GROSSMONT COLLEGE
Math 97: Plane Geometry
Fall 2009 Syllabus

Class Meets: TTh: 11:00 AM - 12:15 PM, Room 53-553   (Section #3385, 3 units)

Instructor: **Michael T. Orr**
Contact Info: Office Hours: MW 2:00 – 3:20 PM in MSC.
                                    TTh 10:00 – 11:00 AM.   Others by Appointment.
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Prerequisite: Elementary Algebra with a "C" or better.

Text: *College Geometry: A Problem-Solving Approach with Applications, 2nd Ed.*, by Musser

Required: *Ruler* (clear is best), *protractor* (clear is best), *compass*, graph paper, scientific calculator, pencil, and eraser.

Overview: Math 097 is designed to provide the student with a basic understanding of plane geometry concepts. By the end of the class, the student will:

1. Demonstrate knowledge of basic vocabulary of geometry.
2. Recognize properties of and describe relationships between geometric figures.
3. Model geometric relationships; formulate conjectures about geometric relationships; collect, analyze, and interpret data related to geometric figures.
4. Write justifications for conjectures or theorems related to geometric properties or relationships using inductive and deductive reasoning.

Consequently, emphasis is placed on analytical and logical thinking rather than tedious computations or complicated mathematical computations.

Grading: **This is a CREDIT/NO CREDIT course**. Your grade for the course is based on:

• Homework/Participation	15%
• Quizzes(in class)	15%
• 4 Hourly exams (11.25% each)	45%
• Final Exam (cumulative)	25%
TOTAL	100%

Credit/No Credit only: 70 – 100 % = **Credit**,   Below 70% = **No Credit**
You can NOT get a passing grade in this class without taking the final exam!

Homework/ Comp. Lab: You will be assigned homework from the textbook. Math is a subject learned by *doing*. Therefore *doing your homework* is very important to succeed in this class. Homework will be assigned daily**. I expect you to attempt all assigned exercises before the next class meeting.** I will answer your questions at the beginning of each class. The homework assignments are designed to **prepare you for exams and quizzes**, so if you are having difficulty with ANY homework assignment, please contact me for help or ask the tutors in the Math Study Center (Room 70-112/113). **We are here to help you SUCCEED!**

Textbook homework will be **collected on EXAM DAY at the beginning of class**. Start each new section of homework at the **TOP** of a **NEW** sheet of paper. **LABEL** each section clearly. **Show all of your work**. Your lowest homework score will be dropped.

Quizzes: **Weekly quizzes will be given in this course.** Because of this, it is important that you come to class every day, and come to class prepared! **Make-up quizzes will NOT be given**. However, your lowest two quiz scores will be dropped.

Exams: There will be 4 in-class exams and a cumulative Final Exam. **No exams will be dropped.** Exams will cover material from the homework, textbook and handouts, as well as material presented in class. *If you do not take an exam, you will receive a ZERO for it.*
         Late exams may ONLY be taken by PRIOR ARRANGEMENT or
         in the case of a DOCUMENTED emergency.
Remember that it is **your responsibility** to contact me (by email, phone, mailbox, or in person) **immediately** if a conflict arises.

Final Exam: The final is **MANDATORY** and **CUMULATIVE** and will be given
         Tuesday, Dec 15th, 11:30 AM – 1:30 PM, Room 53-553
DON'T MAKE TRAVEL PLANS THAT CONFLICT WITH THIS DATE !!!!!

Attendance: Attendance is required at each class meeting. Bring your text and calculator to every class. **You can be dropped from the class for having more than 3 unexcused absences.** Late arrival and early departure from class may be counted as an absence. Please discuss any anticipated absences with me as soon as possible. In the event of an absence, you are responsible for all material covered in class, turning all assignments in **on time** and any schedule changes or class announcements

Supervised/   Students requiring additional help or resources to achieve the stated learning objectives of
Tutoring: the courses taken in a Mathematics course are referred to enroll in Math 198, Supervised Tutoring. The department will provide Add Codes.

Students are referred to enroll in the following supervised tutoring courses if the service indicated will assist them in achieving or reinforcing the learning objectives of this course:
- IDS 198, Supervised Tutoring to receive tutoring in general computer applications in the Tech Mall;
- English 198W, Supervised Tutoring for assistance in the English Writing Center (70-119); and/or
- IDS 198T, Supervised Tutoring to receive one-on-one tutoring in academic subjects in the Tutoring Center (70-229, 644-7387).

To add any of these courses, students may obtain Add Codes at the Information/Registration Desk in the Tech Mall.

All Supervised Tutoring courses are non-credit/non-fee. However, when a student registers for a supervised tutoring course, and has no other classes, the student will be charged the usual health fee.

Student Learning Outcomes:
- A student will use geometric vocabulary and mathematical notation to describe geometric objects and sketch figures with given characteristics.
- A student will be able use mathematical logic; using inductive reasoning to formulate reasonable conjectures and using deductive reasoning for justification, formally or informally.
- A student will use geometric properties of figures in two or three dimensions to find related quantities.
- A student will develop and evaluate conjectures about geometric objects and the relationships between them.

- A student will translate written language into mathematical statements, interpreting information by sketching relevant diagrams and by applying algebraic techniques to solve geometric problems.

Classroom Conduct: You are expected to be courteous to each other and to the instructor. You will be asked to leave the class for display of behavior the instructor deems as disruptive to the class environment. Please see the Grossmont College Catalog for a full statement of the Student Code of Conduct. **In class, please turn off all cell phones, pagers and other distracting electronic devices.**

Academic Integrity: Cheating and plagiarism (using one's own ideas, writings or materials of someone else without acknowledgement or permission) can result in any one of a variety of sanctions. Such penalties may range from an adjusted grade on the particular exam, paper, project, or assignment (all of which may lead to a failing grade in the course) to, under certain conditions, suspension or expulsion from a class, program or the college. For further clarification and information on these issues, please consult with your instructor or contact the office of the Assistant Dean of Student Affairs.

Students w/ Disabilities: Students with disabilities who may need accommodations in this class are encouraged to notify me and contact Disabled Student Programs and Services (DSPS) during **the first two weeks of class**. Students may contact DSPS in person (Room 110) or by phone (619) 644-7112 or (619) 644-7119 (TTY for deaf).

Expectations: Enrolling in a course represents a commitment to attend class and to participate fully in the learning process. I expect students to come to every class **on time**, prepared for that day's lecture. I expect students to be attentive during lectures, to take notes, and to remain seated until class is over. I expect students with questions about the material to ask them before, during and after class. I expect students to put in the effort required to succeed in this course!

Disruptions: Your demeanor should support and respect the environment of learning inside the classroom. Movement and chitchat in the classroom disrupts your classmates and the instructor. This includes leaving class, coming in late, passing notes and chatting with the person next to you about non-math related topics. Because of the size of this class it is very important that all students be respectful of those trying to learn. Again, I encourage you to ask questions in class. If you don't feel comfortable asking the instructor, you can quietly ask your neighbor. Just know that if you have a question related to the class, someone else is certain to be wondering the same thing; So please ask! Talk on your phone and attend to your personal needs before or after *but not during* class. When you enter the classroom, turn off cell phones, pagers, and all other communication devices. In times of family crisis, you may set your cell phone on vibrate. If you must arrive late or leave early, take the first seat near the door.

TIPS FOR SUCCESS:

1. Get to class on time, every day.

2. Listen attentively to the lectures and take careful notes.

3. Asks questions in class when you don't understand.

4. Do the homework! Attempt ALL OF IT!

5. Make a math friend in class. Work in pairs or organize your own study group.

6. Get FREE tutoring – the Math Study Center is in Rooms 70-112.

Hours:	Monday – Thursday	8:00am – 7:00 pm
	Friday, Saturday, Sunday	Closed

7. Feel free to come to me with questions about concepts or problems you don't understand.

8. Keep a positive attitude!

Important Dates:

September 4:	Last day to drop without a "W" (and for refund)
September 7:	Holiday (Labor Day)
November 13-14:	Holiday (Veterans' Day)
November 12:	Last day to drop classes with a "W"
November 26-29:	Holiday (Thanksgiving)
December 15:	Final Exam @ 11:30 AM – 1:30 PM, Room 53-553

This course adheres to the policies outlined in the Grossmont College Catalog. See the Academic Policies stated in the catalog.

Week	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1 8/24 – 8/28		Intro, 1.1, 1.2		2.1, 2.2	
Week 2 8/31 – 9/4		2.2, 2.3		2.3, 2.4	**Last Day to Drop w/out W**
Week 3 9/7 – 9/11	**Holiday**	2.5, 3.1		3.1, 3.2	
Week 4 9/14 – 9/18		3.3, 3.4		3.4, 3.5, Review	
Week 5 9/21 – 9/25		**Exam #1 Ch 1-3**		4.1, 4.2	
Week 6 9/28 – 10/2		4.2, 4.3		4.4, 5.1	
Week 7 10/5 – 10/9		5.1, 5.2		5.3, 5.4	
Week 8 10/12 – 10/16		5.4, 5.5		Review	
Week 9 10/19 – 10/23		**Exam #2 Ch 4-5**		6.1, 6.2	
Week 10 10/26 – 10/30		6.2, 6.3		6.4, 6.5	
Week 11 11/2 – 11/6		6.5, 7.1		7.2, 7.3	
Week 12 11/9 – 11/13		7.3, 7.4		Review **Last Day to Drop**	**Holiday Veterans' Day**
Week 13 11/16 – 11/20		**Exam #3 Ch 6-7**		81., 8.2	
Week 14 11/23 – 11/27		8.2, 9.1		**Holiday - Thanksgiving**	
Week 15 11/30 – 12/4		9.2, 9.3		9.3, Review	
Week 16 12/7 – 12/11		**Exam #4 Ch 8-9**		Review for Final	
Week 17 12/14 – 12/18		**FINAL EXAM 11:30 AM – 1:30 PM**			

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Homework Assignments

The following homework assignments are subject to change.

Section	Page number	Problems
1.1	10	23, 25, 27, 39, 43
1.2	24	3, 7, 11, 13, 15, 21, 39
2.1	46	1, 3, 5, 7, 9, 11, 13, 15, 19, 23, 25, 27, 29, 35, 37
2.2	58	1, 3, 7, 11, 13, 17, 21, 27, 29
2.3	71	5, 7, 9, 11, 13, 15, 17, 19, 27, 29
2.4	80	1, 7, 9, 11, 13, 23, 25, 29
2.5	91	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27
3.1	114	1, 3, 7, 9, 11, 13, 15, 17, 19, 25, 27, 29, 31, 33, 49
3.2	127	1, 3, 5, 7, 9, 11, 13, 15, 17, 21, 23, 25, 29, 33, 39, 41
3.3	141	1-5 all, 7, 9, 13, 15, 17, 19, 21, 23, 27, 31, 33, 37, 45, 49
3.4	153	1, 3, 5, 7, 9, 15, 17, 19, 21, 27, 29, 33, 35, 37, 39, 41
3.5	167	3, 5, 7, 9, 13, 15, 17, 19, 23, 29, 31, 35, 37, 47, 49
4.1	192	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 33, 35, 37, 39, 41, 43, 45, 49
4.2	202	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21-32, 33, 35, 37, 41
4.3	214	1, 3, 5, 7, 9, 11, 13, 17, 19
4.4	225	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29
5.1	247	1-10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 41
5.2	255	1, 3, 5, 7, 9, 11, 13, 15, 19, 21, 23, 25
5.3	266	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35
5.4	276	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 47
5.5	284	1, 3, 5, 7, 13, 21, 35
6.1	303	1, 3, 5, 7, 9, 11, 17, 19, 21, 23, 39, 45, 47
6.2	314	1, 3, 5, 7, 9, 11, 13, 17, 19, 31, 37
6.3	324	1, 3, 5, 7, 9, 11, 13, 15, 17, 21, 25, 31
6.4	337	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 33, 35, 37, 39, 41, 43, 45, 59, 63, 67
6.5	347	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 43, 45
7.1	369	(TO BE DETERMINED)
7.2	378	
7.3	392	
7.4	405	
8.1	429	
8.2	443	
9.1	489	
9.2	505	
9.3	513	

Due: **Tuesday, September 1st**

Often I hear from students that they are "not very good at math". Here is what I hear when you say this to me, "I will have to work harder than most other people". I don't doubt that some of you have had bad experiences in learning mathematics, but don't get discouraged. These are not permanent issues and you CAN learn mathematics and even pursue careers involving heavy mathematics and/or science.

The first thing I want you to do is understand how you learn best. So, I want you to go to the following website; **http://www.grossmont.edu/counseling/college_success/learningstyles.htm** and do the Learning Style survey labeled   A Learning Style Survey for College

Once you have taken the survey I want you to hand in a half page write up of:

1. What is your learning style?

2. What are some techniques/strategies that you can use to help you in your math class?