

Syllabus
Summer Semester, 2006
MATH 1112, Trigonometry and Analytic Geometry
MWF, 12:00–1:45 PM
Boyd Building, Room 305

Text: *Precalculus*, Second Edition, by Robert Blitzer, Prentice-Hall, Inc., 2004.

Instructor: Dr. Mark Faucette

Office: Boyd Building 323

Phone: My office phone number is 678-839-4133. Call and leave a message on my answering machine. I screen my phone calls, so make sure you leave a message.

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

The Web: My web site is at URL <http://www.westga.edu/~mfaucett/>. 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

- MWF: 1:45–5:00 PM

I do not hold office hours during final exam week.

Required Equipment:

- A graphing calculator is required for this course. The TI-83 plus is recommended, but any comparable graphing calculator is acceptable.
- Microsoft[©] PowerPoint is required for this course. This software is available to students free of charge from Student Information Technology Services.

Grading Policy

Tests (300 points) There will be three tests, each counting one hundred points.

Final Examination (150 points) There will be one comprehensive final examination counting one hundred fifty points.

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

- 450 points is the total number of points possible.
- A total of 400–450 points earns an A.
- A total of 350–399 points earns a B.
- A total of 300–349 points earns a C.
- A total of 250–299 points earns a D.
- A total below 250 points earns an F.

Attendance and Classroom Decorum: You are expected to attend class every class period. Class time is at a premium, so it is imperative that it be used wisely. You are not allowed to come to class late or to leave early. You may not converse with other students during class time without my permission. If you disrupt the educational atmosphere of the class, I will ask you to leave. If I have to ask you to leave twice, I will withdraw you from the course. If you miss class for any reason, it is your responsibility to get the notes from a classmate, read the text, and do the homework.

Pagers and Cell Phones: Students are not allowed to carry pagers or cell phones in the classroom unless they are set to an inaudible setting. Any student having a cell phone within view during a graded assignment will be assumed to be using it to cheat and will be turned over to the appropriate university official for disciplinary action.

Office Hour Regulations: In order for me to utilize my time more wisely, I require students to make appointments to see me during office hours. Appointment sheets are posted by my office door and you must sign up for an appointment at least one day in advance. During your appointment you will have my complete and undivided attention. I do not provide individualized instruction during office hours.

Course Content: The course will cover the sections of the book listed on the attached learning schedule.

Reading Assignments: You are responsible for reading and understanding the text before it is covered in class. 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.

Lecture: There are no lectures over the material in the course. Class time will be devoted exclusively to answering students' questions, working examples, and assessment. The student must learn the material through reading the text and downloading and following the PowerPoint lectures for the course. If needed, students can obtain supplementary assistance from the Mathematics Tutoring Center.

Homework: Homework assignments will be made frequently, and will coincide with the the learning schedule. The homework problems may be either examples or applications of the theory presented in class, or expansion of that theory. You may complete the homework either individually or in small groups. Working in small groups is encouraged provided that each member of the group actively contributes to a discussion of the material and to solutions of the problems. You are responsible for completing every homework assignment, regardless of class attendance. Because the completion of the homework is a learning experience in and of itself, I will be unavailable to help you with specific homework. I am, however, available to discuss examples not covered in class, the general theory, and logistical questions about the course.

Extra Credit: There is no extra credit for any reason. All points must be earned on the tests and the final examination.

Make-Up Work: There are no make-up tests for any reason. Students having an unexcused absence on the day of a test will be assigned 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. 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*.

Tests: There will be three tests administered on Wednesday, June 14; Monday, June 26; and Friday, July 7. You will need a small Scantron form (#882-E at the University Bookstore), your calculator, and a number two pencil for each test.

Midterm: THE LAST DAY TO WITHDRAW WITH A W IS WEDNESDAY, JUNE 28.

Final Examination: There will be a comprehensive final examination administered on Friday, July 28, from 10:00 AM to 12:00 PM in room 305 of the Boyd Building. You will need a small Scantron form (#882-E at the University Bookstore), your calculator, and a number two pencil for the final examination.

MATH 1112 Learning Schedule

Monday, June 5	Sections 4.1 & 4.2
Wednesday, June 7	Sections 4.2 & 4.3
Friday, June 9	Sections 4.3 & 4.4
Monday, June 12	Sections 4.4 & 4.5
Wednesday, June 14	Section 4.5 & Test 1
Friday, June 16	Sections 4.6 & 4.7
Monday, June 19	Sections 4.7 & 4.8
Wednesday, June 21	Sections 4.8 & 5.1
Friday, June 23	Sections 5.1 & 5.2
Monday, June 26	Section 5.2 & Test 2
Wednesday, June 28	Sections 5.3 & 5.4
Friday, June 30	Sections 5.4 & 5.5
Monday, July 3	Sections 5.5 & 6.1
Wednesday, July 5	Sections 6.1 & 6.2
Friday, July 7	Section 6.2 & Test 3
Monday, July 10	Sections 6.3 & 6.4
Wednesday, July 12	Sections 6.4 & 6.5
Friday, July 14	Sections 6.6 & 6.7
Monday, July 17	Sections 9.1 & 9.2
Wednesday, July 19	Sections 9.2 & 9.3
Friday, July 21	Sections 9.3 & 9.5
Monday, July 24	Sections 9.5 & 9.6

MATH 1112 Assignment Sheet

Section 4.1	pp. 434–436	#1–69 every other odd, #71–84
Section 4.2	pp. 450–452	#1–55 every other odd, #57–60
Section 4.3	pp. 461–464	#1–41 every other odd, #43–50
Section 4.4	p. 474	#1–65 every other odd
Section 4.5	pp. 493–496	#1–57 every other odd, #59–66
Section 4.6	pp. 506–509	#1–43 every other odd, #45–50
Section 4.7	pp. 522–524	#1–71 every other odd, #73–78
Section 4.8	pp. 534–536	#1–49 odd
Section 5.1	pp. 553–554	#1–59 every other odd
Section 5.2	pp. 563–565	#1–65 every other odd, #67, 68
Section 5.3	pp. 573–575	#1–67 every other odd, #69–71
Section 5.4	pp. 581–583	#1–30 odd
Section 5.5	pp. 592–594	#1–77 every other odd, #79–86
Section 6.1	pp. 607–610	#1–37 every other odd, #39–51 odd
Section 6.2	pp. 616–618	#1–43 every other odd
Section 6.3	pp. 628–629	#1–71 every other odd, #73–77
Section 6.4	pp. 640–642	#1–33 every other odd, #35–39
Section 6.5	pp. 653–654	#1–75 every other odd, #77, 78
Section 6.6	pp. 666–669	#1–51 odd
Section 6.7	pp. 677–678	#1–51 odd
Section 9.1	pp. 842–845	#1–55 every other odd, #57–65 odd
Section 9.2	pp. 857–860	#1–49 every other odd, #51–61 odd
Section 9.3	pp. 872–874	#1–47 every other odd, #49–61 odd
Section 9.5	pp. 895–897	#1–57 every other odd, #59, 60
Section 9.6	pp. 907–908	#1–19 odd, #21–29 odd

Academic Honesty Prohibited Conduct¹

General standard of conduct. No student shall knowingly perform, attempt to perform, or assist another in performing any act of dishonesty on academic work to be submitted for academic credit or advancement. The term “knowingly,” as used in the preceding sentence, means that the student knows that the academic work involved will be submitted for academic advancement. “Knowingly” does not mean that the student must have known that the particular act was a violation of the University’s academic honesty policy. A student does not have to intend to violate the honesty policy to be found in violation. For example, plagiarism, intended or unintended, is a violation of this policy.

Examples of Academic Dishonesty. The following acts by a student are examples of academically dishonest behavior:

- (a) Plagiarism - Submission for academic advancement the words, ideas, opinions or theories of another that are not common knowledge, without appropriate attribution to that other person. Plagiarism includes, but is not limited to, the following acts when performed without appropriate attribution:
 - (i) Directly quoting all or part of another person’s written or spoken words without quotation marks, as appropriate to the discipline;
 - (ii) Paraphrasing all or part of another person’s written or spoken words without notes or documentation within the body of the work;
 - (iii) Presenting an idea, theory or formula originated by another person as the original work of the person submitting that work;
 - (iv) Repeating information, such as statistics or demographics, which is not common knowledge and which was originally compiled by another person;
 - (v) Purchasing (or receiving in any other manner) a term paper or other assignment that is the work of another person and submitting that term paper or other assignment as the student’s own work.
- (b) Unauthorized assistance - Giving or receiving assistance in connection with any examination or other academic work that has not been authorized by a faculty member. During examinations, quizzes, lab work, and similar activity, students are to assume that any assistance (such as books, notes, calculators, and conversations with others) is unauthorized unless it has been specifically authorized by a faculty member. Examples of prohibited behavior include, but are not limited to, the following when not authorized:
 - (i) Copying, or allowing another to copy, answers to an examination;
 - (ii) Transmitting or receiving, during an examination, information that is within the scope of the material to be covered by that examination (including transmission orally, in writing, by sign, electronic signal, or other manner);

¹The content of this page is taken from the document *Academic Honesty Policy (A Culture of Honesty)*, Section 5, The University of Georgia

- (iii) Giving or receiving answers to an examination scheduled for a later time;
 - (iv) Completing for another, or allowing another to complete for you, all or part of an assignment (such as a paper, exercise, homework assignment, presentation, report, computer application, laboratory experiment, or computation);
 - (v) Submitting a group assignment, or allowing that assignment to be submitted, representing that the project is the work of all of the members of the group when less than all of the group members assisted substantially in its preparation;
 - (vi) Unauthorized use of a programmable calculator or other electronic device.
- (c) Lying/Tampering/Bribery - Bribery or giving any false information in connection with the performance of any academic work or in connection with any proceeding under this policy. This includes, but is not limited to:
- (i) Giving false reasons (in advance or after the fact) for failure to complete academic work. This includes, for example, giving false excuses to the Faculty Member or to any University official for failure to attend an exam or to complete academic work;
 - (ii) Falsifying the results of any laboratory or experimental work or fabricating any data or information;
 - (iii) Altering any academic work after it has been submitted, unless such alterations are part of an assignment (such as a request of an instructor to revise the academic work);
 - (iv) Altering grade, lab, or attendance records. This includes, for example, the forgery of University forms for registration in or withdrawal from a course;
 - (v) Damaging computer equipment (including disks) or laboratory equipment in order to alter or prevent the evaluation of academic work, unauthorized use of another's computer password, disrupting the content or accessibility of an Internet site, or impersonating another to obtain computer resources;
 - (vi) Giving false information or testimony in connection with any investigation or hearing under this policy;
 - (vii) Submitting for academic advancement an item of academic work that has previously been submitted (even when submitted previously by that student) for academic advancement, unless done pursuant to authorization from the Faculty Member supervising the work or containing fair attribution to the original work.
- (d) Theft - Stealing, taking or procuring in any other unauthorized manner (such as by physical removal from a professor's office or unauthorized inspection of computerized material) information related to any academic work (such as exams, grade records, forms used in grading, books, papers, computer equipment and data, and laboratory materials and data).
- (e) Other - Failure by a student to comply with a duty imposed under this policy. However, no penalty is imposed under this policy for failure to report an act of academic dishonesty by another or failure to testify in an academic honesty proceeding concerning another. Any behavior that constitutes academic dishonesty is prohibited even if it is not specifically listed in the above list of examples.

Academic Orientation for Fall Semester Freshman Lecture Courses²

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.

²Steven Zucker, *Notices of the American Mathematical Society*, vol. 43, no. 8, p. 865 (August 1996)

The Ten Commandments For Taking a Test

Commandment I

Thou shalt study for an exam gradually over a period of days or weeks. Thou shalt not “cram”.

Commandment II

Thou shalt go to bed at a reasonable hour the night before an exam.

Commandment III

Thou shalt eat breakfast the morning of an exam.

Commandment IV

Thou shalt not study the day of an exam.

Commandment V

Thou shalt arrive at class five to ten minutes before an exam begins. Thou shalt sit in thy usual seat unless thou receivest an assigned seat.

Commandment VI

Thou shalt work through the entire test when thou receivest it. Thou shalt skip any question which thou dost not know how to work immediately and proceedest to the next question.

Commandment VII

Thou shalt check all thy answers after thou doest each problem. Thou shalt check all thy answers a second time after completing the exam.

Commandment VIII

Thou shalt work on the problems which thou hast skipped only after having gone through the entire test once. Thou shalt then have more time to devote to these problems without fearing that thou shalt not finish a majority of the exam.

Commandment IX

Thou shalt never turn in an exam early. Thou shalt check thy answers again if time remains.

Commandment X

Thou shalt have a positive attitude when taking an exam. Thou shalt be confident that thou knowest the material.

Information Sheet

(Please Print)

Name: _____ Student ID#: _____

Local mailing address: _____ E-mail: _____

Phone: _____ Year at UWG: _____

Math Background (List high school courses and any UWG courses.)

What are you taking this semester?

What is your major/proposed major?

When is your birthday?

Where are you from?