

SYLLABUS
MAT 172A
PRECALCULUS TRIGONOMETRY LAB

Faculty Information

Instructor: Charles Hall, M.A. Ed.
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Office: Elm 340
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Office Hours: **Before and after class**

Course Information

Course Title: PreCalculus Trigonometry Lab
Course Number: MAT 172A D1
Credit Hours: 1
Contact Hours: 2
Class Location: ELM 346
Class Meeting Time: R (8:00-10:50)

Course Description This course is a laboratory for MAT 172. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

Prerequisite: Mat 171

Corequisite: Mat 172 D1

Textbook: Sullivan & Sullivan, *Algebra and Trigonometry 5th Edition*

Course Goal: Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction.

Course Specific Competencies: Upon successful completion of the course, the student will be able to:

- Graph, transform, and solve problems involving logarithmic and exponential functions.
- Graph, transform, and solve problems involving trigonometric equations.
- Solve applied problems involving right and oblique triangles.
- Graph, transform and solve problems involving polar coordinates.
- Graph, transform and solve problems involving vectors.
- Use analytic geometry to solve problems.
- Work in teams and communicate effectively.

Reinforcement Experiences for General Education Cross-Curriculum Competencies

The course encapsulates reinforcement experiences for the general education cross-curriculum competencies:

- Communicate effectively in speaking, writing, reading, and listening.
- Locate, evaluate, and use information to analyze problems and make logical decisions.
- Apply math skills and/or natural science knowledge appropriately to organize, analyze and make information useful.
- Develop the ability to succeed as a self-directed learner.

Grading Policy: Your grade for this class will be based on weekly quizzes and lab assignments. The quiz average will account for 40% of your final grade, while the lab average will account for 60% of your final grade. Each week class will begin with a short quiz. The quiz will come from the previous weeks lecture and homework. Students will have only time allotted to finish the quiz; therefore, it is important to arrive to class on time. In addition, you will have a lab assignment every week. Labs will be due at the end of the class period unless you have worked the entire class time and still have not completed your lab. If this is the case, you may have until the beginning of the next class meeting (**not lab meeting**) to turn in your lab assignment. This decision will be made by the instructor at the end of the class. **Your lab must be turned in before class starts.** If your lab is turned in after class starts, it is considered 1 day late and there will be a **15 point deduction**. If you are tardy on “lab collection days”, there will be an automatic 15 point deduction. Labs lose 15 points per day late. Each lab will be graded. **Makeup labs and quizzes will not be given.** **I will drop one of your lowest lab grades and one of your lowest quiz grades.** If for any reason it is necessary for you to withdraw from this class, you must complete the appropriate form and submit it to the Records and Registration Office by the deadline. If you quit attending class without completing the appropriate forms your grade will become an “F”. The final grade will be based on the following scale: **A**(90-100), **B**(80-89), **C**(70-79), **D**(60-69), **F**(below 60)

Final Exam Policy: Final exams for all classes are given during the last 1-2 hours of the regular class schedule.

Attendance Policy: To receive course credit, a student should attend a minimum of 80 percent of the contact hours of the class. Upon accumulating absences exceeding 20 percent of the course contact hours, the student may be dropped from the class with a grade of “U” at the discretion of the instructor. Students are encouraged to arrive to class on time. Students who arrive tardy to class have missed the roll call and have been marked absent by the instructor. Consequently, it is the responsibility of the student to check with the instructor after class to change the absence to a tardy. A tardy is defined as arriving late for class, leaving early, or being away from class without permission during class hours. Three tardies may constitute one absence.

Summer Session - 2009

Registration: Current and Continuing Students	May 4 - 8
General Registration	May 11 - 15
Last Day to Pay Tuition and Fees	May 15*
<i>* Unpaid registrations will be deleted from the computer registration system at 4:30 p.m.</i>	
Late Registration	May 18 - 22
Last Day to Pay Tuition and Fees for Late Registration	May 22*
<i>* Unpaid registrations will be deleted from the computer registration system at 4:30 p.m.</i>	
New Student Welcome	May 22, 9:00 a.m.
Memorial Day College Holiday	25-May
Classes Begin	26-May
Schedule Adjustments	May 26 - 27
Last Day to Apply for Summer Graduation	22-May
Last Day to Drop for a Partial Refund	8-Week Session: May 29 10-Week Session: June 1
Independence Day College Holiday	3-Jul
Last Day to Withdraw	8-Week Session: July 7
10-Week Session: July 10	
Last Day of Class/Examinations	8-Week Session: July 21**
<i>** July 21 will be scheduled as a Friday make-up day for both sessions.</i>	
Summer Graduation	7-Aug
Total Class Days	8-Week Session: 40 10-Week Session: 50

Academic Dishonesty: You may not deceive any official of the college by cheating on any assignment, exam, or paper. This includes plagiarism, which is the intentional theft or unacknowledged use of another's words or ideas. Plagiarism includes (but is not limited to) paraphrasing or summarizing another's words *or works* without proper acknowledgement, using direct quotes of material without proper acknowledgement, or purchasing or using a paper *or presentation* written *or produced* by another. The faculty at A-B Tech *may* also consider presenting as original work a paper written for one class to satisfy a requirement in another class to be academic dishonesty.

Code of Classroom Conduct: Asheville-Buncombe Technical Community College is an institution for adult learning. It is a partnership between instructors with the desire to teach and students with the desire to learn. In order to create an appropriate environment for teaching and learning to flourish, there must be respect for the instructor and fellow students. Listed below are guidelines for classroom behavior which the College has established to ensure that the learning environment is not compromised.

1. Attendance: You are expected to be in class the entire class time. Do not enter late or leave early. Rare exceptions may be excused, particularly under emergency circumstances, but you should be prepared to explain your tardiness to the instructor after class. Likewise, the need to leave early should be explained to the instructor before class.

2. Absences: Inform the instructor in advance, if you know you are going to miss a class. Also, take responsibility for getting missed assignments from other students. Do not expect that you will be allowed to make up work, such as unannounced quizzes or tests, after an absence. Instructors are not responsible for re-teaching the material you missed because of absence.
3. Conversation: Do not carry on side conversations in class.
4. Other Activities: You may not work on other activities while in class. This includes homework for other courses or other personal activities.
5. Internet: In classes where Internet access is provided, you may use the Internet for valid, academic purposes only. You may not use it for open access to other non-academic sites which are unrelated to the course.
6. Sleep: Do not sleep in class.
7. Attitude: You are expected to maintain a civil attitude in class. You may not use inappropriate or offensive commentary or body language to show your attitude regarding the course, the instructor, assignments, or fellow students.
8. Profanity and Offensive Language: You may not use profanity or offensive language in class.
9. Cell phones and beepers: You may not receive or send telephone calls or pages (including text messages) during class. **You are responsible for turning off cell phones and beepers upon entering class.**
10. Guests: You may not bring unregistered friends or children to class.
11. Food, Drink, Tobacco Products: You may not have food or drink in class. You may not use tobacco products on the campus of A-B Tech.
12. Personal Business: You may need to transact personal business with the instructor, asking him or her to sign forms. Plan to do this before instruction begins or after class.

Typically, violations of the Code of Classroom Conduct will be dealt with as minor infractions. However, repetition of minor infractions or other more serious violations of the Code of Student Conduct may lead to removal from the classroom while the matter is resolved and referral to the Vice President for Student Services for disciplinary action.

Other Information: Tutoring in math and related courses is available in the Academic Learning Center, Laurel Building, Room 118. The hours are from 9 am-6:30 pm M-Th, and 9 am-1:00 pm on Friday.

Calculator: A graphing calculator is required for this course. The TI-83 or TI-86 will be the calculator used by the instructor. I will not permit the TI-89 or the TI-92 to be used on tests. Your calculators may be cleared before examinations. Sharing calculators on quizzes is not permitted.

Statement of Right to Make Changes: I reserve the right to make changes in the syllabus. Any changes will be announced in class.

MAT 172A
PRECALCULUS TRIGONOMETRY LAB
Content Outline

Lab 1: Graphing calculator review

Lab 2: Inverse functions, exponential functions, and logarithmic functions

Lab 3: Properties of logarithms, logarithmic and exponential equations, growth and decay

Lab 4: Right Triangle Trigonometry

Lab 5: Trigonometric Functions/Unit Circle

Lab 6: Graphs of Trigonometric Functions

Lab 7: Inverse Trigonometric functions and Trigonometric Identities

Lab 8: Trigonometric Equations

Lab 9: Applications of right triangles

Lab 10: Law of Sines and Law of Cosines

Lab 11: Polar Coordinates

Lab 12: Vectors

Lab 13: Conic Sections

****THIS OUTLINE IS TENTATIVE AND SUBJECT TO CHANGE**

**MAT 172A D1
PRECALCULUS TRIGONOMETRY LAB
2007*01**

Your Acknowledgement

I have been provided access to the course syllabus, understand what is expected of me, and agree with the provision set forth in the syllabus.

Your name

Your student I.D. Number

Your signature

Date