

MA 062: Geometry II
Alabama School of Math and Science
Classroom/Office: S201
Web site: mathemartiste.com
Office Hours: Mon, Wed, Fri 10:00 (3rd per) & 1:45 (7th per); Wed 3:45 (9th per/"after school")
Math Lab (free tutoring): Sunday-Thursday 6:30-8:30pm in S201
Khan Academy Coach Code: WP9Z8VW8

Spring 2018 Syllabus
Instructor: Sarah Brewer
Office Phone: 251.441.2127
Email: sbrewer@asms.net (best way to contact me)

Course Description: Geometry II involves Euclidean Geometry of the circle and associated concurrence theorems, the study of analytic geometry of the various conic sections, and an investigative approach to the study of elementary topology, fractal geometry and non-Euclidean geometry. Prerequisite: MA061.

Text: Harold R. Jacobs, *Geometry: Seeing, Doing, Understanding*, 3rd ed.

Coverage: Chapters 9-16

Required Materials: 3-ring binder with notebook paper and dividers

Students should regularly update this notebook with reflections on assignments, performance, and learning.

Dividers should be labeled as follows:

1. Handouts – This section should include the syllabus, formula sheets, photocopies of supplementary texts, or any other materials that are distributed in class that do not fall into another category.
2. Lecture Notes – This section should include any notes taken by the student from class lectures, the textbook, and videos, including any handouts with fill-in note slides, clearly labeled with the date and section or topic title, ordered according to date. Note that any lecture notes presented using the Smart Board will be exported in .pdf format and posted to my teaching web site for student convenience.
3. Problem Solving – This section should include problem sets assigned from the textbook and Khan Academy, and any other practice problems worked by the student to support the lecture notes. These should be labeled neatly with your name, date, textbook chapter & section and/or video/topic title as relevant, and problem numbers.
4. Quizzes/Tests/Projects – This section should include any Quizzes, Tests, Projects, Papers, and Reports, clearly labeled and in order by date.
5. Reflection – This section should include study guides with material grouped by chapter/section/topic, written reflections and corrections after each graded assignment is returned, and copies of any Progress Reports received by the student.

Grade determination: Grades will be assigned based on total points earned out of total points possible. Homework assignments and tests will be posted on Netclassroom. Khan Academy assignments will be given regularly. It is the student's responsibility to check these daily to make sure they are not missing anything. Grades will be posted on Netclassroom.

Tests are worth 100 points each, and will consist primarily of material covered since the prior test, but will also include some review questions. Tests will consist of questions similar to what students will see on the AP Calculus Exam. The final exam will be comprehensive and is worth 200 points.

Tentative test dates: Week 3, Week 6, Week 9

Homework assignments typically range in point value from 5-20 points, and should be labeled neatly with your name, date, textbook chapter & section and/or video title as relevant, and problem numbers. Since many textbook problems assigned will be odd-numbered, students should check their own work for accuracy and ask the instructor or Math Lab proctors to check even-numbered problems. Credit will not be given for answers copied from the back of the book or from another student. Show all of your own work. Some assignments may be submitted via turnitin.com. Assignments made on Khan Academy should be worked out on paper and kept in the appropriate notebook section. Even when not required, use of this resource is encouraged.

Quizzes and other in-class assignments typically range in point value from 10 to 50 points. Quizzes will be a combination of theory (rules, definitions, and formulas) and problems similar to and directly from homework assignments. Quizzes can occur any day of the week and may be announced or unannounced. If you miss a quiz with an excused absence for which a make-up quiz is not available, you will have fewer total possible points. If a make-up quiz is available, it must be made up within 3 days of a student's return to class. Quizzes missed due to unexcused absences will receive a grade of 0.

Make-up policy: Any homework checks, quizzes, or tests missed due to unexcused absences will receive a grade of zero. Homework assigned during a student's absence must be turned in within three days of the student returning to class. There are no make-up quizzes. Arrangements to make-up tests must be done BEFORE the test is missed. In case of unexpected illness, this can be done via email. Note: make-up assignments will, in general, be more difficult than the original.

Cell phone policy: Phones should be SILENT or OFF (not on vibrate) and away. I reserve the right to confiscate any phone that I deem a distraction. Use of cell phones during quizzes or tests will be considered academic dishonesty and result in a grade of zero. Occasionally, we may use smartphone apps in class, but phones should remain away unless otherwise specified.

Attendance and Tardiness Policy: Three tardies count as one unexcused absence. A student with three unexcused absences may be assigned a grade of WF for the course. Students are responsible for acquiring any missed notes and assignments (as these are posted on the web, this should not be a problem, but check with a classmate to see if you missed anything not posted).

Tutoring: All students are encouraged to attend my weekly Office Hours and the evening student-run Math Lab for help with homework and studying. Even if you do not have a specific question about the material, come by and work on your homework free from distractions and with math experts nearby to help. When you come, make sure you have both your notebook and textbook with you. The primary goal of tutoring is to help you figure out the answers for yourself, not to give you the answer, but if you get stuck, please speak up, even if a Math Lab proctor or myself are helping another student.

Calculators: Students will have in-class access to both scientific and graphing calculators. For any out-of-class assignments requiring calculator use, students are encouraged to utilize wolframalpha.com and desmos.com. Calculators will not be allowed at all on many assignments.

Geometry I Spring 2017 Tentative Schedule

Week 1 – February 26 – March 2

- Ch 9 – Area

Week 2 – March 5-9

- Ch 10 – Similarity

Week 3 – March 12–16
(3/16 is 1st grade posting)

- Test #1
- Ch 11 – The Right Triangle

Week 4 – March 19-23
(3/20 is ACT for Juniors)

- Ch 12 - Circles

Week 5 – March 26-29 (3/29 is short day)

- Ch 13 – The Concurrency Theorems

Week 6 – April 9-13 (4/13 is 2nd grade posting)

- Ch 13 – The Concurrency Theorems
- Test #2

Week 7 – April 16-20

- Ch 14 – Regular Polygons and the Circle

Week 8 – April 23-27

- Ch 14 – Regular Polygons and the Circle
- Test #3

Week 9 – April 30 – May 4

- Ch 15 – Geometric Solids

Week 10 – May 7-11 (5/9 is 3rd grade posting)

- Ch 15 – Geometric Solids
- Test #4

Week 11 – May 14-18 (5/18 is super short day)

- Ch 16 – Non-Euclidean Geometries

Final Exams – May 21-24