MATH 99CM: INTERMEDIATE ALGEBRA
Winter, 2008

Instructor: Carol Avery (you may address me as Mrs. Avery, Ms. Avery, or Carol)
Office: Bldg. 20, Room 6
Office Hours: M-F 2:00-3:00 pm (or by appointment). Please make use of my office hours if you have any questions or need extra help with the course material. I also work in the MARC (Bldg. 19-22) Tu-F from 8:30-9:20.
Phone: 253.460.4429 e-mail: cavery@tacomacc.edu
Webpage: http://www.tacomacc.edu/home/cavery/Math99/Math99CM-home.htm

Description & Objective: Algebraic operations and concepts, solving equations and inequalities including quadratic equations, algebraic fractions, exponents, roots and radicals, graphing of linear and quadratic functions, and introduction to logarithms. Scientific calculator required.

Learning Objectives: The abbreviation following each objective refers to the College-Wide Learning Outcomes: COM=Communication; CRT=Critical Thinking; IIT=Information and Information Technology; RSP=Responsibility; LWC= Living and Working Cooperatively. Upon successful completion of this course, the student should be able to:

1. Use function notation. (CRT, COM)
2. Understand linear functions from an algebraic, graphical, numeric, and verbal perspective. (CRT, COM)
3. Use both set builder and interval notation to describe subsets of the real number line, their intersections, and their unions. (CRT, COM)
4. Perform operations on and simplify radical expressions. (CRT)
5. Solve radical equations. (CRT)
6. Apply and solve quadratic equations, including using the quadratic formula. (CRT)
7. Understand graphical applications of quadratic functions. (CRT)
8. Create and use direct and inverse variation models. (CRT)
9. Use negative exponents, rational exponents, and scientific notation. (CRT, COM)
10. Understand exponential functions from the numerical, graphical, and algebraic perspective. (CRT, COM)
11. Understand logarithmic functions as inverses of exponential functions. (CRT, COM)
12. Use the distance and mid-point formulas.
13. Understand circles from the algebraic and graphical perspectives. (CRT)
14. Use the above concepts in applications. (CRT)
15. Use correct English to write clear explanations of mathematical reasoning. (COM)
16. Use a scientific calculator appropriately. (IIT)

Prerequisite: MATH-090 with a "C-" or better or assessment above MATH-090; READ-085 with a "C" or better or assessment above READ-085. If it should come to the attention of the instructor that you do not meet the prerequisite requirements, you will be administratively withdrawn from class. There are no exceptions

Course Instruction: This is a computer mediated learning course that utilizes interactive mathematical software to deliver the content of the course. You are expected to view the "Instruct" material for each section, do some practice problems from each section, and complete each chapter certification on your own. The instruction for this class will be mainly delivered through the Hawkes software. Classroom attendance is required on Tuesdays and Thursdays, when I will collect homework, give quizzes, and cover concepts and places for common mistakes. I also will be in the classroom on Monday, Wednesdays and Friday to provide help and answer questions. I encourage you to come to class every day to work independently or with other students and to ask questions of your instructor.
**Required Materials for Class:**

- Pencils with good erasers (mechanical pencils OK)
- Graph paper (grid no smaller than 5 squares/inch)
- A SCIENTIFIC calculator (TI-30XIIS recommended)
- Small ruler or straight edge
- 3-ring binder (recommended)

**Course Requirements:** Grades will be based upon a number of factors, including section certification, written homework, quizzes, and exams. These areas are detailed as below:

**Section Certification:**

Each section of the required software has a "Certification" quiz. (Sometimes this is broken into several subsections.) You must pass that quiz at the end of each section by the start of class on the due date given on in your Hawkes Learning grade book. Either you succeed in certifying, or you don't. (The software allows you to attempt certification multiple times. It doesn't matter how many attempts you make at certification, only whether you eventually do certify or not.) Certification is worth 3 points (per quiz). If you certify on time, you will get 3 points. If you certify up to a week late, then you will get 2 points. If you certify more than one week late, you will get 1 point. (This one point is available for late certification until the final exam is started.) **Your 3 lowest section certification scores will be dropped when calculating the final grade.**

You may not take an exam early unless you have certified in each (sub-)section covered by the test. You are expected to take each test by the test date indicated on the class website. If you have not certified in a section covered by the test by the test date, you must still take the test on that date.

**Written Homework**

Problems for written homework assignments come out of the text, with 4-6 problems from each (sub-)section certification in the Hawkes software. **You should plan to work on homework each day.** Written homework will be graded not only for correctness, but also for how the work is laid out on the paper (see Homework Guidelines). Your work must be clear and easy to follow, or you will not receive full credit for it, even if the work is correct. **Graphs must be drawn according to the Math Department Graphing Guidelines.** Homework is always due by the end of class on Tuesdays as outlined on the course calendar. Each homework assignment is worth 10 points. **I do not accept late homework. I will drop your lowest homework score when calculating the final grade.**

**Quizzes**

You will take a 10-point in-class quiz most Thursdays as outlined on the course calendar. You may take a quiz early if you have completed all certifications covered by that quiz. To take a quiz early, you must make arrangements with the instructor. **I will drop your lowest quiz score when calculating your final grade.**

**Unit Exams**

There will be four Unit Exams during the quarter, each worth 100 points. Each unit exam must be taken by the deadline date indicated on the course calendar. The dates ARE NOT subject to change. When taking an exam on the deadline day, you must take it in class. **YOU ARE RESPONSIBLE FOR KNOWING WHICH DAYS ARE TEST DEADLINE DAYS.** You may take a test early if you have completed all certifications covered by that exam. To take an exam early, you must make arrangements with the instructor. **No unit exam scores will be dropped when calculating your final grade.**
Final Exam
The exam is scheduled for Monday, March 17, 2008, 11:30-1:30 pm. You may not take the final after that date, but you may take the final early if you have completed all four unit tests. To take the final early, you must make arrangements with the instructor. The final will be comprehensive and is worth 100 points.

Course Calendar:
Follow the course calendar carefully. Each day you should work on the section indicated on the calendar and then work on the written homework assigned from that section. You may also work ahead of schedule if you choose. Section certification deadlines are generally set for a day or two after the date listed on the calendar. To see the section certification dates, go to your Progress Report in the Hawkes Learning Grade Book, and sort by Due Date. We will not have class on the following dates: January 21 (Martin Luther King, Jr’s Birthday Holiday), February 1 (Prof. Development Day for Faculty and Staff), February 18 (President’s Day Holiday), February 28 (Educational Planning Day) and February 29 (Math Dept. Retreat for instructor).

Late Work Policy:
- Section certifications may be done late, but scores will be given as follows:
  - If you certify by then end of class on the due date, you will receive 3 out of 3 points.
  - If 1-7 days late (INCLUDING WEEKENDS), you will receive 2 out of 3 points.
  - If more than 7 days late (up to the time of the start of the final), you will receive 1 out of 3 points.
  - If you don't certify before the start of the final, you will receive 0 out of 3 points.
- All written homework assignments are due by the end of class on the date due, and I DO NOT accept late homework. Assignments turned in to my mailbox early MUST be stamped with the date and time by the building 20 staff. When turning an assignment in to my mailbox, the assignment will be considered late if the time stamp is after the time that class is scheduled to end or if there is no time stamp on the assignment.
- I DO NOT give make-up quizzes.
- Make-up exams may be scheduled with prior approval in highly exceptional cases. If you are sick on the day of an exam, you must contact me via email or telephone before class time.

Grading: The grading of each individual assignment or test will be based on your ability to demonstrate your understanding of a given concept or skill. This can’t be done by just writing down the answer: all work and/or steps must be shown as well. Problems just showing the “right answer” with no back-up work will not receive full credit.

Your final grade will be based on the percentage of possible points obtained. Though the exact number of points will not be determined until the end of the quarter, it will be very close to the following:

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<table>
<thead>
<tr>
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<th></th>
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<tbody>
<tr>
<td>Section Certifications</td>
<td>81 points</td>
</tr>
<tr>
<td>Written Homework</td>
<td>80 points</td>
</tr>
<tr>
<td>Quizzes</td>
<td>60 points</td>
</tr>
<tr>
<td>Unit Exams</td>
<td>400 points</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>100 points</td>
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</tbody>
</table>

The percent-to-letter-grade scale is as follows:

- 94.5 - 100 = A
- 89.5 - 94.4 = A-
- 86.5 - 89.4 = B+
- 84.5 - 86.4 = B
- 79.5 - 84.4 = B-
- 76.5 - 79.4 = C+
- 74.5 - 76.4 = C
- 69.5 - 74.4 = C-
- 66.5 - 69.4 = D+
- 64.5 - 66.4 = D
- 59.5 - 64.4 = D-
- 0 - 59.4 = E
This grading scale may be altered at the instructor’s discretion, but will only be altered to the students’ advantage.

**Withdrawals/Incompletes/S, U, V Grades:** TCC policy states that anyone can drop a class on the college web site through the third day of the quarter. After that you need to fill out an add/drop form and submit it to Registration and Records. In general, if you are receiving a C grade or better at the time of your request, a WI grade will be given if you have completed 60% of the coursework for the quarter. Otherwise, a V grade will be given. If your grade is lower than a C, an E grade will be given (exceptions may be made, depending on the circumstances). *Students who simply stop coming to class will receive an E.* After the 50th calendar day of the quarter, students no longer have the option to withdraw from a course. Incompletes will be given only in VERY RARE instances, which must be discussed with the instructor before the final exam. An “I” grade is reserved for students who have generally done well throughout the quarter but miss a small amount of work (say, the final) due to exceptional circumstances. S/U grade requests must be processed through the registration office and meet their deadlines.

**Classroom Policies:**

1) All cell phones and pagers must be turned off during class time. If you are expecting an urgent call or page, please talk with the instructor prior to class.
2) Beverages are allowed in class, but please save food for after class. No tobacco products will be allowed in class.
3) Children are not allowed in class.

**Cheating:** I encourage you to collaborate with others on homework, but you may NOT collaborate on exams. Cheating on an exam or project will result in zero points for the work. A second infraction will result in an E grade for the course. For more information, refer to the TCC Academic Dishonesty Policy on p. 31 of the 2005-2007 College Catalog or at <http://www.tacomacc.edu/resourcesforstudents/studentpolicies/administrativeprocedureforacademicdishonesty.aspx>.

**Classroom Concerns/Disputes.** If you have questions or concerns about this class or me, please come to talk with me about your concerns. If we are unable to resolve your concerns, you may talk next with the Chair of the Math Department, Greg Ferencko. He can assist with information about additional steps, if needed.

**Special Accommodations:** If you have a physical, mental, or learning disability that you feel may require some form of accommodation, you must 1) have your disability documented with the TCC Accessibility specialist (Counseling Center in Bldg 18), and 2) inform me of any necessary accommodations BEFORE they are needed. Documentation should occur within the first 2 weeks of class. Requests for accommodations without necessary documentation will generally be denied.

**Getting Help:** A number of resources are available if you need additional help. Please make use of my office hours, listed at the beginning of this syllabus. Help is also available at the Al Kwarizmi Math and Learning Center (MARC) in Bldg. 19-22. The Writing/Tutoring Center has tutors available to meet with you once or twice a week. Stop by Bldg. 7, Room 221 or call 253.566.6032 to make an appointment. Drop-in tutoring is also available on a first come, first served basis. If you know you are starting to get behind or feel lost, GET HELP!

*The information in this syllabus is subject to change. Any changes may be made via class announcements.*