

Math 104 Trigonometry**4 Units****Spring 2014**

Meeting Times: Monday & Wednesday 6:00 – 7:50 PM Meeting Place: Room E106

Instructor: Charlie Lincoln

Email: c.lincoln@sbcglobal.net

Cell Phone: 545-9411

Office Hours: To Be Announced or By Appointment

The best way to contact me is to call my cell phone, 545-9411. If I am not in my office, please leave me a voice or text message with your name and phone number.

Optional Text: *Precalculus* 6th Edition by Sullivan & Sullivan,
Check out the Solutions manual for this course before purchasing it to see if the book meets your needs.

Course Compass Log-In: (for [MyMathLab](#)): **lincoln74418**

Course Compass is optional for this course but if you want to use it for practice or to study, a software license is required. You must have a valid e-mail address to use the on-line curriculum. Students have *two choices*. The *first choice* is to purchase the textbook from the bookstore. The textbook comes with the software license. Note: If you purchase a used textbook, it may not have a valid course access code. Be VERY careful when acquiring the text. The *second choice* is to purchase the license alone either from the bookstore or online at coursecompass.com. The license gives you access to the textbook online. This is a more economical choice, but is only recommended to students who have online access and feel comfortable reading a computer screen instead of a traditional book. To access our class page, go to www.coursecompass.com and register using your student access code and the course ID for this class: **lincoln74418**

Course Description: MAT 104 is the study of trigonometric functions, their graphs and properties, functions of multiple angles, trigonometric identities, radian measure, inverse trigonometric functions, solutions of triangles, polar coordinates, parametric equations, and complex numbers.

Prerequisite: Mat 103A with a grade of “C” or better or equivalent or appropriate skills demonstrated through the math assessment process.

Co-requisite: Mat 103B or equivalent or appropriate skills demonstrated through the math assessment process. Prior completion of Mat 103B with a grade of “C” or better also satisfies this co-requisite.

Calculators: A graphing calculator is required for this class. I will be demonstrating with the Texas Instruments-89.

Course Objectives:

1. Provide and analyze graphs of trigonometric functions.
2. Apply trigonometric techniques to solve problems in real world contexts.
3. Derive and prove trigonometric properties and identities.
4. Produce solutions to equations using skills developed in trigonometry

Grading: Your class letter grade will be based on the usual grading scale:

A: 90% and above,	B: 80-89%,	C: 70-79%,	D: 60-69%,	F: 59% and under.
Homework			100 pts.	
4 Quizzes			100 pts.	
Midterm Exam 1			100 pts.	
Midterm Exam 2			100 pts.	
<u>Comprehensive Final Exam</u>			<u>100 pts.</u>	
Total			500 pts	

Grades will be posted on the internet with Passport

Homework: The homework problems are to be turned in weekly. Their due dates are listed every week. These problems are considered late if they are not turned in by 11:55 PM on the day they are due. Homework that is turned in late within one week of the due date receives 8 points. All homework sections are worth 10 points each.

Quizzes: There are no make-up quizzes. I give five quizzes but only four are counted so your lowest quiz score will be dropped.

Midterm Exams: You must notify me before an exam if you will miss the exam (545-9411). Exams must be made up within 3 school days after the scheduled date. You may take an exam up to 3 school days before the scheduled date. Arrangements must be made with me one week in advance.

Please come see me if you do not understand these policies.

In this class, it is your responsibility to drop the class in order to avoid an unwanted grade. You must go to Admissions & Records.

Friday, April 18 is the last day for refunds.

Friday, April 18 is the last day to drop with no record.

Friday, May 23 is the last day to withdraw with a “W” grade.

How to Succeed in a Math Class:

I am often asked how to successfully pass a math class, and here is my advice:

1. Come to every class session. Be prepared, and plan on participating.
2. Do your homework. Remember that what I assign is what I consider a bare minimum. If you need more practice, do it.
3. Read the book.
4. Make use of available tutors and my office hours. You will find tutors who know the subject matter in this course at the GMC.
5. Do math every day. Math is just like everything else: if you don't practice, you become rusty.

Students with disabilities must identify themselves to me within the first two weeks of class.

Accommodations for Students with Disabilities: Students requiring accommodations for a certain disability that may affect class performance are requested to schedule with a staff member at the Disability Resource Center to discuss this during the first week of the quarter so that appropriate arrangements can be made.

* Course materials available in alternate format.

Academic Dishonesty: Academic dishonesty of any form will not be tolerated. Students caught cheating on exams or quizzes will receive a score of zero on the assignment for the first offense and a course grade of F for the second offense. Students may work together on homework assignments (and, in fact, are encouraged to) as long as all students understand the material covered.

Course Schedule:

The following is a tentative schedule. If things change, I will let you know.

April

- 7 6.1 Angles and their Measurements
- 9 6.2 The Trigonometric Functions
- 6.3 Properties of the Trigonometric Functions
- 14 6.4, 6.5 Graphs of the Trigonometric Functions
- 16 **Quiz 1**
- 6.6 Phase Shifts and Curve Fitting
- 21 Review
- 23 **Exam I**
- 28 7.1, 7.2 The Inverse Trigonometric Functions
- 30 7.3 Trigonometric Identities
- 7.4 Sum and Difference Identities

May

- 5 7.5, 7.6, Double-Angle, Half-Angle, and other Identities
- 7 **Quiz 2**
- 7.7 Trigonometric Equations
- 12 7.8 More Trigonometric Equations
- 14 8.1 Solving Right Triangles
- 19 Review
- 21 **Exam II**
- 26 Memorial Day Holiday
- 28 8.2 Law of Sines

June

- 2 8.3, 8.4 Law of Cosines and Areas of Triangles
- 4 **Quiz 3**
- 9.1, 9.2 Polar Coordinates, Equations, and Graphs
- 9 9.3 Trigonometric Form of Complex Numbers
- 11 **Quiz 4**
- 9.4 Vectors
- 15 9.5 The Dot Product
- 10.7 Parametric Equations
- 18 **Quiz 5** Review
- 23 **Final Exam**