INTRODUCTION TO ELEMENTARY ALGEBRA
Math 85
Fall Quarter 2010

Instructor: Kim Litz
Phone: 460-4399 for messages
Email: vklitz@comcast.net (preferred); vlitz@tacomacc.edu (I don’t check this one as much.)
Webpage: http://www.tacomacc.edu/home/vlitz/index.htm

Office Hours: by appointment before class in 27-150

Text: Elementary and Intermediate Algebra, fourth edition; Bittenger/Ellenbogen/Johnson
Math 85 Supplement, September 2008 edition

Calculator: A scientific calculator is required. TI-30XIIS recommended.

Course Description: Beginning algebra specifically designed for students with no algebra background. Topics include introduction to variables and signed numbers, solutions to linear equations and inequalities, simplification of algebraic expressions, evaluation and manipulation of formulas, an emphasis on word problems and graphing of linear equations.

Learning Objectives: The TCC Math Department has agreed on the following student learning objectives for Math 85. 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.

Math 85 will prepare the student for further study of algebra, specifically Math 90. Upon successful completion of the course, the student will be able to:

1. Demonstrate an understanding of the concept of a variable by identifying variables and using them in equations and algebraic expressions. (COM,CRT)
2. Perform operations with signed numbers. (COM,CRT)
3. Solve linear equations and inequalities using a vertical format. (COM,CRT)
4. Apply the commutative, associative and distributive properties. (COM,CRT)
5. Substitute values into formulas and solve for the remaining variable. (COM,CRT)
6. Solve Formulas for a specified variable. (COM,CRT)
7. Solve the following types of basic word problems: (COM,CRT)
8. Translation of an expression or equation from words to algebra.
9. Area, perimeter, distance-rate-time, coin, consecutive integer, etc.
10. Produce clear and complete written solutions. (COM,CRT)
11. Use a scientific calculator appropriately. (IIT)
12. Understand lines and linear equations from a symbolic and graphical viewpoint. Graph lines from equations and determine equations from graphs or points. (COM,CRT)
13. Understand slope both graphically and symbolically. Find slopes of lines given graphs, equations, or data points. (COM,CRT)

Prerequisite: The prerequisite for this course is a grade of “C-” or better in Math 75 or assessment into Math 85 and successful completion of or current enrollment in Reading 85. If it should come to the instructor’s attention that you do not meet the prerequisite requirements, you will be administratively withdrawn from the class. There will be no exceptions.

Required Materials: You should come to class every day prepared with 1) your textbook and packet, 2) pencils and good erasers, 3) 8½ x 11 notebook paper, 4) graph paper (grid no smaller than 5 squares per inch), 5) small ruler or straight edge, 6) 3 x 5 cards, and 7) a SCIENTIFIC calculator. The TCC math department recommends a Texas Instruments, model TI-30XIIS. Scientific calculators are available in the bookstore for about $12. If you are not sure if your current calculator is a scientific calculator, ask your instructor. Graphing calculators will NOT be allowed on any tests or in-class assignments.
Course Requirements: Grades will be based upon a number of factors, including homework, projects/writing assignments, tests/quizzes, and attendance/participation. These areas are detailed below:

1. Homework

**PLAN TO SPEND AT LEAST 2 HOURS PER DAY, FIVE DAYS A WEEK ON HOMEWORK!**
Each homework assignment will be worth 5 points. Answers to all odd problems are in the back of your book, and you are expected to check your answers before turning homework in. I will scan your work to check that all problems are done; that you are showing all the work done to obtain an answer; and that you are working in a neat and organized manner. I am not as interested in your answer as in your process. You are responsible for attempting every problem, re-working a problem until you get the correct answer, and taking advantage of various resources (see “Helpful Links” on the web) to help on problems of which you are unsure. Assignments are due at the beginning of class (usually the day after they are assigned). If you are absent for any reason, reduced credit will be given for your late work. If you are not absent, no late assignments will be accepted for any reason. Refer to the Homework Guidelines for homework format expectations. Homework not following the guidelines will not receive full credit. To account for any emergencies or illness, two assignments will be dropped.

2. Project/Writing Assignments

One project will be assigned during the quarter. With any assignment calling for writing, the clarity and accuracy of your writing is important: use of proper grammar, punctuation, and spelling is expected. More detail will be provided.

3. Tests and Quizzes

We will have quizzes, exams and a comprehensive final exam. No tests or quizzes may be made up. All assessments will be announced; there will be no “pop quizzes.”

4. TOLOPs/Attendance

TOLOP stands for "Talking Out Loud On Paper." Each week you will be asked to do some writing on a topic, share your concerns, ask specific questions, or give me feedback about the class. TOLOPs are also a way for you to obtain points for attendance. You are expected to attend class every day, arriving on time and remaining until the end of the period. You will lose TOLOP points if you are absent, late, or leave early. Group problems will also be assigned. To account for any emergencies or illness, two TOLOP/Group Problems will be dropped.

5. Study Groups

Study groups are one of the most valuable resources in a math class. I strongly encourage your participation. A study group can be two to five members. You will be expected to participate in class discussions and group activities, and are encouraged to work with your classmates on homework.

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*. 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. The breakdown of your grade by percentage is shown below.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Exams</td>
<td>25%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Project</td>
<td>10%</td>
</tr>
<tr>
<td>Group Work/TOLOPs</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Refer to the Homework Guidelines for homework format expectations. Homework not following the guidelines will not receive full credit. To account for any emergencies or illness, two assignments will be dropped.
The percent-to-letter-grade scale is as follows:

<table>
<thead>
<tr>
<th>Percent Range</th>
<th>Grade</th>
<th>Percent Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>92.0-100</td>
<td>A</td>
<td>72.0-77.9</td>
<td>C</td>
</tr>
<tr>
<td>89.5-91.9</td>
<td>A-</td>
<td>69.5-71.9</td>
<td>C-</td>
</tr>
<tr>
<td>88.0-89.4</td>
<td>B+</td>
<td>68.0-69.4</td>
<td>D+</td>
</tr>
<tr>
<td>82.0-87.9</td>
<td>B</td>
<td>62.0-67.9</td>
<td>D</td>
</tr>
<tr>
<td>79.5-81.9</td>
<td>B-</td>
<td>59.5-61.9</td>
<td>D-</td>
</tr>
<tr>
<td>78.0-79.4</td>
<td>C+</td>
<td>Below 59.5</td>
<td>E</td>
</tr>
</tbody>
</table>

This scale may be altered at the instructor’s discretion, but will only be altered to the students’ advantage.

WITHDRAWLS/INCOMPLETES/S, U, V GRADES

TCC policy states that anyone can withdraw from a class by the 10th day of the quarter, IF the student fills out the necessary forms and turns them in to registration. After that, you need the instructor’s permission. THAT MEANS: you need to tell me your reasons for wanting to withdraw (warning: “I’m getting a bad grade,” is not reason enough to get a withdrawal). After the 50th calendar day, the instructor may withdraw you under special circumstances. 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. 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.

Incompletes will be given only in VERY RARE instances, which must be discussed with the instructor before the final. 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 Structure/Etiquette:

1) The first 5-15 minutes of every class will involve group work on the previous homework assignment. You may ask your classmates for assistance on problems that you were not able to solve on your own. The instructor will be available during this time to answer questions your classmates are not able to answer.
2) Turn off cell phones, pagers, etc. If you are expecting an urgent call or page, please talk with the instructor prior to class.
3) Beverages are allowed in class, but please save food for after class. No tobacco products will be allowed in class.
4) Class will last the full time allotted. Do not start packing away your books until class is dismissed.

Make-up Work: As stated earlier, no homework or quizzes may be turned in late or made up. You must talk with me at the earliest possible time you know there is going to be a problem, not after the fact.

Cheating: You may collaborate with others on homework, or on projects as specified, but you must give credit for any help received (this includes help from the tutoring center, MARC, etc.). You may NOT collaborate on exams and quizzes. Cheating on an exam, quiz, or project will result in zero points for the work. A second infraction will result in an E grade for the course. Refer to the TCC Academic Dishonesty Policy for more information about cheating.

Disabilities: 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 disabilities 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.
Help: A number of resources are available if you need additional help (refer to the “Resources for Help with Math” handout). Please make use of my office hours, listed at the beginning of this syllabus and take advantage of the MARC in building 19. The Writing and Tutoring center in Bldg 7 has tutors available to meet with you once or twice a week. If you know you are starting to get behind or feel lost, GET HELP! Once you truly are behind or lost, any help will generally be too late.

Study Groups: Study groups are one of the most valuable resources in a college class. I strongly encourage your participation. An effective study group has two to five members.

Additional Resource:
Pearson custom website for the Bittenger text: http://www.pearsoncustom.com/wa/tacomacc_math
[This website includes graphing calculator, tutoring and additional math websites for students.]

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

Acknowledgement: Thanks to Valerie Morgan-Krick for sharing her syllabus and ideas on class organization.

---

**HOMEWORK GUIDELINES**

Please make certain that your homework is done in a **professional** manner. You will find that neat, concise work performed in homework assignments will lead to a better understanding of physical concepts and greater success in your math courses. These guidelines will be used in evaluating homework assignments for this course.

1. Place your **NAME**, the **SECTION NUMBER**, **MY NAME**, and the **ASSIGNMENT NUMBER** in the top, right-hand corner of each page.

2. Use only **8.5 x 11 inch, ruled paper**. Loose-leaf paper allows you the option of removing and inserting papers into a 3-ring notebook. Papers with jagged edges ripped from a spiral notebook will **not** be accepted (too messy!).

3. Show all work except where a short answer is necessary. Include sketches where necessary and label answers as appropriate. Homework will, from time to time, include writing, calculator, and/or computer work. When writing is required, it is expected that the work will include complete, meaningful sentences. Correct grammar and spelling will be considered; the correct spelling of mathematical terms is especially required. Problems that require a graph should be done on graph paper and then labeled “see attached” unless you choose to cut the graph out and paste it within your work.