressions (7.1);
9. Evaluate function notation and utilize the Vertical Line Test (2.2);
10. Determine the domain and range of a function given its graph (2.2);
11. Solve a system of three equations in three variables (3.4);

12. Write the square root of a negative radicand utilizing a factor of  $i$  (7.8);
13. Graph exponential functions (9.2); Convert logarithmic form to exponential form (9.3);
14. Graph equations of circles (10.1) and ellipses (10.2).

(NOTE: Decimals in parentheses above that follow a course objective correspond to text section(s) containing content for that objective.)

**Grading Policy:**

The scores you earn on quizzes, midterm exams and a final examination will determine your course grade. The points possible for each of these items are as follows:

<u>Item</u>	<u>Points Possible</u>
Quizzes (6 x 25)	150
Test 1	150
Test 2	150
Test 3	150
Final Examination	200
<b>Total</b>	<b>800</b>

Course grades will be determined utilizing the following scale:

<u>Course Grade</u>	<u>Points Earned</u>
A	720 – 800
B	640 – 719
C	560 – 639
D	480 – 559
F	0 – 479

**Homework:**

Homework and reading will be assigned for each day of the course. To be successful in the class it is of extreme importance that you keep up with the work. You are encouraged to work with a classmate when trying to solve these problems.

**Homework will not be collected.**

Homework questions will be answered in class but I encourage you to visit the **Learning Center** often.

**Quizzes & Exams:**

You will have eight (8) quizzes worth 25 points each, three (3) tests worth 150 points each and a final exam worth 200 points. The quizzes will be given at the end of the lecture. The quizzes can be in class or take home.

You will **not** be allowed to use **calculators, notes, or your book during quizzes and exams**. If you miss an exam or a quiz, you will receive a 0. There will be **NO make-up quizzes for any reason**, but you can miss two quizzes and it will not count against you. Make-up exams WILL NOT be given without serious and compelling reasons for your absence. If you are unable to make one of these exams, please let me know no later than the time the test is scheduled.

Test 3 will be comprehensive. If you get a higher score on test 3 than on the other 2 tests, then you can replace the lowest score of test 1, or test 2 with the same amount of point earned on test 3. Test 3 cannot be replaced with any other test.

**Final Exam:** The final exam will be held on Thursday, December 10 from 3:30 until 6:00. This exam is comprehensive and there will be absolutely **NO** make-ups of the final exam. If a student does not show up for the final, they will not pass the class.

**Suggestions:**

- Keep an organized notebook for this course.
- Study all your homework and quizzes before you take a test.
- Look at other problems besides the homework (practice).
- See your instructor or the learning center about the homework or any other questions you may have about the course.
- If it helps rewrite your notes and make sure you understand the material.

**Attendance Policy:** **You may be dropped after missing the equivalent of two full class meetings.** Remember that every lesson builds on the lesson from the previous day, so that if you miss a class you will have trouble understanding the next day's lesson. If you miss a half hour of class, you will be considered absent for one full class meeting. If you arrive late to class, you will be considered absent for one-half (1/2) of a full class meeting. If you leave before the instructor has dismissed the class, you will be considered absent for one-half (1/2) of one full class meeting. Also note that you are responsible for all material covered and announcements given in class.

If you know ahead of time that you will be late for a class or must leave a class early, please notify the instructor before doing so. If you do so, then you might not be penalized. Remember to sit near an exit if you must leave early.

The purpose of the attendance policy is to help reduce disruptions to the learning environment. Students who arrive to a class late or leave early create distractions for EVERYONE. Enforcement of the attendance policy will help ensure a classroom environment suitable for the successful study of mathematics.

**Classroom Behavior:** As a courtesy to fellow students as well as the instructor, you should remain quiet during class time unless you are asking the instructor a question or answering a question posed by the instructor. If you are disrupting the class, you will be given only one warning. If you disrupt the class again, you will be excused from class for the remainder of the day. You will be marked absent for that entire class meeting.

Cell phones, pagers, and other devices capable of electronic communication must be turned off during lectures and exams. These devices must not be visible at all during any class.

As is the case with the attendance policy, the purpose of the classroom behavior policy is to help reduce disruptions to the classroom environment. Classroom disruptions include, but are not limited to, speaking to anyone other than the instructor during class time and interrupting the instructor or a fellow student while that individual is speaking.

**Cheating:** Students are expected to conduct themselves in a professional manner at all times. Using or giving improper assistance during an exam will not be tolerated. If you are caught cheating on a test or on the final examination, you will receive a score of zero points for that examination and appropriate disciplinary action will be taken.

**Students with Disabilities:**

If you have a documented disability that limits major life activity which may have some impact on your work in this class and for which you may require accommodations, please notify the Disabled Students Program and Services. DSPS phone number (760) 245-4271 ext. 2212. Location: Student Service 2, Building 50.

**Drop Dates:**

Fall semester begins	August 25
The last day to drop a full-term course <u>without</u> a "W":	Nov. 4.
Veteran's Day Holiday.(No classes)	Nov. 10
Thanks giving Holiday.(no classes)	Nov. 27 – Nov. 30
<b>Final Exam</b>	<b>Dec. 11</b>