

# **MAT 153 EUCLIDEAN GEOMETRY**

**Winter 2015**

TIME AND LOCATION: Monday and Wednesday 9:00-10:50 AM

LOCATION: A211

INSTRUCTOR: Wynn Walker

E-MAIL: [wlwalker326@gmail.com](mailto:wlwalker326@gmail.com)

OFFICE HOURS: outside of the Math Success Center

Monday and Wednesday 1:30 PM – 2:30 PM

Tuesday and Thursday 2:00 PM – 3:30 PM

OR BY APPOINTMENT

**REQUIRED TEXT:** Elementary Geometry for College Students, 5th Edition, Brooks/Cole Cengage Learning

**COURSE DESCRIPTION:** This is a formal course in Geometry covering the basics of lines, planes, angles, triangles and congruence, the Pythagorean Theorem, similarity, and special right triangles. The methods of deductive reasoning will be studied in depth.

## **STUDENT LEARNING OUTCOMES:**

Students will be able to

1. Prove geometric statements using classical axioms and theorems.
2. Perform ruler and compass constructions.
3. Make deductions using the rules of logic.
4. Solve problems involving parallel lines, triangles, and angles.

**PREREQUISITE:** C or better in Mat152A and Mat152B, or satisfactory score on assessment test. Mat152B may be taken concurrently.

## **GRADING POLICY:**

Exam 1 (Chapters 1-2) 15%

Exam 2 (Chapters 3-5) 15%

Homework 25%

Quizzes 20%

Final (Cumulative) 25%

Your letter grade will be based on your percentage of the total points. The total points possible are 1000 points.

1. A 90-100%
2. B 80-89%
3. C 70-79%
4. D 60-69%
5. F less than 60%

You can check your grade any time by contacting me.

**ATTENDANCE POLICY:** Students are strongly encouraged to attend all classes. As an incentive to encourage students to attend, the lowest quiz score will be dropped for any student who attends every class and does not leave early nor arrive late. Any student who misses more than two classes during the first two weeks will be dropped from the class.

**MAKE-UP POLICY:** There are no make-ups for quizzes however one quiz score will be dropped, taking the best 3 out of 4 quizzes provided the student attends every class without leaving early. No exams may be taken after their scheduled time. If a student will be unable to take an exam at the scheduled time, he or she must take the exam prior to the scheduled time. Students must contact the instructor in advance of the examination in order to arrange a time to take any exam early. **THE FINAL MUST BE TAKEN AT THE SCHEDULED TIME.**

**CALCULATORS:** Calculators are not allowed in this course.

**CELL PHONES:** Cell phones and all other electronic devices must be turned off while class is in session. A 5% penalty will be given to any student whose cell phone goes off during a quiz or exam.

**A WORD ON HONESTY:** Cheating or copying will not be tolerated. People who cheat dilute the honest effort of the rest of us. If you cheat on a quiz, exam, or project you will receive an F for the course, not merely for the test. Other college disciplinary action including expulsion might occur. Please don't cheat in this class. If you are having difficulty with the course, please contact me.

**HOMEWORK:** Homework will be due on the dates provided in the schedule. Typically, homework for the sections covered each week will be due the following Tuesday, with a couple of exceptions. Late homework will be accepted one class period beyond the due date, with a 50% penalty, no exceptions. If you are unable to attend class, to avoid a late penalty you must turn your papers into my mailbox through the student mail-drop box, located near the Reprographics Room in the B wing of the college. I will check my mailbox at 10:30 AM on the days of instruction. Homework not turned in to my box by 10:30 AM on the days of instruction will be considered late.

**TUTORING:** Free tutoring is available in the Math Success Center.

**ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES:**

If there is anyone in this class who has need for test-taking or note-taking arrangements through the Disabilities Resource Center, please feel free to come and discuss this with me. 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:** Here are some tips for successfully passing a math class:

I) Come to every class session. Be prepared, and plan on participating.

II) Do your homework. Remember that what I assign is what I consider a bare minimum. If you need more practice, do it.

III) Read the book. You paid good money for it, so you might as well use it.

IV) Make use of available tutors and my office hours. You will find tutors who know the subject matter in this course at the Math Success Center (MSC).

V) Do math every day. Math is just like everything else: if you don't practice, you become rusty.

### **Lecture Schedule and Homework Assignment Due Dates**

**1/5** Section 1.1, page 8: 3, 5-8, 13, 15, 17, 20, 22, 24, 25, 27, 33-35, 41, 43, 45, 50-52, 55

**1/7** Section 1.2, page 18: 3, 7, 9, 11, 14, 16, 19, 20, 27, 28, 33-37, 39, 41, 42, 46

***Sections 1.1 and 1.2 are due Monday, January 12.***

**1/12** Section 1.3, page 28: 1, 2, 9, 10, 11, 14, 15, 17-19, 21, 26-28, 38.  
Section 1.4, page 37: 1, 5, 6, 10, 11, 14, 15, 18, 23, 28, 30, 31, 33, 34, 42

**QUIZ #1 (SECTIONS 1.1-1.2)**

**1/14** Section 1.5, page 44: 1, 3, 5, 7, 9, 12, 14, 20, 24, 25, 29, 32

***Sections 1.3-1.5 are due Wednesday, January 21.***

**1/19 Martin Luther King Holiday**

**1/21** Section 1.6, page 52: 1, 5, 8, 11, 13, 15, 22

Section 1.7, page 58: 2, 3, 8, 10, 15, 18, 21, 26, 27, 29

***Sections 1.6, 1.7 are due Monday, January 26***

**1/26** Section 2.1, page 78: 1, 2, 5, 8, 9, 11-14, 24, 27, 28

**1/28** Section 2.2, page 84: 2, 5-7, 15, 19, 23, 25

Section 2.3, page 91: 2-4, 7-11, 15, 17, 21, 23, 25, 35

***Sections 2.1-2.3 are due Monday, February 2***

**2/2 QUIZ #2 (SECTIONS 1.4-1.7, 2,1)**

Section 2.4, page 96: 3, 8, 9, 10, 13, 14, 16, 17, 19, 28, 31, 37, 42

Section 2.5, page 105: 4, 7, 9, 11, 13, 15, 18, 19, 37

**2/4** Section 3.1 , page 136:1, 2, 4, 6, 8, 10, 11, 15, 18-20, 26, 27, 32, 35

Review for Exam I

***Section 2.4, 2.5 is due Monday February 9***

**2/9 EXAM I (CHAPTERS 1 AND 2)**

**2/11** Section 3.2, page 142: 2, 3, 9, 14, 15, 18, 23, 27, 34

***Sections 3.1 and 3.2 due Wednesday February 18***

**2/16 President's Day Holiday**

**2/18** Section 3.3, page 151: 2, 3, 7, 8, 19, 20, 22, 25, 27, 34, 35, 37

**Sections 3.3 due Monday February 23**

**2/23** Section 3.5, page 165: 1, 2, 5, 6, 8, 13, 15, 17-19, 21, 24

Section 4.1, page 184: 3, 5, 7, 11, 14-16, 23

**QUIZ #3 (SECTIONS 3.1-3.3)**

**2/25** Section 5.1, page 226: 2, 5, 7, 8, 18, 23, 25, 27

**Sections 3.5, 4.1, and 5.1 due Monday March 2**

**3/2** Section 5.2, page 232: 1, 2, 5, 10-13, 17, 19, 30, 35

Section 5.3, page 240: 3, 9, 12, 23, 24, 29, 31

**3/4** Section 5.4, page 250: 7, 9, 11, 13, 15, 17, 33

**Sections 5.2-5.4 are due Monday March 9**

**3/9** Section 5.5, page 258: 1, 2, 3, 6, 8, 11, 14, 15, 17, 20, 24, 31

Section 8.1, page 359: 1, 4, 7, 8, 10, 11, 13, 17, 18, 20, 21, 22, 30, 37

Review for Exam II

**3/11 EXAM II (COVERS CHAPTERS 3, 4, AND 5, INCLUDING SECTION 5.5)**

**Sections 5.5 and 8.1 is due March 16**

**3/16** Section 11.1, page 502: 1, 3, 5, 8, 11, 18, 21, 24, 28, 33

Section 11.2, page 509: 2, 4, 9, 10, 15, 17, 20, 23, 26, 29, 32

Section 11.3, page 517: 1, 3, 6 (sin, cos, tan only), 11, 12, 15, 17, 20, 22, 23, 38, 41, 44

**3/18 Quiz 4 (sections 5.5 and 8.1)  
catch up and review**

***Sections 11.1, 11.2, 11.3 due March 23***

**3/23 Review for Final Exam**

**3/25 FINAL 10:00 – 11:50 AM (cumulative. You may bring an 8.5x11 single side note card)**