

MATH 36 Trigonometry SPRING 2018

34329: TTH Hybrid 9:40 - 10:55 AM LIB 108 34533: TTH Hybrid 11:15 - 12:30 PM LIB 108

WEB SITE: www.bobprior.com

INSTRUCTOR:

Prof. Bob Prior

bob.prior@NorcoCollege.edu Phone: (951) 372-7035

OFFICE HOURS:

TTh 8:30 – 9:30 AM MW 10:00 – 12:00 PM Office: ATEC 217/212

PREREQUISITE: MAT 35: Intermediate Algebra and MAT-53 Geometry

COURSE DESCRIPTION:

We learn the six trigonometric functions defined (i) by the right triangle, (ii) in the x-y-plane, and (iii) around the unit circle; graphing of trigonometric functions in the x-y-plane; trigonometric identities and proofs; solving trigonometric equations; solving right triangles and oblique triangles and their applications; vectors; graphing complex numbers; and DeMoivre's Theorem. 72 hours lecture. (Letter Grade, or Pass/No Pass option.)

MANDATORY ONLINE ACCESS:

Because this is a hybrid course (part in-class, part online), online access is required. It is the student's responsibility to own or have access to a computer with internet capabilities. We use Blackboard as our Learning Management System (LMS). In Blackboard, students have access to the online lessons, homework, videos, and quizzes.

STUDENT LEARNING OUTCOMES:

- Identify special triangles and their related angle and side measures.
- Evaluate the trigonometric function of an angle in degree and radian measure.
- Manipulate and simplify a trigonometric expression.
- Calculate powers and roots of complex numbers using DeMoivre's Theorem.
- Prove trigonometric identities.
- Solve trigonometric equations, triangles, and applications.
- Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs.
- Evaluate and graph inverse trigonometric functions.
- Represent a vector (a quantity with magnitude and direction) in the form <a,b> and ai+bj.
- Convert between polar and rectangular coordinates and equations.
- Graph polar equations.

IMPORTANT DATES:

Last day to add the course Last day to drop with a refund Last day to drop without a "W" Cesar Chavez Day Spring Break Last day to drop with a "W" Final Exam

Final Exam (34533, 11:15 class) Final Exam (34329, 9:40 class) Friday, February 23
Friday, February 25
Sunday, February 25
Friday, March 30
April 9-13
Friday, May 11
Tuesday, June 5, 11:00 - 1:

Tuesday, June 5, 11:00 - 1:30 PM Tuesday, June 7, 8:00 - 10:30 AM

THE TEXT BOOK:

Trigonometry, 3rd Ed. by Robert H. Prior

QUIZZES AND TESTS:

There will be many online quizzes and possibly a few in-class quizzes. There will be four or five chapter tests, one or more of which might be online. Each test covers one or two chapters. Additionally, there is a comprehensive final exam which covers material from the entire course.

GRADING:

All points are equal.	The following grading scale	Approximate percentage of graded assignments	
Points on a quiz are equivalent	is used to assign grades.		
to points on a test. One's average			
is calculated by the total points	91.0% - 100% A	Homework	5%
earned divided by total points	81.0% - 90.9% B	Quizzes	15%
possible.	71.0% - 80.9% C	Tests	60%
Students are encouraged to keep track	55.0% - 70.9% D	Final Exam	20%
of their ongoing course percentage.	00.0% - 54.9% F		

CALCULATORS:

A scientific calculator or graphing calculator will be required for some parts of the course. Students will be notified when a calculator is needed.

HOMEWORK:

Homework in a math class is more than just doing practice exercises. It also includes reading the material in the book, handouts, or other resources, including on-line resources such as watching videos. It is expected that a college math student will spend twice as much time outside of class as inside on learning the material. For a class that meets 5 hours per week, that means 10 hours of outside homework per week.

Homework exercises will be assigned on a regular basis, nearly every day. Daily homework assignments will be posted on-line in our Blackboard course. It is expected that each homework assignment will be completed before the next class session. At the beginning of each class session, some time will be spent reviewing a few questions. All other homework questions can be discussed at the break or after class.

A single day's homework might be collected at random; no late homework will be accepted, not even for a reduced grade. Each homework collected is graded out of **5 points**.

Note: If I collect a homework assignment, I will not grade it for accuracy of answers. Instead I look for (1) completeness, (2) neatness, and (3) thoroughness. To receive the most credit, you must show complete work on each exercise. Homework may be given a lower score if it is not neat, work is not shown, or it is out of page order.

CLASSROOM RULES:

Be respectful of and courteous to classmates. This means being supportive of someone asking a question to which you know the answer. Also, keep one-to-one conversations to a whisper and "on task."

Be respectful of and courteous to the professor. This includes not playing with your cell phone (texting, games, music, etc.) or other electronic devises. If you have an earplug in your ear, you will be asked to remove it. This rule also applies to laptop computers, tablet computers, etc. Splitting your attention between an electronic device and the class work is rude and unproductive

Be respectful to yourself. Come to class prepared: (1) be on time, (2) have all materials at hand, including completed homework, and (3) strive to always do your best, asking questions when needed.

ATTENDANCE:

Attendance is required. The instructor reserves the right to drop any student who misses four or more total class sessions or 3 consecutive class sessions. However, don't depend on me to drop you. If you plan to drop the course, you should do so on your own through WebAdvisor or by filling out a drop card. Be aware of the two drop deadlines, shown in the calendar. If you do miss three classes and intend to remain enrolled, then write to me to let me know why you are absent.

Please be on time! If possible, be early! Any student not returning to class after the break may be counted absent for 1/2 day.

DROPPING THIS CLASS

You may withdraw from this course by using WebAdvisor prior to the drop deadline. The deadline is available on WebAdvisor by selecting "My Class Schedule/Deadlines" after logging in. If there is a hold restricting use of WebAdvisor for this purpose, you may bring a completed ADD/DROP card to the Admissions counter of the college and complete the process there. It is the student's responsibility to drop this class should he/she decide no longer to attend.

ADDING THIS CLASS

Students receiving a four digit add authorization code from the instructor are responsible for completing the add process – through WebAdvisor -- *before* the deadline to add (refer to our calendar on the first page). **Not adding the class by the deadline prohibits the student from continuing to attend class. Refer to the Student Handbook for more information.**

Adding this course after the published deadline will require documented extenuating circumstances involving severe illness, accident, or death. The unauthorized use of an add code is grounds for removal from the course, and the student will be referred to the Dean of Student Life for disciplinary action.

ACADEMIC INTEGRITY:

Norco College is committed to maintaining academic integrity throughout the college community. Academic dishonesty is a serious offense that can diminish the quality of scholarship, the academic environment, the academic reputation and the quality of a Norco College degree. The **Student Handbook** states:

In cases of academic dishonesty by a student, a faculty member may

- 1) Reduce the score on test(s) or assignment(s);
- 2) Reduce the grade in the course;
- 3) Fail the student in the course if the weight of the test(s) or assignment(s) warrants course failure;
- 4) Recommend suspension from the course (see further details in the **Student Handbook**).

Students may discuss assignments but are expected to complete all work independently (unless an assignment is designated as group work by the instructor). **Academic dishonesty** includes but is not limited to:

- a) **Plagiarism** the intentional presentation of words, ideas or work of others as one's own. This includes but is not limited to: copying homework, using a work or portion of a work written or created by another but not crediting the source and using one's own work completed in a previous class for credit in another class without permission.
- b) Cheating During Examinations includes, but is not limited to, unauthorized electronic assistance or devices, copying from another, looking at another student's exam and opening books or notes when not authorized.
 Any of these practices could result in charges of academic dishonesty.

ACCOMMODATIONS FOR DISABILITIES

Norco College provides services to students with disabilities through the <u>Disability Resource Center (DRC)</u>; located in the Center for Student Success Building. To request academic accommodations due to a disability, please visit the DRC or contact the DRC staff at 372-7070. A DRC staff member will confidentially review your concerns with you to determine any required accommodations. Once your accommodations are approved through DRC, please bring your DRC documentation(s) to me so that we may discuss your accommodations.

VIOLENCE ON CAMPUS

Norco College does not tolerate any violence or implied violence. A threat of violence includes any behavior that by its very nature could be interpreted by a reasonable person as intent to cause physical harm to self, another individual, or property. Violence or the threat of violence against or by any **student** or employee of the District or any other person is unacceptable **and will not be tolerated**. Should an individual on District property, who is not an employee or student, or a student or employee of the District, demonstrate or threaten violent behavior, s/he may be subject to criminal prosecution (AP 3510 Workplace Violence and Safety).

If you are a victim of any violent, threatening, or harassing conduct, any witness to such conduct, or anyone receiving a report of such conduct, [. . .] shall immediately report the incident to his/her supervisor of College Safety and Police (951- 222-8171) (AP 3510 Workplace Violence and Safety).

DECLARING A PROGRAM OF STUDY

Declaring your Program of Study in WebAdvisor is important. Norco College contacts students that have declared a certificate/degree for internships and job opportunities in that specified field. Also, by declaring your certificate/degree goal, you can use the "Academic Review" tool in WebAdvisor which will calculate exactly what classes you still need to take to finish your certificate/degree and graduate. If you have questions about a field of study, please schedule an appointment with a counselor to discuss this important issue.

STUDENT SERVICES:

Norco College offers excellent services for all students. These services include help with disability accommodations, financial aid, finding jobs, academic counseling, health services, veterans services, tutoring and more. Here is a partial list of resources available to you:

- <u>Disability Resource Center (DRC)</u>, Center for Student Success, (951) <u>372-7070</u>, drc@norcocollege.edu
- <u>Veterans Services</u>, Student Services Building, First Floor, (951) 372-7142, veterans.services@norcocollege.edu
- <u>Student Support Services</u>, Student Services Building, (951) 372-7149, <u>Hortencia.Cuevas@norcocollege.edu</u>
- <u>EOPS/CARE</u>, (Extended Opportunity Programs and Services/Cooperative Agencies Resources for Education), Center for Student Success, (951) 372-7128, eops@norcocollege.edu
- <u>CalWORKs</u> (California Work Opportunity and Responsibility for Kids), Center for Student Success (951) 372-7052, <u>norcocalworks@norcocollege.edu</u>
- Learning Resource Center (LRC), Wilfred J. Airey Library, First Floor, (951) 739-7896, Irc@norcocollege.edu
- Student Health and Psychological Services, Wilfred J. Airey Library Building, Lower Level, (951) 372-704, lisa.mcallister@norcocollege.edu
- <u>Student Financial Services</u>, Student Services Building, First Floor, (951) 372-7009, Maria.Gonzalez@norcocollege.edu

SPECIAL PROGRAMS:

- Honors Program
- STEM
- UMOJA
- Puente
- JFK Middle College High School
- Study Abroad
- Tutorial Services, lower-level of Library building, (951) 372-7143
- Supplemental Instruction (SI)

Intended Daily Schedule (subject to change)

Refer to our Blackboard class