

Syllabus
Fall Semester, 2026
MATH 1112
Trigonometry & Analytic Geometry
MW: 9:00–10:15 AM
Technology-Enhanced Learning Center, Room 1114

Text: *Algebra and Trigonometry 2e*, by J. Abramson, Openstax.

The student can download the text for free at

<https://openstax.org/details/books/algebra-and-trigonometry-2e>.

Make sure to download the pdf version.

Instructor: Dr. Mark Faucette

Office: Technology-Enhanced Learning Center, Room 2247

Phone: My contact phone number is 470-729-1129. This is my Google voice phone number. It will ring my campus phone and my cell phone.

E-Mail: My e-mail address is faucette@westga.edu.

The Web: My web page is at URL <http://mfaucette.dyndns.org>. The full course syllabus is located on my web site and can be downloaded as a pdf file. It is the student's responsibility to download and/or to print the syllabus and to follow it.

Office Hours: My office hours are

- MW: 1:30–2:30 PM
- F: 9:00–11:30 AM

Other times available by appointment.

I do not help students with homework problems or quiz problems. I do not provide private instruction or individual tutoring. If you need help with the content of the course, go to the STEM Tutoring Center or the Center for Academic Success.

I do not hold office hours during final exam week.

Required Equipment: The following is required for the course:

- A graphing calculator is required for this course. Graphing calculators equivalent to the TI 83, 84, 85, and 86 will be allowed on exams, as will scientific calculators. The TI-89 and other equivalent calculators will *not* be allowed. You must have your calculator with you every class day.

Learning Outcomes: Students should be able to demonstrate:

1. An understanding of how to find the values of the trigonometric functions from right triangles and circles
2. An understanding of how to graph the trigonometric functions
3. An understanding of how to prove trigonometric identities
4. An understanding of how to use the sum, difference, double-angle and half-angle formulas for sine and cosine
5. An understanding of how to solve triangle using the law of sines and law of cosines
6. An understanding of polar coordinates and graphs
7. An understanding of how to analyze and solve applied problems

Common Language for Course Syllabi: Students, please carefully review the following information at the link

<http://www.westga.edu/UWGSyllabusPolicies/>.

It contains important material pertaining to your rights and responsibilities in this class. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.

Grading Policy

Homework (200 points) Homework will be completed online using MyOpenMath. Homework will be scaled to count two hundred points.

Quizzes (150 points) Quizzes will be completed online using MyOpenMath most every Friday. Quizzes will be scaled to count one hundred fifty points.

Tests (400 points) There will be four tests, each counting one hundred points.

Final Examination (250 points) There will be one comprehensive final examination counting two hundred fifty points.

At the end of the semester, the following grading scale will be used:

- 1000 points is the total number of points possible.
- A total of 900–1000 points earns an A.
- A total of 800–899 points earns a B.
- A total of 700–799 points earns a C.
- A total of 600–699 points earns a D.
- A total below 600 points earns an F.

Expectations

Course Content: The course will cover the topics listed on the attached learning schedule.

Reading Assignments: You are responsible for reading and understanding the text before it is covered in class through lecture. The lectures during class time will supplement, not replace, the reading of the text. Since class time is limited, only a limited number of examples can be given in class. You can find a large number of examples worked completely in the text. If you are diligent, you will find these examples a great help in completing the homework assignments and earning a satisfactory grade at the end of the semester.

Extra Credit: There is no extra credit for any reason. All points must be earned on the homework, quizzes, tests, and the final examination. I do not “curve” scores. That, too, is extra credit. You get the points you earn.

Make-Up Work: There are no make-up grades for any reason. Students must complete all the homework assignments and quizzes when they are due. Students having an unexcused absence on the day of a test will receive a grade of zero for that test. Students having an excused absence on the day of a test will have their test average entered for the missed grade. This may only be done once. Absences must be excused *before* they occur except in extraordinary cases, such as active military duty, jury duty, or hospitalization. *Being sick, short of being hospitalized, is not an excuse.* If you anticipate being absent from class for a religious holiday, it is your responsibility to notify me *in advance*.

Homework: For each section of our text, there will be an accompanying homework assignment found on MyOpenMath which has been integrated into CourseDen. *Do not create an account in MyOpenMath for this course.* Deadlines for each section will be found on CourseDen with each assignment throughout the semester.

There are no extensions on the due dates for homework assignments for any reason.

Quizzes: Quizzes will be completed online using MyOpenMath most every Friday. There will also be unannounced in-class quizzes to ensure attendance and participation from time to time. Quizzes will be scaled to count one hundred fifty points.

There are no extensions on the due dates for quizzes for any reason.

Tests: There will be four tests administered on Wednesday, September 9; Monday, October 5; Monday, November 9; and Wednesday, December 2.

You will need your calculator for each test.

Midterm: THE LAST DAY TO WITHDRAW WITH A W IS WEDNESDAY, OCTOBER 21.

Final Examination: There will be a comprehensive final examination administered on Monday, December 7, from 9:00 AM to 11:00 AM in room 1114 of the Technology-Enhanced Learning Center.

You will need your calculator for the final examination.

MATH 1112 Lecture Schedule

Wednesday, August 12	Section 7.1
Monday, August 17	Section 7.2
Wednesday, August 19	Section 7.3
Monday, August 24	Section 7.4
Wednesday, August 26	Section 8.1
Monday, August 31	Section 8.2
Wednesday, September 2	Section 8.3
Monday, September 7	Labor Day Holiday
Wednesday, September 9	Test 1
Monday, September 14	Section 9.1
Wednesday, September 16	Section 9.2
Monday, September 21	Section 9.3
Wednesday, September 23	Section 9.4
Monday, September 28	Section 9.5
Wednesday, September 30	Review
Monday, October 5	Test 2
Wednesday, October 7	Section 10.1
Monday, October 12	Section 10.2
Wednesday, October 14	Section 10.3
Monday, October 19	Section 10.4
Wednesday, October 21	Section 10.5
Monday, October 26	Section 10.6
Wednesday, October 28	Section 10.7
Monday, November 2	Section 10.8
Wednesday, November 4	Review
Monday, November 9	Test 3
Wednesday, November 11	Section 12.1
Monday, November 16	Section 12.2
Wednesday, November 18	Section 12.3
Monday, November 23	Thanksgiving Recess
Wednesday, November 25	Thanksgiving Recess
Monday, November 30	Review
Wednesday, December 2	Test 4

Academic Orientation for Freshman Lecture Courses¹

The fundamental problem is that most of our current high school graduates don't know how to *learn* or even what it means to learn (a fortiori to understand) something. In effect, they graduate high school feeling that learning must come down to them from their teachers. That may be suitable for the goals of high school, but it unacceptable at the university level. *That the students must also learn on their own, outside the classroom, is the main feature that distinguishes college from high school.*

My contention is that it is possible to get college freshmen to learn calculus fairly well, without resorting to utopian tricks such as enforced group projects. All we have to do is get the student to accept that learning is something that will take place mostly outside of class; that is, *just insist that they grasp the underlying premise of college education.*

1. **You are no longer in high school.** The great majority of you, not having done so already, will have to discard high school notions of teaching and learning and replace them by university-level notions. This may be difficult, but it must happen sooner or later, so sooner is better. Our goal is more than just getting you to reproduce what was told to you in the classroom.
2. Expect to have material covered at *two to three* times the pace of high school. Above that, we aim for greater command of the material, especially the ability to apply what you have learned to new situations (when relevant).
3. Lecture time is at a premium, so it must be used efficiently. You cannot be “taught” everything in the classroom. **It is *your* responsibility to learn the material.** Most of this learning must take place *outside* the classroom. You should be willing to put in two hours outside the classroom for each hour of class.
4. The instructor's job is primarily to provide a framework, with *some* particulars, to guide you in doing your learning of the concepts and methods that comprise the material of the course. It is not to “program” you with isolated facts and problem types nor to monitor your progress.
5. You are expected to read the textbook for comprehension. It gives the detailed account of the material of the course. It also contains many examples of problems worked out, and these should be used to supplement those you see in the lecture. The textbook is not a novel, so the reading must often be slow-going and careful. However, there is the clear advantage that you can read it at you own pace. Use pencil and paper to work through the material and to fill in omitted steps.
6. As for *when* you engage the textbook, you have the following dichotomy:
 - (a) [*recommended for most students*] Read for the first time the appropriate section(s) of the book *before* the material is presented in lecture. That is, come prepared for class. Then the faster-paced college-style lecture will make more sense.
 - (b) If you haven't looked at the book beforehand, try to pick up what you can from the lecture (absorb the general idea and/or take thorough notes) and count on sorting it out later while studying from the book outside of class.

¹Steven Zucker, *Notices of the American Mathematical Society*, vol. 43, no. 8, p. 865 (August 1996)