Professor: David McClendon (ASC 2046, phone x2574 (231-591-2574 off campus), hours MTR 1-2 or by appointment, email: DavidMcClendon@ferris.edu)

Lectures: TR 9:30-10:45 AM in STR 108.

Prerequisite: MATH 115 (or equivalent) with a grade of C- or better; or a sufficient score on a standardized test or placement exam. Basically, this means decent algebra skills.

Web: http://mcclendonmath.com/120.html contains the lecture notes, study guides for each exam, and other information.

Materials you need: Two items:

- **Required:** My lecture notes, which can be obtained from my web page (as a pdf) or as a course pack at the bookstore. Bring the lecture notes every day, as they contain the examples we use in class.
- **Required:** A calculator that has SIN, COS and TAN buttons on it. It does not matter if it is a graphics calculator. You should bring your calculator to class. **You may not use your cell phone as a calculator on quizzes or exams.**

Other recommended materials: I recommend a three-ring binder to hold the lecture notes and other handouts. I also recommend bringing a couple of colored pens or pencils to class each day, as some of the pictures we will draw to explain concepts are much more easily understandable when drawn in color.

Course material: Angles; trigonometric functions; solutions of triangles; manipulation of trig expressions using identities.

Learning outcomes: After completing MATH 120, it is my hope and expectation that students will be able to:

1. solve abstract and practical problems involving angle measures, angle measurements, circular arc length, areas of circles, sectors and triangles, linear velocity and angular velocity;
2. evaluate trigonometric functions (by hand at special angles; otherwise with a calculator);
3. solve triangles;
4. sketch and interpret the graphs of trigonometric functions (including shifts of sine and cosine graphs); and
5. verify trigonometric identities and use them to manipulate expressions and solve problems.

Grading policy: Class participation/in-class activities: 8%. Quiz average: 13%. Three midterm exams: 18% each. Final exam: 25%. Grades will be curved at the end of the semester, but an average of 90% guarantees you at least an A-, an average of 80% guarantees you at least a B-, etc.

Attendance policy: I have no formal attendance policy. That said, **nothing** is more correlated with strong performance in my classes than attendance in lectures.

Recommended Homework: In the back of my lecture notes (Chapter 8), you will find homework problems from each section in my notes. While these exercises will not be collected for a grade, extensive practice with homework exercises is the best preparation for quizzes and exams.

Quizzes: There will be ten quizzes on the dates listed on the attached course calendar (I reserve the right to change these dates if necessary). These are ≤ 10 minutes long and *always cover the material that has been covered in class since the previous quiz or exam*. Whether or not a calculator is permitted depends on the quiz content. Each quiz is graded out of 10 points; the lowest three are dropped and the other seven are averaged to give your quiz average. Makeup quizzes are not given under any circumstances (you have to use one of your three drops).

Midterms: There are three midterm exams, on the dates listed on the attached course calendar. Each test is divided into two parts, where on one part you may not use a calculator and on the other part you will need a calculator. You may not use notes, the book, or other study aids on the exams. Midterms are not directly cumulative, but mathematics is "inherently cumulative".

You may make up an exam that you miss (whether your absence is excused or not) but the makeup exams may be considerably more difficult. If you miss an exam, contact the professor; you are to make up the exam at the *earliest possible time*.

Final exam: The final exam is cumulative, and like the midterms, has a part where you cannot use a calculator and a part where you need a calculator.

Getting help: The best place to receive help is my office. In class, I will not have time to take many homework questions, and I will not be able to present all perspectives on a topic. In office hours, I am able to discuss the material at a much more friendly pace and offer some alternate viewpoints that may help you understand the material better.

If you cannot make my scheduled office hours, you can come talk to me anytime my office door is open. Also, I am more than happy to make an appointment to discuss the material with you. Send me an email.

Additionally, the Math Club may hold weekly tutoring sessions in FLITE (times and locations of these will be announced later) and the Academic Support Center (FLITE 120, x3543, asc@ferris.edu) offers free tutoring as well.

To schedule an appointment with a tutor, you can use the online scheduling tool TutorTrac (located within the "Academic Support" link in Ferris360).

Students with disabilities who require reasonable accommodations to fully participate in course activities or meet course requirements should register with the Educational Counseling and Disability Services office (x3057, ecds@ferris.edu). While ECDS will send me a letter outlining the accommodations to make for you, I would appreciate it if you could contact me immediately for assistance with any necessary classroom accommodations.

Academic dishonesty: Papers will be monitored for "magic answers". Issues with academic dishonesty are taken very seriously, will almost always result in an F for the class, and will be referred to the Office of Student Conduct.

In particular, no cell phone usage is allowed for any reason during exams.