

Math 241(#1499) Fall 2013
Trigonometry with Vectors (4 units)

MTWTh 11:10 am - 12:15 pm
Classroom MSA 006

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

Prerequisite: Mathematics 125 or Math 128 with a grade of "C" or better, or placement through assessment process.

Instructor: Professor Bonnie Ellen Blustein, Ph.D.

Office Hours: If you need help or want to chat, the best times to find me in my office are Tuesday and Thursday after class (12:15 - 1:00 pm) or Monday and Wednesday 2:30 - 3:45 pm. I am often there late in the afternoon, too. You are welcome to stop by anytime to see if I'm free. You can also email me to set up an appointment.

Office: MSB 205

Phone: 310-287-4217

email: blusteb@wlaac.edu

Textbook: Trigonometry 6th Edition (2008) by McKeague and Turner. You may be able to rent one from the Bookstore. However, it might be less expensive to buy a used copy (often very cheap online)—the 5th edition would be fine. The 7th edition (2013) would also be okay, but pricey.

Homework

You should spend an hour or more each day, outside of class, plus time on the weekends, studying and doing the practice problems assigned from the textbook.

- Homework will NOT be collected or graded. The purpose is for you to learn. Doing exercises and solving problems outside of class is where you learn the most.
- Study groups are usually helpful. **Free tutoring** is available in the Learning Resource Center ("Library").
- There will be time in class for questions. Also, please make use of office hours.
- Keep all of your work in an organized fashion and use it to study for tests.
- Begin your study session by reviewing (and rewriting, if necessary) your class notes. Refer to the text or an online video if you need clarification.
- Then do the assigned problems. Check answers to odd problems in the back of the book to make sure you are doing them correctly.
- Finally, preview the next topic, using your text or an online video lecture.

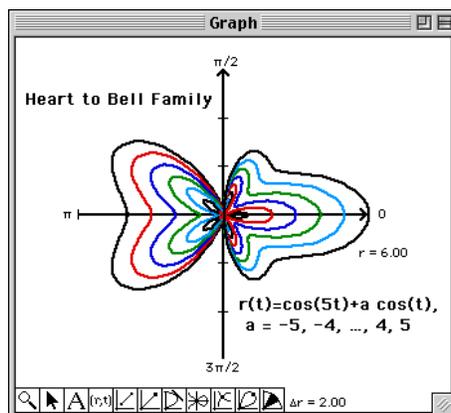
Materials: Please bring your math notebook (with graph paper), pencils, a scientific calculator and the textbook to class each day. *Calculators or laptops with symbolic manipulation capabilities, and calculators built into any device with communication capability (such as an iPhone) are not allowed on tests.* Casio graphing calculators will be available on loan from the instructor for tests.

Attendance: Please be in class on time every day and participate in all class activities. College policy is that an instructor may drop a student who has missed more than six hours of class. If you have excessive absences (regardless of the reason) AND you are not passing the course, you may be dropped without notice. If you have a valid reason for an absence, please notify the instructor via e-mail (preferably) or telephone as soon as possible.

Students with disabilities who believe they may need accommodations in this class are encouraged to contact Disabled Students Programs and Services located in SSB 320 (phone 310-287-4450) immediately to improve the chances that such accommodations can be implemented in a timely manner. The instructor will do everything possible to comply with ADA and all other mandates.

College-Wide Student Learning Outcomes and Course Policies

- ❖ **Critical Thinking:** Classroom activities and weekly homework assignments will require you to use sound reasoning to analyze, model and solve problems.
- ❖ **Communication:** In your math papers and on tests you will be expected to show and explain your work in a clear, well-organized manner.
- ❖ **Quantitative Reasoning:** This is the core of your mathematics learning experience and will be demonstrated in all the work you do in this course.
- ❖ **Apply self-assessment and reflection strategies** to learn from your mistakes and to seek better methods to solve particular problems.
- ❖ **Civic Responsibility:** Students are expected to respect classmates as well as the instructor. This includes refraining from disruptive behavior (coming late, leaving early, wandering in and out of class, eating/drinking during class, side conversations, instant messaging, etc) and practicing positive behaviors (cooperation, civility, helpfulness, constructive engagement in class activity).
- ❖ **Technical Competence:** Utilize the appropriate technology - including web-based systems and hand-held graphing calculators - as well as pencil-and-paper methods for “skill drills” and problem-solving. Locate videos on YouTube or elsewhere to preview or review lecture material.
- ❖ **Ethics:** All students will maintain the highest standards of academic honesty. You may NOT give or receive help on tests or quizzes. You may not turn in someone else’s work as your own. *If you are discovered committing any act of academic dishonesty (cheating), you will receive no credit (“zero”) for the test, quiz, or assignment AND you will be suspended from class AND the case will be referred to the Vice-President for further disciplinary action. (See the WLAC Fall 2013 Schedule of Classes).*
- ❖ **Aesthetics:** Mathematicians often talk about a “beautiful” or “elegant” method of solving a problem. We hope that students will find aesthetic experiences in their mathematical work.



**West LA College Student Learning Outcomes:
Quantitative Literacy, Critical Thinking, Communication, Ethics**

<i>Math 241 SLOs (* indicates Course SLOs)</i>	<i>Math Program SLOs</i>
*1. Use the trigonometric ratios and the laws of sines and cosines to solve applied problems involving triangles	Apply quantitative thinking processes using basic mathematical operations (addition, subtraction, multiplication, division)
*2. Graph sinusoidal functions of real numbers and use them to model periodic processes 3. Model and solve physics problems using vectors	Select appropriate math strategies for solving and handling real life problems
4. Solve trigonometric equations 5. Prove trigonometric identities 6. Construct and analyze graphs using parametric equations and polar coordinates	Use mathematical tools essential for analyzing quantitative problems and for producing solutions.
SLO ASSESSMENT	
Student achievement of SLOs will be assessed by means of tests (including a final exam) and/or informal measures such as class participation, homework, classwork, and student self-assessment.	

If people do not believe that mathematics is simple, it is only because they do not realize how complicated life is. ~John Louis von Neumann



Most of us are dealing with a lot besides class: working a job (or needing one), dealing with family problems, child care, health issues, housing issues, and all the other impacts of the deep crisis in our society today. The **WLAC Health Center** can hook you up with a counselor to help you deal with stress. Other programs on campus can help, too (although they have been heavily impacted by cutbacks). These include **Workforce Development, TRIO-SSS, EOP&S, Counseling, the Veterans' Center, and DSPS**. Please speak to your teacher - or contact me by phone or email - and I will try to point you in the right direction.

The general LA County hotline is **211** - they can refer you to publicly available services.

Evaluation/Grading

All class activities should help you achieve the course **Student Learning Outcomes** at a level that **prepares you for success in Pre-Calculus and in other situations requiring trigonometry skills**. “Grades” and “points” may serve as feedback on your progress. Ideally, there would be no grades as we know them today, and education would be very different from today’s schooling. But since we are still struggling for such a society, I will have to assign you a grade in December. The basis for that grade is described below.

Chapter Tests - 65% of grade (4 tests)

These will mainly be “constructed-response” (show all work). Half the points lost on each of the first three tests may be earned back by turning in corrections. Make-up tests will only be given if there is a valid, documented excuse and if requested (by phone or email) by the end of the test day, and options for earning-back points may be limited.

In-class tests are scheduled for TUESDAYS. No test scores will be dropped.

Final Exam - 35% of grade

This is scheduled during Final Exam Week on the day and time slot prescribed by the West Los Angeles College Final Exam Schedule. The final will mainly consist of “constructed response” questions but may include some multiple-choice or short-answer questions.

Grades: Please note that “Incomplete” grades are extremely rare. They may only be considered if a student is passing the class with a C or better on the final drop date and is unable, due to an emergency, to complete the course as scheduled. Otherwise, if you decide you cannot finish the course with a satisfactory grade, it is your responsibility to *withdraw officially*, on or before Friday, November 15, 2013.

The **grading scale** will be no stricter than:

90-100% A 80-89% B 70-79% C 55-69% D under 55% F

However, if your score on the final is 70% or higher, then you will pass the class regardless of your test scores.

IMPORTANT DATES:

Last day to file Third Repeat Petitions: Fri., August 16, 2013

FIRST DAY OF CLASS: MONDAY, August 26, 2013

Last day to add a class: Friday, September 6

Last day to drop without fee and without W: Friday, September 6

Last day to drop with W: Friday, November 15, 2013

Final Exam: Thursday, December 12, 2013, 11:30 a.m. - 1:30 p.m.
(subject to change of College-wide final exam schedule)

SCHEDULE - SUBJECT TO CHANGE BY INSTRUCTOR

Week #		MONDAY	TUESDAY	WEDNESDAY	THURSDAY
1	Aug. 26-29	A1 #1-28, 29-63 odds, 64-69	1.1 #1-6 (oral), 7-13 odds, 15-24 all, 25-65 odds, 68	1.2 #9-83 odds	1.3 #1-71 odds
2	Sept. 2-5	LABOR DAY HOLIDAY	1.4 #1-57 odds, 59-62	1.5 #1-57 eoo, 59-91 odds	2.1 #1-15 odds, 17-26 oral, 27-59 odds, 61-71
3	Sept. 9-12	2.2 #1-73 odds, 91-98	2.3 #1-57 odds, 59-68	2.4 #1-15 odds, 17-33 all, 35-42 all	2.5 #1-21 odds, 23-48 all Ch. 2 "Test"
4	Sept. 16-19	Review Ch. 1 "Test"	TEST 1 (Chapters 1-2)	3.1 #1-27 odds, 29-65 eoo, 67-90	3.2 #1-71 odds, 85-92
5	Sept. 23-26	3.3 #1-49 odds, 63-70 all	3.4 #1-55 odds, 57-64	3.5 #1-19 eoo, 21-59 odds, 61-66 all	4.1 #1-67 eoo, 69-82 all SEE NOTE ABOUT 6 th ed.
6	Sept. 30 - Oct. 3	4.2 #1-65 odds, 67-82 all	4.3 #1-51 odds, 53-58 all	4.4 #1-31 odds, 33-44 all	4.5 #1-35 odds, 37-46 all
7	Oct. 7 -10	A2 #1-29 odds, 32-41	4.6 #1-83 odds, 85-96 all	5.1 #1-65 odds, 75-81 odds, 83-92	5.2 #1-63 odds, 65-76 Ch. 3 "Test"
8	Oct. 14-17	Review Ch. 4 "Test"	TEST 2 (Chapters 3-4)	5.3 #1-63 odds, 65-72 all	5.4 #1-47 odds, 49-58
9	Oct. 21-24	5.5 #1-35 odds, 37-46	6.1 #1-53 odds, 55-73 eoo, 75-90 all	6.2 #1-55 odds, 59-68 all	6.3 #1-57 odds, 59-72 all-
10	Oct. 28-31	6.4 #1-27 odds, 29-38 all	7.1 #1-37 odds, 39-52 all	7.2 #1-31 odds, 33-42 all	REVIEW AND CATCH-UP Ch. 5 "Test" Ch. 6 "Test"
11	Nov. 4-7	REVIEW	TEST 3 (Chapters 5-6)	7.3 #1-31 odds, 33-46 all	7.4 #1-21 odds, 23-30 all
12	Nov. 11-14	VETERANS' DAY HOLIDAY	7.5 #1-47 odds, 49-54 all	7.6 #1-31 odds, 33-36 all.	8.1 #1-81 odds, 83-96 all
13	Nov. 18-21	8.2 #1-67 odds, 69-80	8.3 #1-57 odds, 59-70	8.4 #1-35 odds, 37-46	8.5 #1-1-43 eoo, 49-63 odds, 65-70
14	Nov. 25-28	8.6 #1-57 odds	Ch. 7 "Test"	Ch. 8 "Test"	THANKSGIVING HOLIDAY
15	Dec. 2 - 5	REVIEW	TEST 4 (Chapters 7-8)	REVIEW	REVIEW
Finals	Dec. 9 - 12	FINALS START			FINAL EXAM 11:30 a.m. - 1:30 p.m.