

## Trigonometry, MATH 1316-10

<http://www.math.lamnar.edu/faculty/maesumi/trig.html>

<http://www.math.lamnar.edu/faculty/maesumi/trig.pdf>

All information is subject to change. Access or timely update to the web site is not guaranteed. Attend all classes to get the latest information.

**Coordinates:** M-F 11:30–1:00, Lucas 113, July 12 – Aug 15.

Exams: Tuesday July 24, Friday August 3, Wednesday August 15, subject to change

Office: Lucas 206, M-F 11:05-11:25, 1:05-2:00, maesumi@gmail.com, 409-880-8766.

**Course Format:** We will use what is called “Now U-Try, dialog-based, flipped, inverted, or upside-down” format. In this method of teaching:

- a) Students view the videos at home and take careful searchable lecture notes. (Mostly two lecture videos per day)
- b) Students form study groups (2 or 3 students per group).
- c) Students solve the homework problems and enter the problem/answers on their notebook and/or online homework software MyMathLab/MML.
- d) Students come to board during class time to solve homework problems.
- e) Students get bonus points based on their performance at the board and for the performance of their team.
- f) There may be a short quiz at the beginning of each class on the assigned video lectures.
- g) So long as this format is used the tests will be open notebook.
- h) If 2/3 of students vote for traditional class format then tests will be closed notebook.

**Text and Online Access Code:** Title: Trigonometry, second edition, Authors: Beecher, Penna, and Bittinger, Publisher: Pearson, Addison Wesley, about 250 pages, soft cover. You may use MyMathLab software with this course. In that case you will do your homework online and get immediate feedback. You also get access to ebook version of the text (alongside extra material for college algebra, video instructions etc) through the access code. You can go to <http://www.coursecompass.com/> (or an alternate address as specified on your text access code) to register for the online component (once an access code is registered it cannot be used by another person but you can use it for the life of the edition of the text). I will give a course ID number in class which you will enter during registration. If you feel comfortable with using an ebook you may just purchase an access code (without the text). So long an access code is not registered then it can be used once for any course the publisher offers. A used text is an alternative, however it typically does not come with an un-used access code.

**Instructor, Contact:** Dr. Mohsen Maesumi, Ph.D. Room: Lucas 206. Preferred contact mode: E-mail: maesumi@gmail.com (Other email addresses are not monitored! Phone: 8766 is best used for last minute check, you want to re-confirm with email asap.)

**Office Hours:** M-F 11:05-11:25, 1:05-2:00. Feel free to drop in. If door is closed knock and wait 30 seconds. If you are coming to office it may be better if you bring exams, notebooks and other supporting material. If you are sending e-mail include your full name and use a heading that makes your e-mail stand out, e.g. Trig. Keep a copy and e-mail it again if you do not get a reply within one business day. The preferred contact form is through email given above, however if you want to leave a message on phone make it brief, speak clearly, and resend same information by email.

**Exam Dates, Absence:** Tuesday July 24, Friday August 3, Wednesday August 15, subject to change Exams are sectional and they count equally toward your final grade. Even though tests are sectional and focus on the material since the previous test certain topics do show up through out the course. If you are absent from an exam let me know as soon as possible and be prepared to show written proof of emergency. All issues with respect to grades should be resolved within one week of each test.

**Grading:** If you use MML your online homework grade will count as another test grade. If you do not use MML the average of your two highest test grades will count as another grade. The bonus points for work at board can be up to 10 points. The letter grades are given by  $A \geq 90 > B \geq 80 > C \geq 70 > D \geq 60$ .

**Course Objectives:**

Upon completion of the course, students should be able to:

1. Compute the values of the six trigonometric functions for key angles.
2. Graph all six trigonometric functions and their transformations.
3. Use the basic trigonometric identities to verify other trigonometric identities.
4. Solve trigonometric equations.
5. Solve right and oblique triangles.
6. Plot points and graph equations in the Polar Coordinate system.
7. Use basic operations for vectors in planes.
8. Relate the polar form for complex numbers to vectors.
9. Use the concepts of trigonometry to solve applied problems.

**How to prepare for exams:**

- 0- Number the pages of your lecture/homework note.
- 1- Study the problems solved in videos, in class or in the text.
- 2- Write the full statement of the problem on an index card.
- 3- Specify where the solution is to be found and the time to be allocated for solving it.
- 4- Store the index cards in a box.
- 5- Randomly choose enough problems to give yourself a one hour or 90 minute test.
- 6- Check your solutions vs the correct solutions.
- 7- Study the problems you missed.
- 8- Repeat with another self-test until you reach your desired performance level.
- 9- Do the optional review homework.

**Calculator Policy:** Advanced or graphing calculators and cell phones or wireless devices are NOT allowed on tests. Only BASIC scientific calculators are allowed. These calculators cost about 10-30 dollars, and do NOT have graphing capabilities. You do need to practice using the calculator EARLY ON and become confident about its operations. Do keep its manual and find the website of the calculator for future reference. The calculators with multi-line mathematical style display can show your steps and reduce data entry error. Casio FX-115ES and Sharp EL-W516 are two calculators below \$20 with this ability.

**Solution Manual Policy:** Do not bring it to class.

**NO:** noise, food, drink, ice, chips, chewables, edrugs (ipod, iphone, texting, surfing), etc.

**Test Code:** During tests your face should be visible to the instructor, your paper should be protected from your neighbors, you should not look at the test paper of your neighbors.