



WACO, TEXAS

**COURSE SYLLABUS
AND
INSTRUCTOR PLAN**

**TRIGONOMETRY
MATH 1316 SECTION C05
AARON WERNET**

NOTE: This is a 16-week dual credit course.

COVID 19 Notice:

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website at <https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html> on any changes to these guidelines.

TRIGONOMETRY

MATH 1316.C05

Course Description:

Provides an in-depth study and application of trigonometric functions and their graphs, trigonometric identities and equations, inverse functions, solutions of triangles, complex numbers, polar coordinates, vectors, analytic geometry, and parametric equations. Graphing calculator required. Semester Hours 3 (3 lec)

Prerequisites and/or Corequisites:

MATH 1314 (College Algebra) with a minimum grade of C or passing score on non-credit equivalency exam for MATH 1314 or consent of division chair.

Course Notes and Instructor Recommendations:

This course has a major component (MyLabMath) that requires a good working knowledge of the computer. Online access is needed at a speed that will facilitate streaming video and downloading of materials. Not only will homework be available at this site, but an electronic version of the text, class notes, publisher lecture videos, and numerous other learning aids are available at this site.

Instructor Information:

Instructor Name: Aaron Wernet

MCC E-mail: awernet@mclennan.edu

West ISD E-mail: awernet@westisd.net

Office Phone Number: 254-981-2083

Office Location: West High School, Room 11.08

Office/Teacher Conference Hours: M-F 7:30-7:55, 9:46-10:35 (3rd period), & by appointment 3:30-4:00

Required Text & Materials:

Title: MyLab Math with Pearson eText -- 18 Week Instant Access -- for Trigonometry, 11th Edition

Author: Lial, Hornsby, Schneider & Daniels

Edition: 11th

Publisher: Pearson

ISBN-13: 9780135961599

Course ID: wernet34446 School Zip Code: 76708

Course Name: MATH1316 Trigonometry DC - Wernet M-F 2:41-3:30 Spring 2022

Calculator: TI-83, TI-84, TI Nspire Graphing Calculator

Optional textbook: *Trigonometry*, Lial, et al, 11th edition, ISBN-13: 9780134217437

MCC Bookstore Website: <http://www.mclennan.edu/bookstore/>

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Methods of Teaching and Learning:

In class lectures and problem solving will be provided. MyMathLab is the online component that will house the course content and information. All homework and quizzes will be done online in this environment. Lecture notes, reference materials, and tutoring are available online as well. Exams will be completed in class.

Course Objectives and Competencies:

Upon completion of the course, the student will be able to:

1. Use the basic terminology trigonometry and convert between degrees and radians (SLO 1,2,4)
2. Perform calculations and applications using trigonometric ratios based on right triangles (SLO 1,2,4,9)
3. Graph the trig functions, including vertical shift, phase shift, change in period, and change in amplitude (SLO 2,4,5)
4. Establish, prove, and apply trigonometric identities (SLO 3,9)
5. Solve trigonometric equations (SLO 2,3,9)
6. Apply the law of sines and law of cosines to solve triangles, find the area of triangles, and solve application problems (SLO 1,2,3,8,9)
7. Convert between polar and rectangular coordinates (SLO 2,4)
8. Manipulate angle formulas including half angle, double angle, sum and difference (SLO 2,3,9)
9. Solve application problems involving angular and linear speed, trigonometric functions and vectors (SLO 1,2,4,8,9)
10. Find powers of complex numbers using DeMoivre's Theorem (SLO 2)
11. Graph polar equations (SLO 2,4,5)

STUDENT LEARNING OUTCOMES (SLO): GEN ED/MATHEMATICS

- 1 To apply arithmetic, algebraic, geometric, higher-order thinking, and statistical methods to modeling and solving real-world situations.
- 2 To represent and evaluate basic mathematical information verbally, numerically, graphically, and symbolically.
- 3 To expand mathematical reasoning skills and formal logic to develop convincing mathematical arguments.
- 4 To use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results.
- 5 To interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them.
- 6 To recognize the limitations of mathematical and statistical models.
- 7 To develop the view that mathematics is an evolving discipline, interrelated with human culture, and understand its connections to other disciplines.
- 8 Reading at the college level means the ability to analyze and interpret a variety of printed materials -- books, articles, and documents. A core curriculum should offer students the opportunity to master both general methods of analyzing printed materials and specific methods for analyzing the subject matter of individual disciplines.
- 9 Critical thinking embraces methods for applying both qualitative and quantitative skills analytically and creatively to subject matter in order to evaluate arguments and to construct alternative strategies. Problem solving is one of the applications of critical thinking, used to address an identified task.

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Course Outline and Schedule:

The course will include the following concepts:

1. Trigonometric Functions
2. Acute Angles & Right Triangles
3. Radian Measure & the Unit Circle
4. Graphs of the Circular Functions
5. Trigonometric Identities
6. Inverse Circular Functions & Trig Equations
7. Application of Trigonometry & Vectors
8. Complex Numbers, Polar & Parametric Equations

This course will advance the study of algebra & geometry that students began in Algebra I & II, Geometry, and College Algebra. This is a college level trigonometry class emphasizing problem solving application problems relevant to the real world today. The students will be required to work on their own, complete assignments on time, and develop the ability to solve problems using algebraic methods. In general, the students will develop the ability to logically organize information and make a plan that, using standard mathematical applications, can lead them to a solution.

DATE	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Jan 3-7	Staff Development Day - NO CLASSES	Staff Development Day - NO CLASSES	First Day Activities; Course Syllabus; Lesson 1.1	Lesson 1.2	Math Lab: Quiz 1.1-1.4
Jan 10-14	Lesson 1.3	Lesson 1.4	Lesson 2.1	Math Lab: Quiz 1.1-1.4	Math Lab: Quiz 1.1-1.4
Jan 17-21	Staff & Student Holiday - NO CLASSES	Test - Chapter 1	Lesson 2.2	Lesson 2.3	Math Lab: Quiz 2.1-2.5
Jan 24-28	Lesson 2.4	Lesson 2.5	Lesson 3.1	Math Lab: Quiz 2.1-2.5	Math Lab: Quiz 2.1-2.5
Jan 31 - Feb 4	Math Lab: Quiz 2.1-2.5	Test - Chapter 2	Lesson 3.2	Lesson 3.3	Math Lab: Quiz 3.1-3.4
Feb 7-11	Lesson 3.4	Lesson 4.1	Lesson 4.2	Math Lab: Quiz 3.1-3.4	Math Lab: Quiz 3.1-3.4
Feb 14-18	Math Lab: Quiz 3.1-3.4	Test - Chapter 3	Lesson 4.3	Lesson 4.4	Math Lab: Quiz 4.1-4.5
Feb 21-25	Staff & Student Holiday - NO CLASSES	Lesson 4.5	Math Lab: Quiz 4.1-4.5	Math Lab: Quiz 4.1-4.5	Math Lab: Quiz 4.1-4.5
Feb 28 - March 4	Math Lab: Quiz 4.1-4.5	Test - Chapter 4	Lesson 5.1	Lesson 5.2	Math Lab: Quiz 5.1-5.6
March 7-11	Spring Break - no classes				
March 14-18	Staff Development Day - NO CLASSES	Lesson 5.3	Lesson 5.4	Math Lab: Quiz 5.1-5.6	Math Lab: Quiz 5.1-5.6
March 21-25	Lesson 5.5	Lesson 5.6	Math Lab: Quiz 5.1-5.6	Math Lab: Quiz 5.1-5.6	Math Lab: Quiz 5.1-5.6
March 28 - April 1	Math Lab: Quiz 5.1-5.6	Test - Chapter 5	Lesson 6.1	Lesson 6.2	Math Lab: Quiz 6.1-6.4
April 4-8	Lesson 6.3	Lesson 6.4	Math Lab: Quiz 6.1-6.4	Math Lab: Quiz 6.1-6.4	Math Lab: Quiz 6.1-6.4
April 11-15	Math Lab: Quiz 6.1-6.4	Test - Chapter 6	Lesson 7.1	Lesson 7.2	Staff & Student Holiday - NO CLASSES
April 18-22	Lesson 7.3	Lesson 7.4	Lesson 7.5	Math Lab: Quiz 7.1-7.5	Math Lab: Quiz 7.1-7.5
April 25-29	Math Lab: Quiz 7.1-7.5	Math Lab: Quiz 7.1-7.5	Math Lab: Quiz 7.1-7.5	Test - Chapter 7	Math Lab
May 2-6	Math Lab	Final Exam (Chapters 1-7)	Final Exam (Chapters 1-7)	Math Lab	Math Lab
May 9-13	Math Lab	Math Lab	Math Lab	Math Lab	Math Lab
May 16-20	Math Lab	Math Lab	Math Lab	Math Lab	Semester Exams
May 23-27	Semester Exams	Semester Exams	Semester Exams	Staff Development Day - NO CLASSES	Staff Development Day - NO CLASSES

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Course Grading Information:

Grading in this course will be based on on-line homework, on-line quizzes, in-class unit/chapter tests, and a comprehensive final exam according to the following percentages.

1. Minor Grades (30%): There is a homework assignment & quiz for each section that is covered during the semester. Homework problems & calculator activities (10%) will be a good source of practice for the tests since they are all similar in style and format. Quizzes (20%) are used to ensure students are fulfilling their responsibilities of understanding the concepts, completing the daily assignments or homework, and reviewing for tests. All homework & quizzes are completed online. Also be aware that assistance or tutoring is available online in the form of “Help Me Solve This,” “View an Example,” “Video,” “Textbook,” “Ask My Instructor,” or “Instructor Tip.” Homework & quiz due dates will be posted online. Your homework average will count as 10% of your grading period average, and your quiz average will count as 20% of your grading period average.
2. Major Grades (70%): There will be in-class tests. There will be a minimum of two tests during each grading period. Tests will count as 70% of your grading period average.

A cumulative semester or final exam is required; it will count 15% (~1/7) of the semester average. Your overall semester average is determined by taking 42.5% (~3/7) of each nine-week grading period or quarter average plus 15% of your final exam. The standard grading scale applies: 90 – 100 = A 80 – 89 = B 70 – 79 = C 60 – 69 = D 59 and below = F

Late Work, Attendance, and Make Up Work Policies:

Late homework and quizzes will earn a maximum 85% credit (or lose 15% credit) only on the parts submitted after the due date. You are given multiple opportunities to take/re-take a quiz before the due date. Again, all due dates for homework and quizzes will be posted online. Students will be permitted to make up class work and assignments missed due to absences caused by (1) authorized participation in official college or school functions, (2) personal illness, (3) an illness or a death in the immediate family, or (4) the observance of a religious holy day. It is the student’s responsibility to inform the instructor of the reason for an absence and to do so in a timely fashion. The instructor has the prerogative of determining whether a student may make up work missed due to absences for other reasons. The instructor reserves the right to adjust these policies given special circumstances.

Student Behavioral Expectations or Conduct Policy:

Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance, and an attitude that seeks to take full advantage of the education opportunity. Please refer to the [Highlander Guide](#) for the general conduct policy. Also refer to the [West ISD Student and Parent Handbook](#) and the [Student Code of Conduct](#).

[Click Here for the MCC Attendance/Absences Policy](#)

(<https://www.mclennan.edu/highlander-guide/policies.html>)

Click on the link above for the college policies on attendance and absences. Your instructor may have guidelines specific to this course.

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Student Privacy:

According to federal privacy regulations (FERPA), students' educational privacy rights transfer to them once they enroll in an institution of higher education. In practical terms, this means MCC cannot disclose information about a student enrolled in a college course to parents or other interested parties. In general, a college instructor cannot discuss a student's grade or progress in a course with parents. However, there are options for students who would like their parents to receive this information. First, since the instructor is using an online grade book, a student may log in at any time to show the record of grades to a parent. Second, if a student wishes to allow the parent to receive private information directly from an instructor, the student must log into [MCC WebAdvisor](#), then in the "Student" menu select "My FERPA Consent Information," then select "Add FERPA Consent," and then correctly enter all required information. The consent does not allow the parent or designated person to make decisions for the student such as changing the student's schedule, requesting to be withdrawn from a class, requesting to be added to a class, or requesting an official transcript. Please refer to the [Highlander Guide](#) for the complete policy. For additional information, parents can also refer to the Parents page on the MCC website at <http://www.mclennan.edu/parents/>.

** You will need to access each link separately through your Web browser (for example: Internet Explorer, Mozilla, Chrome, or Safari) to print each link's information.*

The instructor reserves the right to change any term on this syllabus and instructor plan at any time during the semester.

I have read and understand the MATH 1316.C05 Trigonometry course syllabus and instructor plan, and I agree to abide by them. If I fail to abide by them, I realize that I have chosen to do so on my own, and I accept the consequences my actions bring.

Student Signature

Parent Signature

McLennan

C O M M U N I T Y

COLLEGE

ACADEMIC RESOURCES/POLICIES

Accommodations/ADA Statement:

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit www.mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

disabilities@mclennan.edu

254-299-8122

Room 319, Student Services Center

Title IX:

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at titleix@mclennan.edu or by calling Dr. Drew Canham (Chief of Staff for Diversity, Equity & Inclusion/Title IX) at (254) 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <http://www.lighthouse-services.com/mclennan/>.

Go to McLennan's Title IX webpage at www.mclennan.edu/titleix/. It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at <http://www.mclennan.edu/campus-resource-guide/>

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact a Success Coach by calling (254) 299-8226 or emailing SuccessCoach@mclennan.edu. Students may visit the Completion Center Monday-Friday from 8 a.m.-5 p.m. to schedule a meeting with a Success Coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff based on household size. Text (254) 870-7573 to schedule a pantry appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to <https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html> to find out more about the emergency grant. The application can be found at https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf.

MCC Academic Integrity Statement:

Go to www.mclennan.edu/academic-integrity for information about academic integrity, dishonesty, and cheating.

Minimum System Requirements to Utilize MCC's D2L|Brightspace:

Go to <https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-and-Staff-Commons/requirements.html> for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

Backup Plan for Technology:

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

Email Policy:

McLennan Community College would like to remind you of the policy (<http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails.

Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

Email on Mobile Devices:

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email Helpdesk@mclennan.edu for help.

Forwarding Emails:

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

Disclaimer:

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.