

Trigonometry with Vectors Math 241

West LA College Fall 2014

Instructor: Jamie Jenson

Email:

Section: 4504 (4units)

TuTh 4:30-6:35pm

MSA-202

Text: Trigonometry (6th Ed.) by McKeague and Turner (Required)

You may be able to rent one from the Bookstore. However, it might be less expensive to buy a used copy online.

Office and Phone: TBA

Prerequisites: Mathematics 125 or equivalent with "C" or better, or appropriate placement level demonstrated through math assessment process

Materials: You must buy the textbook for this course. Any scientific calculator will work fine for this course. You **CANNOT** use a graphing calculator for this course. You **CANNOT** use a smartphone, or PDA as a calculator and you cannot share calculators. You need to bring your calculator to every class period. You will also need a PENCIL to use for anything to be turned in. This means I will not grade anything written in pen. The exams and quizzes will be write-in (I don't believe in multiple choice) but the paper will be provided to you. You **DO NOT** need to buy any blue books or other material.

Availability

I am available almost all the time through email. Once I get specific office hours then you will be encouraged to meet me to ask questions and get help on anything we covered in class. If you are not able to meet me in office hours, you should ask or email me to set up a time before or after class. It is up to you to ask me for help.

Course Description:

This course of analytical trigonometry includes solutions of triangle problems, radian measure, graphs of trigonometric functions, trigonometric equations, identities, polar coordinates, inverse trigonometric functions, complex numbers and vectors.

Student Learning Outcomes

1. Use the trigonometric ratios and the laws of sines and cosines to solve applied problems involving triangles.
2. Graph sinusoidal functions of real numbers and use them to model periodic processes.

Course Objectives

1. Define the six trigonometric functions.
2. Evaluate trigonometric functions.
3. Find all solutions to problems involving the ambiguous case of the Law of Sines.
4. Distinguish between trigonometric equations and identities.
5. Distinguish between multiple-solution and single-solution equations.
6. State the reasons for range restrictions of the inverse trigonometric functions.
7. Recognize the connection between complex numbers and trigonometric functions.

Need Help?

There are many resources that are available to you for help with homework, studying and time management.

1. Your instructor - I am here to help you understand and get to know the wonderful subject called math. You can ask me questions in class (these are encouraged), as well as

email me anytime and I will get back to you quickly. I am also willing to meet before or after class to help if we can work out our schedules!

2. Your peers - Creating a study group and working on problems together is a great way to understand a concept better, and you can motivate each other to stay on top of your work. Even if that means you don't even talk, having company while you work can often keep you going. Try not to chat too much though! If you have a question you are unsure of, always email your instructor just in case.

3. Success Center - You can get help here on any of your homework problems.

5. Private Tutoring - There are many students who are in upper level math classes that are looking to help students at their school. This will usually cost you (The other options are all free!) but it might be the difference between being successful in this class, or not. Let me know if you would like to hire a tutor and I will do my best to find you a suitable one.

Do NOT wait until the last minute looking for help. By then, it will be too late. You need to keep on top of your homework to make sure you are successful in this class, and any others you take.

Homework (100 pts)

Homework will be turned in in four packets throughout the semester. These will be graded by checking 4 problems at 5 points each, and then an additional 5 points given if all problems are complete in each packet. Homework will be collected in packets, on the dates indicated on the schedule. Make sure to keep up with homework as we cover the sections. EOO means Every other Odd question. Please follow the FAWW below to make sure your homework is clear otherwise it will not be graded. You should take advantage of the Success Center on campus as well as your peers to get help for homework. You also should email me with any questions you have and I will be happy to help you via email, or meet with you, if possible.

Quizzes (200 pts)

There will be 10 quizzes worth 20 points each to be completed during class. You will not be allowed to make up any quizzes. Quiz problems will be similar to the homework problems assigned. They will not be the exact problems, but will have different numbers or similar changes. The quizzes will have time limits (usually 10-15 minutes) and must be completed once you begin. Quizzes will be given at any time during the class period so it will be in your best interest to show up on time and expect to stay the entire class period. **No makeups will be given for being late or missing class!** There are 11 quizzes scheduled, so I will be dropping your lowest quiz score to account for days you are absent because of illness, emergencies, etc.

Exams (300pts)

There will be 3 (100 pts each) midterm exams on the dates indicated in the schedule. Exam dates are subject to change if necessary. The problems on the exam will be similar to homework problems and quizzes.

If there is a crisis on the day of the exam, you need to contact me immediately and we will try to make arrangements for you, depending on the circumstances. You are expected to show all your work, or I will have to assume you cheated. You also need to follow the Format for All Written Work (FAWW) at the end of this syllabus. If you do not follow this format, you will receive 50% of your grade on that assignment, and will continue to receive that until you do follow the format. Plan on being at every exam now, check out the schedule. **There will be no makeup exams!**

Final (200 pts)

The final exam will be comprehensive and is worth 200 points. A missed final exam will result in an 'F' in the course. **No makeup exams will be given for missing class or being late!** You DO NOT need to buy any blue books or other material. If you keep up with the material and complete all the homework problems and study the quizzes, you should be well prepared for the exams. But, you are expected to understand the concepts we cover, not just the particular problems, so do not expect to see the exact problems that are on the quizzes also on the exams. They will be different, but overall will be similar.

Grading:

Homework	100 points	A: 90 - 100%
Quizzes (-1 quiz)	200 points	B: 80 - 90%
Midterm Exams	300 points	C: 70 - 79%
<u>Final Exam</u>	<u>200 points</u>	D: 60 - 69%
Total	800 points	F: Below 60%

Attendance

I expect you to be in class, just as you expect me to be there. You are responsible for finding out what you missed and making sure you understand what was covered in class if you do miss. It is much more difficult to learn on your own, so do not schedule doctor's appointments or trips to see grandparents during class, because you will not be able to hear the lecture or get my help in person. I do understand that things do come up, and we are forced to miss a class or two (illness, flat tire, etc) so you need to contact me as soon as possible. If you do have to miss a class period for some reason or another, you need to notify me by email at least a week in advance. If you are absent excessively (more than 2 times) without any communication with me, you will be dropped from the class without notice. In the same way you should come to class, you should also **be on time**. I may ask you to wait outside until a break if you disrupt the class flow, which could result in missing an important concept, and you could also be marked absent if you show up late. Please be respectful of everyone in class and show up on time.

Since you are expected to be responsible for what you missed if you are absent. Here is a perfect opportunity to introduce yourself to your neighbors:

Name: _____ Phone #: _____

Name: _____ Phone #: _____

Please contact these people for sections we covered in class, and any announcements I made to the class.

Academic Dishonesty

Don't cheat. It cheapens your education, as well as the education people seek at this institution. I will not tolerate cheating in any way! If I notice you cheating during a quiz or test, you will receive an 'F' for that assignment or an 'F' in the class and reported to the college administration. A grade of "F" assigned to a student for academic dishonesty is final

and shall be placed on the transcript. If the student withdraws from a course, a “W” will not replace an “F” assigned for academic dishonesty. Cheating can be done by talking, looking at other papers, leaving notes open ‘accidentally’ on the floor in front of you, or using someone’s calculator, etc. Do not make me question your integrity by doing anything that seems like cheating. You are expected to do your own work, because you are getting your own grade for this course. **No Warnings will be given!**

Responsibility

Your grade is your responsibility. If you want to do well in this course, you will want to devote studying for this class at least 3 hours every day. We only see each other 2 times a week, which means there is a lot of time to forget what we learned and talked about, so it is in your best interest to work on this stuff a lot outside of coming to class. You need to make sure that you are studying every day, doing homework and keeping up with the material. If you do not understand a concept, you need to talk with me immediately, because you don’t have time to get behind. I do not grade easily. I expect a lot from you, as you will expect a lot from me.

You are expected to check your emails and announcements online, because that will be the easiest way for me to communicate with you.

You are also expected to withdraw from this class if you decide to leave too soon, do not expect me to do it for you.

You are expected to have all cellphones and any noisemakers to be turned on silent. Vibrate is not silent, so please leave it off this setting! **No laptops** are needed for this course, so please leave yours in your bag, and **text messaging will also not be needed**, so please leave your phone there too! Don’t make me ask you to leave, it’s no fun for me, and it will be no fun for you missing class. If such devices are used, the class may have a pop quiz to make up for the disruption.

Disabled Student Program and Services (DSPS)

Students with disabilities who believe they may need accommodations are encouraged to contact the DSPS located in SSB 320, as soon as possible to ensure that, if they qualify, we can make arrangements in this course in a timely fashion. Contact DSPS: Phone 310.287.4450.

Format for All Written Work (FAWW)

All written work must follow the following format to receive full credit:

1. Use standard size 8 ½ x 11 inch sheets of notebook or blank paper. Reusing previously printed-paper is not acceptable.
2. Do not use paper with torn or rough edges (such as spiral bound notebook paper) - all edges must have a clean, straight cut.
3. Use a pencil - work done with a pen is not acceptable.
4. Write your Last name first, then First name, the days of your class (MW), and your student ID# in the upper right hand corner of your first page.
5. Put the title of your work at the top.

6. Write the number of each problem. Work should be done in numerical order.
7. Divide the paper in half vertically. Work from the top of the left hand column down in numerical order. If the work from your first column does not spread across to the second column, you may continue at the top of the right hand column and work downward again.
8. Use only a maximum of two columns per side.
9. Leave at least one horizontal line of space between problems.
10. You may use both sides of the paper.
11. Write solutions using the style demonstrated in class: neat and clear, working downward, line-by-line.
12. Use an eraser to remove mistakes.
13. Use scratch paper (not to be handed in) to work out tentative solutions or to make arithmetic calculations.
14. Circle or box your answers (obvious exceptions: graphs).
15. Staple multiple work pages for an assignment together in the upper left hand corner (do not use paper clips).
16. When solving word problems, you are expected to write your solution using the following format:
 - Step 1: Define the unknown(s). Write this at the beginning of your solution:

Let x = (...describe exactly what x represents...)
 - Step 2: Write an Equation for the unknown.
 - Step 3: Solve your equation using correct algebraic operations.
 - Step 4: Write the final answer to the original question in a complete sentence.

Behavior Guidelines

1. Students will respect and accept the authority of the instructor and instructional associates to establish the rules and procedures for the classroom, laboratory, and tutoring room and will comply with these rules and procedures.
2. Students will use appropriate language and classroom etiquette at all times.
3. Students will arrive on time to class and refrain from leaving early unless prior permission has been granted.
4. Students will endeavor to keep good attendance and maintain a serious attitude regarding their own achievement including the completion of all assignments in a timely manner.
5. All cellular phones, media players, or other personal electrical devices (other than mathematics calculators) will remain off inside the lecture room, computer laboratory, and tutoring room.

6. No food or beverages other than bottled water are allowed in classrooms, laboratory, or tutoring room.
7. Challenges or harassment of faculty or staff members, either verbal or otherwise including inappropriate gestures, by students are unacceptable.
8. Each student will accept responsibility for his/her own academic success.

Conclusion

The rules established herein are not negotiable. The student's enrollment in this course shall be interpreted as his/her consent to abide by the guidelines stated above. These rules are in addition to those stated in the Student Code of Conduct published each semester in the Schedule of Classes. Any student who believes they have been subjected to an unfair action should first speak with their instructor. A formal student grievance procedure is also available as a last resort.

How to Study for this Math Course!

- **Practicing is essential!** You need to put a lot more practice into this course than you would in another class. For math, just like playing a musical instrument, you need practice. What do you think the line, "Practice Makes Perfect" is made for? You cannot just watch me do some problems on the board, review the notes before exams and believe that you have it. You will need to do your own practice, without your notes on problems to see if you really get all the steps. When you sit down to study for an exam, pick out problems from the homeworks and quizzes, write them out on a scratch piece of paper, and then close your notes and books. See how far you get before you get stuck, and make a note of it. This will give you real expectations of how you would do on the day of an exam.
- **You Need Time!** Make sure to give yourself enough time for this course. You cannot take a full course load and work full time and expect to pass this class. You will not! You need to plan on giving yourself **at least 8 hours a week** outside of the class to work on homework and to study.
- **Be Patient!** It takes a lot more than doing one problem to get how to do a problem. Sometimes we make easy mistakes (like forgetting a negative, or writing down a number incorrectly), and these are easily fixed by taking your time and writing neatly. If you make a mistake that you can't quite figure out why it didn't work, it is probably time to check your notes for the steps to a problem, or to check the concepts. If you still are stuck, it is time to come see me or go to the tutoring center to see where you mixed stuff up.
- **Don't erase your practice.** If you make a mistake, you will want to be able to go back and review your work to see if you can find it. If you can't, it will be a lot easier for me to see where the mistake was with your work in front of me. Help me, help you!
- **Read your text** beforehand! It will be nice if you already have an idea of what I am going to talk about before class. Even if it seems a little overwhelming, you will want to read it with a pencil and paper, jot down some notes, and get an idea of how to work out some problems. Trust me, it will be clearer when we go over it in class, and if you check it out before, you will most likely get it right away.
- **Don't be afraid to ask questions!** No joke, questions are great. I love them, and I am not just saying that. When you ask questions, it tells me what I might have went too fast on, and what you all might be a little fuzzy on. Trust me, if you have a question, there is a 90% chance that someone else has the same one, they are just too chicken to speak up! So speak up, no worries!