MATH 61 – SUMMER 2008
PLANE GEOMETRY

Instructor: Alina Birca
Email/Phone: **abirca@mtsac.edu** ; 909-594-5611 ext 5364
Website: **www.timetodare.com**
Office: Building 40 – Room 145
Text: *Essentials of Geometry for College Students* – Custom Edition for Mt SAC
                  by Lial, Brown, Steffensen, Johnson
Section   TWTH   40-128 #114269 (1:20 – 4:00 pm); #114270 (4:10 – 6:50 pm)

Course Objectives
This is a course in Euclidian Geometry and we will learn about points, lines, polygons, and circles and their relationship to each other on a plane surface. We will study congruent and similar relationships. We will also study inductive, deductive, and indirect reasoning, and the formal proof will be used and practiced throughout the course. Upon completion of this course, the students will be able to:
- acquire the principles of objective thinking and relate it to problems of life as well as geometry;
- develop the habit of defining terms, thinking accurately, establishing conclusions, both geometric and non-geometric;
- develop intellectual maturity rather than mere acquisition of the details of geometry;
- communicate effectively using proper terminology as well as written notation;
- independently analyze and set up application problems, thus applying problem solving techniques to new situations, anticipate and check their proposed solutions.
- Apply learned principles and skills to new situations in addition to situations that mimic those on the homework and those shown in class

Methods of Instruction
This course will combine lecture, teamwork, and class discussion. Students will be required to do homework, group problems, quizzes and examinations.

Attendance and Participation
Understanding math requires more than just reading a textbook. Listening and participating in the class activities are as important as solving problems. College policy requires that you attend every class meeting. Moreover, I do notice when you do not show up. If your grade is on a borderline, those with regular attendance are more likely to be on the higher side of the line. In addition, you miss the material from that day and that day's quiz. Do not be late to class. The homework is due at the beginning of the class. You may also miss the quiz if you are late. NOTE: You the student are responsible for dropping the course should you decide not to continue in it. If you stop attending and doing the work and you fail to drop, you will receive a failing grade in this course. **You may be dropped from this class if you miss class during the first 2 weeks of instruction.** Your seat will be given to a student who has been attending each day.

Prerequisites
There is an official prerequisite for this course (Math 51 or 51 B – Beginning Algebra), and I expect that you demonstrate beginning algebra skills (properties of real numbers, polynomials, exponents, absolute value, evaluating algebraic expressions, solving linear and quadratic equations, the rectangular coordinate system, equations of lines).

Study time & Extra help
You are expected to study two hours outside class for every hour in class. If you have trouble completing assignments or understanding the mathematics, get help as soon as you need it. Free tutorial services are available in MARC (40 - 113).

Late Work
Be prepared with all assignments on the day they are due. As a rule, I do not accept late written work nor are there any make up tests or quizzes.

Academic Honesty
Plagiarism or cheating will not be tolerated. There will be a zero on the assignment and risk failing the course.

Calculators/Instruments

All of the problems I will assign this semester will be done using <u>paper, pencil, ruler, compass, and protractor</u>.

If you have a phone or pager, please turn it to vibrate and sit close to the door in case you need to use it in an emergency. Thank you.

Organization, Grading and Requirements

You will need a 3-hole binder with 3 separators, labeled as follows:

LECTURES   **HOMEWORK**   **TESTS & QUIZZES**

- **LECTURES** – Pay attention in class to what I say and do, and make careful notes. In particular, note the problems I work on the board, and copy the complete solutions as well as the theory presented in each section. Work as neatly as you can. Write your symbols clearly, and make sure <u>the exercises are clearly separated from each other</u>. Do not hesitate to ask questions in class. It is not a sign of weakness, but of strength. There are always other students with the same question who are too shy to ask.

- **HOMEWORK** – Before you start on homework assignments, rework the problems I worked in class as well as all examples from the textbook . This will reinforce what you have learned. Make sure you check your previous work against the solution sections posted on my website. Print out the solutions from my website for your reference.

- Keep all homeowork, quizzes and tests that are returned to you in your binder. Use them when you study for future tests and for the final exam.

Assignments in the course are divided into four areas and are worth a total of 1000 points. Those earning 900 points or more will be awarded an A, 800 to 899 points a B, 700 to 799 points a C, 600 to 699 points a D, and less than 599 points an F.

Homework 100 points

Homework will be assigned every class session. I will not always collect the homework, it may be collected at random, or there may be a "homework quiz" (see due dates on the Tentative Class Schedule). If collected, <u>homework is due at the beginning of the class</u>. The "homework quiz" could be given any time during the class. If you are not present, you will miss the points. There is no make up for the "homework quiz". You should do the homework every day. You need to bring your homework assignment with you to class. Homework should always be completed following all the directions. **You must copy each problem before solving it. You must copy or make any appropriate drawing.** Each homework is worth 20 points. <u>Read carefully all the directions from the homework handout.</u> You are encouraged to discuss assignments with your classmates; however, you are required to write up your work independently. Copied homework will not be tolerated and identical, or nearly identical, assignments will share a single score. <u>I</u> will make every effort to address homework questions in class as time permits. Please feel free to come to my office or contact me by email if you need additional help.

Quizzes 240 points

Three quizzes will be given (see Tentative Class Schedule). They may be given at the beginning of class or at the end of the class! These quizzes will be given from <u>exercises and examples done in class</u> as well as homework <u>problems</u> assigned from the topics covered up to that point. For an exercise to be complete there needs to be a detailed solution to the problem. Do not just write down an answer. **No proof, no credit given!** Each quiz is worth 80 points.

Tests 360 points

Two tests will be given over the major areas addressed in the course. Each test is worth 180 points. For an exercise to be complete there needs to be a detailed solution to the problem. Do not just write down an answer. **No proof, no credit given!**

Comprehensive final 300 points

The final is a 2.5 hour exam and it is held on **Thursday, July 31** . The final is a cumulative exam. You may use the final exam percent score to replace your lowest test score. You must take the final to pass this class.

Grade Sheet

Homework 1		/20
Homework 2	+	/20
Homework 3	+	/20
Homework 4	+	/20
Homework 5	+	/20
HOMEWORK	=	**/ 100**
Quiz 1		/80
Quiz 2	+	/80
Quiz 3	+	/80
QUIZZES	=	**/240**
Test 1		/180
Test 2		/180
TESTS	=	**/360**
FINAL EXAM	=	**/300**
TOTAL	=	**/1000**