



MATH 36

Trigonometry

FALL 2016

37609: T/Th 10:30 AM - 12:35 PM WEQ W4

37838: T/Th 2:00 - 4:05 PM WEQ W3

WEB SITE: www.bobprior.com

INSTRUCTOR:

Prof. Bob Prior

bob.prior@NorcoCollege.edu

Phone: (951) 372-7035

Office: ATEC 217/212

OFFICE HOURS:

T/Th 9:20 – 10:20 AM in ATEC 217/212

Wed 9:00 – 12:00 PM in ATEC 217/212

(subject to change to meet students' needs)

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.)

STUDENT LEARNING OUTCOMES:

- Calculate powers and roots of complex numbers using DeMoivre's Theorem.
- Represent a vector (a quantity with magnitude and direction) in the form $\langle a, b \rangle$ and $ai + bj$.
- Convert between polar and rectangular coordinates and equations.
- Graph polar equations.
- Prove trigonometric identities.
- 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.
- 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.

IMPORTANT DATES:

Last day to add the course

Friday, September 9

Last day to drop with a refund

Sunday, September 11

Last day to drop without a "W"

Sunday, September 11

Last day to drop with a "W"

Friday, November 13

Thanksgiving Holiday

Thursday, November 24

Final Exam

AM class: Tuesday, December 13, 11:00 – 1:30

PM class: Tuesday, December 13, 2:00 – 4:30

THE TEXT BOOK:

[Trigonometry, 3rd Ed. by Robert H. Prior](#)

QUIZZES AND TESTS:

There will be some quizzes throughout the semester, worth 5 - 10 points each. There will be five or six chapter tests and a final exam. Each test covers one or two chapters. The final exam is comprehensive; it covers material from the whole course.

GRADING:

All points are equal. Points on a quiz are equivalent to points on a test. One's average is calculated by the total points earned divided by total points possible.

The following grading scale is used to assign grades. Students are encouraged to keep track of their ongoing course percentage.

91.0% - 100% A
81.0% - 90.9% B
71.0% - 80.9% C
55.0% - 70.9% D
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 4 hours per week, **this means 8 hours of outside homework per week.**

Much of the out-of-class work will be reading. Students will read the assigned textbook sections and come to class prepared to ask questions. Lecture time will be for clarifying what was read; only occasionally will new material be discussed in class.

Homework exercises will be assigned on a regular basis, nearly every day. Daily homework assignments will be posted on-line at my website, bobprior.com (look for the Math 36 link). It is expected that each homework assignment will be completed before the next class session. A single day's homework might be collected at random; no late homework will be accepted, not even for a reduced grade.

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 is graded on these three criteria.

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 conversation 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 devices. 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. I reserve the right to drop any student missing 3 consecutive class sessions or 4 or more classes total. If you do miss class 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.

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. Also, please e-mail me if this is your intention.

INTENDED DAILY SCHEDULE (SUBJECT TO CHANGE):

For the daily schedule, please refer to the on-line calendar at

<http://bobprior.com/MAT36/AA-MAT36HW-FALL16.html>

ADDING THIS CLASS

Students wanting to add this section will need to be provided with a four digit add/authorization code. If you receive an add authorization code, you are responsible for completing the add process **before** the deadline to add. This deadline can be found in the Schedule of Classes available online. Add codes can be processed through your WebAdvisor account. **If you fail to add the class by the deadline, you are not officially enrolled and college policy prohibits you from continuing to attend class.**

Be aware that your failure to pay fees/fines, to document prerequisites, to clear academic holds, or to navigate personal problems may hinder you from adding this section. Please allow sufficient time to take care of these issues **before the deadline to add**. Adding this course after the published deadline will require documented extenuating circumstances involving severe illness, accident, or death.

The use of an add/authorization code issued to another student violates the Student Code of Conduct and the student will be referred to the Dean of Student Life for disciplinary action. The unauthorized use of an add code is grounds for removal from the course.

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.

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 Student Handbook).

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. The usual consequence of academic dishonesty is failure of the course and referral of the case to the appropriate dean for additional disciplinary action. Students may discuss assignments but are expected to complete all work independently.
- 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 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 Disability Resource Center (DRC); 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.

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.

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).

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:

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

SPECIAL PROGRAMS:

- **Honors Program**, Ana-Marie Olaerts, (951) 739-7815, Ana-marie.olaerts@norcocollege.edu
- **John F. Kennedy Middle College High School**, Cheryl Kretz, Counselor, (951) 738-2200, ckretz@cnusd.k12.ca.us
- **Puente**, David Payan, Puente Counselor, (951) 372-7080, david.payan@norcocollege.edu
- **Study Abroad**, Jan Schall, Director, (951) 222-8340, jan.schall@rcc.edu
- **Talented Tenth (T3P)**, John Moore, T3p Counselor, (951) 372-7148, John.Moore@NorcoCollege.edu
- **STEM SCHOLARS (science, technology, engineering, and mathematics) SCHOLARS** 951-739-7803, STEM@norcocollege.edu
- **Tutorial Services**, lower-level of Library building, (951) 372-7143