

Lake Tahoe Community College
MAT 153 – Euclidean Geometry
M, T, W, Th **10:30 am – 12:20 pm** **A209**
Summer 2005

Instructor: Janine Bouyssounouse

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Course Description: This is a formal course in geometry covering the basics of lines, planes, angles, triangles, congruence, the Pythagorean Theorem, similarity, and special right angles.

Required Text: Geometry by Bass, Charles, Johnson, and Kennedy – Prentice Hall

Co-Requisites: MAT 152B or equivalent or appropriate skills demonstrated through the math assessment process. Prior completion of MAT 152B with a grade of "C" or better also satisfies this co-requisite.

Student Outcomes

- 1) Exhibiting a proficiency in the topics covered in the course.
- 2) Engaging in logical and critical thinking.
- 3) Reading technical information.
- 4) Demonstrating the solution to problems by translating written language into Mathematical statements, interpreting information, sketching relevant diagrams, analyzing given information, formulating appropriate math statements, and checking and verifying results.

Grading Scale:

A	90-100%	Tests:	40%
B	80-89%	Quizzes:	20%
C	70-79%	Homework:	15%
D	60-69%	Final:	25%
F	Less than 60%		

Grades will be posted online at www.mygradebook.com. Login IDs and passwords will be distributed the first week of class.

Tests: There will be 4 tests, usually occurring on Thursdays.

Quizzes: There will be at least 4 quizzes, usually occurring on Tuesdays. There will be no make-ups for quizzes. *The lowest quiz grade will be dropped.*

Make-Up Policy: There are no make-ups for quizzes; however one quiz will be dropped. Make-ups for tests will have a 10% penalty if taken after the actual test date. Students must contact the instructor in advance to arrange to take the make-up test.

Homework: Homework will be collected on the day of the quiz or test. **The last day to turn in homework for Mat 153 is Wednesday, August 3.** *No homework will be*

accepted on the day of the final. Completing homework before quizzes and tests will provide practice and may make tests and quizzes seem easier than if the homework was not completed before the quizzes or tests.

Final: A comprehensive final exam will be given on **Thursday, August 4, 10:30 am in A209.**

Attendance: Regular attendance in class is an obligation assumed by every student at the time of his/her registration. Students will still be responsible for the work missed because of their absence. Homework questions will be answered in class. This can be very helpful in understanding the material, as well as preparing for quizzes and tests. Please familiarize yourself with the sections to be covered in class before attending class.

The **Gateway Math Center** (G5) has free tutoring for all registered students. They are open Monday through Saturday. The hours change each quarter, so please check the hours of operation. Please Log In and Out so that the facility gets the funds it needs.

Any students needing accommodations should inform the instructor.

Students with disabilities who may need accommodations for this class are encouraged to notify the instructor and contact the Disability Resource Center (DRC) early in the quarter so that reasonable accommodations may be implemented as soon as possible. Students may contact the DRC by visiting the Center (located in room A205) or by phoning 541-4660, ext. 249 (voice) or 542-1870 (TTY for deaf students). All information will remain confidential.

How to Succeed in a Math Class:

1. Come to every class meeting.
2. Arrive early, get yourself settled and be ready when class starts. Sit where you won't be distracted.
3. Read each section before it is discussed in class.
4. Do all of the homework.
5. Do some math every day.
6. Start preparing for tests at least a week in advance.
7. Take advantage of tutors and office hours, extra help can make a big difference.
8. Do some review every time you study math.

Tentative Schedule:

Date	Sections/Quizzes/Tests
Monday 6/27	Greetings, Syllabus, 1.1, 1.2
Tuesday 6/28	1.3, 1.4 Quiz #1 (1.1-1.2), Homework Due (1.1-1.2)
Wednesday 6/29	1.5, 2.1
Thursday 6/30	2.2, Test #1 (1.1-2.1), Homework Due (1.3-2.1)
Monday 7/4	Holiday – No Class
Tuesday 7/5	2.3, 2.4, Quiz #2 (2.2), Homework Due (2.2)
Wednesday 7/6	2.5, 3.1
Thursday 7/7	3.2, Test #2 (2.2-3.1), Homework Due (2.3-3.1)
Monday 7/11	3.3, 3.4
Tuesday 7/12	3.7, 4.1, Quiz #3 (3.2-3.4), Homework Due (3.2-3.4)

Date	Sections/Quizzes/Tests
Wednesday 7/13	4.2, 4.3
Thursday 7/14	4.4, Test #3 (3.2-3.4, 3.7, 4.1-4.3), Homework Due (3.7, 4.1-4.3)
Monday 7/18	4.5, 4.6
Tuesday 7/19	4.7, 5.3, Quiz #4 (4.4-4.6), Homework Due (4.4-4.6)
Wednesday 7/20	5.4, 5.5
Thursday 7/21	6.1, Test #4 (4.4-4.7, 5.3-5.5), Homework Due (4.7, 5.3-5.5)
Monday 7/25	6.2, 7.1
Tuesday 7/26	7.2, 7.3, Quiz #5 (6.1, 6.2, 7.1), Homework Due (6.1, 6.2, 7.1)
Wednesday 7/27	8.1, 8.2
Thursday 7/28	8.3, Test #5 (6.1-6.2, 7.1-7.3, 8.1-8.2), Homework Due (7.2-8.2)
Monday 8/1	8.5, 9.1
Tuesday 8/2	9.2, Begin Review
Wednesday 8/3	Complete Review , Last Homework Due Date (8.3, 8.5, 9.1-9.2)
Thursday 8/4	Final Exam for Mat 153 (1.1-9.2, except sections not covered on syllabus)

Tentative Assignments:

Sec.	Section Title	Homework Problems to Complete
1.1	Patterns and Inductive Reasoning	1–5 odd, 8-12 all, 17, 19, 23, 24, 25, 28, 29, 34, 41, 47, 49
1.2	Points, Lines, and Planes	1–69 every other odd, 92-94 all
1.3	Segments, Rays, Parallel Lines and Planes	1–19 odd, 21-53 every other odd, 71-83 odd
1.4	Measuring Segments and Angles	1-27 odd, 29-32 all, 33-77 odd (omit 49), 87-95 odd
1.5	Basic Constructions	1-15 odd, 21-33 every other odd, 41-49 odd
2.1	Conditional Statements	1-61 odd, #53 is extra credit
2.2	Biconditionals and Definitions	1-49 every other odd, 55-69 odd
2.3	Deductive Reasoning	1-15 all, 17-33 odd, 39-43 odd
2.4	Reasoning in Algebra	1-31 odd, 43-53 odd
2.5	Proving Angles Congruent	1-35 odd, 39-59 every other odd, 67-73 odd
3.1	Properties of Parallel Lines	1-25 odd, 32-36 all
3.2	Proving Lines Parallel	1-17 odd, 21-33 every other odd, 45, 49, 57-61 odd
3.3	Parallel Lines and the Triangle Angle-Sum Theorem	1-11 odd, 19-35 every other odd, 41-49 odd
3.4	Polygon Angle-Sum Theorem	1-5 all, 9-25 every other odd, 33, 41, 47, 51, 71-85 odd
3.7	Constructing Parallel and Perpendicular Lines	1-33 every other odd
4.1	Congruent Figures	1-41 odd
4.2	Triangle Congruence by SSS and SAS	1-29 odd, 33, 41, 43, 49-55 odd
4.3	Triangle Congruence by ASA and AAS	1-33 odd, 46-49 all

Sec.	Section Title	Homework Problems to Complete
4.4	Using Congruent Triangles: CPCTC	1-23 odd, 35-39 odd
4.5	Isosceles and Equilateral Triangles	1-27 odd (omit 19), 33-36 all, 51-53 all
4.6	Congruence in Right Triangles	1-19 odd, 28, 29, 33, 42-47 all
4.7	Using Corresponding Parts of Congruent Triangles	1-17 odd, 23, 27, 29, 33, 39, 41
5.3	Congruent Lines, Medians, and Altitudes	11-16 all, 19-22 all, 27-29 all, 45-51 all
5.4	Inverses, Contrapositives, and Indirect Reasoning	1-25 odd, 31-39 odd, 50-55 all
5.5	Inequalities in Triangles	1-25 every other odd, 34-36 all, 52-55 all
6.1	Classifying Quadrilaterals	1-12 all, 19-33 odd, 37-42 all, 46-49 all, 51-54 all, 65-73 odd
6.2	Properties of Parallelograms	1-61 every other odd, 70-76 all
7.1	Areas of Parallelograms and Triangles	1-3 all, 8-14 all, 15-23 odd, 44-46 all, 59-63 odd
7.2	The Pythagorean Theorem and its Converse	1-23 odd, 25-61 every other odd, 66, 76, 77, 81, 83
7.3	Special Right Triangles	1-29 odd, 35-41 odd, 47, 48, 52-55 all
8.1	Ratios and Proportions	1-21 every other odd, 27-47 every other odd, 57-61 odd, 73-77 odd
8.2	Similar Polygons	1-15 odd, 21-28 all, 33-39 odd, 42, 43, 47, 57, 59, 65-65 all
8.3	Proving Triangles Similar	1-19 odd, 23-41 odd, 49-53 odd, 57
8.5	Proportions in Triangles	1-10 all, 19, 23, 31, 33, 47, 49, 60-69 all
9.1	The Tangent Ratio	1-3 all, 5-17 every other odd, 27, 29, 39-43 all, 53, 55, 57, 67-69 all
9.2	Sine and Cosine Ratios	1-3 all, 5-21 every other odd, 23, 26, 28, 41-43 all