

# COURSE SYLLABUS AND INSTRUCTOR PLAN

# TRIGONOMETRY MATH 1316.87

## **STACY KUEHN**

## **NOTE:** This is an online 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 <u>https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html</u> on any changes to these guidelines.

#### Course Description:

In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included.

#### Prerequisites and/or Corequisites:

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

Instructor Information: Instructor Name: Stacy Kuehn

E-mail: <u>skuehn@mclennan.edu</u>

When contacting me through email, include the COURSE NUMBER in the subject line and YOUR NAME somewhere within the body of the email. Please review the **Email Policy** found at the link Academic Resources and Policies in the CONTENT section of our Brightspace class.

Office: M 211

**Office Hours:** TTH 1:00 - 2:30 pm (virtual hours only)

\*\* feel free to contact me via email or phone with any questions and I will get back with you within 24 hours Monday through Friday.

Your McLennan student email address is the preferred email address for official college information or business. You are expected to read and, if needed, respond in a timely manner to college emails. The College recommends that you set up your mobile device to receive McLennan emails.

#### Required Text & Materials:

Students <u>must</u> purchase the MyMathLab component containing the eBook and have access to an internet connected computer <u>with either a built-in camera or externally connected webcam</u> for the entire semester.

Title: *Trigonometry* Author: Lial, Hornsby, Schneider, & Daniels Edition: 11<sup>th</sup> Publisher: Pearson/Addison Wesley ISBN-13: 9780134217437

Additional supplies include (but are not limited to):

- 1. Reliable internet (please see the MCC website for more suggestions on internet).
- 2. Camera on computer or an externally connected webcam for proctored midterm and final exams.
- 3. Graphing calculator. I will mainly use the TI-84 graphing calculator but I also utilize the free online Desmos graphing calculator. If you do not already have a graphing calculator, please

check the 'Graphing Calculator Resources' section found in the START HERE section of our Brightspace course.

#### MCC Bookstore Website: http://www.mclennan.edu/bookstore/

#### **Course Notes and Instructor Recommendations:**

Math 1316 in an online format involves listening to video lectures and taking notes, completing online assignments and various projects as well as a midterm and comprehensive final exam.

This course is *extremely fast paced* and 16-weeks' worth of material is covered in 35 days! You should expect to cover 1-2 chapters PER WEEK. Because of this, all assignments are open on the first day of class and close on the last day of class (July 5<sup>th</sup> by 11:59pm). **Note any special due dates listed on the WEEKLY CALENDAR.** A suggested WEEKLY CALENDAR is given to keep you on track but do not attempt the entire course in a few short days. Additionally, students must complete all assignments PRIOR to the time of the midterm and final or they will NOT BE ALLOWED TO TAKE EITHER EXAM.

#### **Student Responsibilities:**

The student is *solely* responsible for:

- Completing each assignment by the specified date
- Utilizing, as needed, all available study options (including contacting the instructor, referring to the online text, reaching out to the Math Lab for tutoring via Zoom, etc) to resolve any questions they might have regarding course material
- Giving as much of an effort as it takes to pass this course

#### **Course Grading and Information:**

It should be noted that enrollment in this course does not guarantee advancement to the next course level. The final responsibility for learning lies with the student. The average will be determined by the following guidelines:

Homework (25%) - Homework is assigned through MyMathLab for every lesson and is to be completed on any internet connected computer. *Please do not work the homework until you have watched the video lecture and taken notes.* There is no limit on the number of times you can work a homework problem until the due date for that assignment. That means you could potentially score a 100 on every homework if you reworked the assignment to achieve that score. I suggest you keep a notebook showing all your work so you can review homework for understanding as well as ask questions if needed. **Students must score 70 or above on <u>each</u> homework assignment to take the chapter quizzes.** 

Activities (5%) – There are two activities due during the summer session each with specified due dates. Check the Weekly Calendar for dates! Other information about these activities can be found under CONTENT in Brightspace and will be mentioned in the announcements. Since I do not curve or replace your exams, think of these activities as the potential curve 0.

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Quizzes (30%) - There will be four chapter quizzes during the semester and you will have <u>two</u> attempts on each quiz. Please refer to the CALENDAR for dates and coverage information. These will range in complexity from short assignments to more in-depth activities. Students must score a 60\* or above on each chapter quiz to take the midterm and final exams. \*Minimum score for Quiz 3 is 50.

**Exams (40%)** – The midterm and final exam will both be online and proctored via webcam from your internet connected computer\*\*. You get <u>one</u> attempt for each exam, and I do not drop or replace either exam.

\*\*We will be utilizing Respondus Monitor Proctoring for both the midterm and final exams. This service utilizes a webcam that is either built into your computer or an external webcam attached via USB port. This service **does not** work with Chromebooks. If you do not have a camera or you use a Chromebook, there are several places on the MCC campus that have computers with webcams for use during these exams. Another alternative could be to use a friend or relative's computer that has a webcam. Either way, start preparing now for how to address the exam issue as online proctoring via webcam is a course requirement.

Having someone else do your online assignments (homework, quizzes, and tests) is a violation of the academic integrity policy and either may result in failing grades and/or being dropped from the class. Infractions such as these will be reported to the administration for tracking and possible college action.

There is no extra credit. Active participation in class (asking/answering questions through email, completing assignments by the due date, listening to lectures and taking notes, getting help through the free, online Math Lab, etc.) leads to improved test scores, rendering extra credit unnecessary.

#### Late Work, Attendance, and Make Up Work Policies:

Due dates for assignments are clearly stated in MML and on the WEEKLY CALENDAR and therefore <u>extensions are not given</u>. Missing the midterm or final will also result in a 0 and I do not drop either of these grades. The instructor has the right to adjust this policy under special circumstances.

#### **Attendance Policy:**

In a traditional face-to-face summer class, you would meet 2 hours a day for 4 days plus outside time completing assignments, making the time commitment about 16 hours per week devoted to the course. An online course should have no less of a time commitment and possibly even a little more. Be sure you schedule time now for the next five weeks to regularly work on the course by watching lecture videos and taking notes, completing assignments, and asking questions for further clarification.

#### **Course Specific Policy**

Attendance will be based on participation in the course. You should have activity

(activity = work in any MML assignment such as homework, quizzes or exams) in the course each week. A report will be run each week (on Tuesday) to determine activity in the course. Any week in which no work is logged, will count as an absence. You are allowed 1 such week of inactivity before I will drop you. You will receive an email when you are on the Inactivity report in any week.

#### **Campus Policy**

#### \* 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.

#### **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.

#### Course Objectives and/or Competencies:

Upon successful completion of the course, students will:

- Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians
- Graph trigonometric functions and their transformations
- Prove trigonometric identities
- Solve trigonometric equations
- Solve right and oblique triangles
- Use the concepts of trigonometry to solve applications

\* 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.

#### I reserve the right to change any term on this syllabus at any time during the semester

#### **Course Outline or Schedule:**

This is a SUGGESTED schedule outlining which assignments should be completed by each mark to stay on track with the course.

Week	Section	Assignment
	1.1 Angles	1.1 Angles
	1.2 Similar Triangles	1.2 Similar Triangles
	1.3 Trigonometric Functions	1.3 Trig Functions
	1.4 Using Trigonometric Functions	1.4 Using Trig Functions
1	2.1 Trig Functions of Acute Angles	2.1 Special Triangles
	2.2 Trig Functions of Non-Acute Angles	2.2 Non-Acute Angles
	2.3 Finding Trig Functions with a Calculator	2.3 Special Triangles
	2.4 Solving Right Triangles	2.4 Solving Rt Triangles
	2.5 Applications of Right Triangles	
	<mark>Quiz 1: Ch 1- 2</mark>	Quiz 1: Trig Functions and Right Triangles

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	Understanding the Unit Circle	Unit Circle Project (due 6/10)
	3.1 Radian Measure	3.1 Radian Measure
	3.2 Applications of Radian Measure	3.2 Application of Radian Measure
	3.3 The Unit Circle	3.3 Circular Functions
	3.4 Linear and Angular Speed	3.4 Linear and Angular Speed
	Quiz: Unit Circle	Speed Quiz: Unit Circle ( <mark>timed</mark> )
2		
	4.1 Graphs of Sine and Cosine Functions	4.1 Graph of Sine and Cosine
	4.2 Translations of the Sine and Cosine Functions	4.2 Translations of Sine and Cosine
	4.3 Graphs of Tangent and Cotangent	4.3 Graphs of Tan and Cot
	4.4 Graphs of Secant and Cosecant	4.4 Graphs of Sec and Cosec
	4.5 Harmonic Motion	4.5 Harmonic Motion
	Quiz 2: Ch 3-4	Quiz 2: Radian Measure and Graphing
	Midterm Exam (online and proctored)	Midterm: Ch 1-4 (due Wed, 6/15)
	5.1 Fundamental Identities	5.1 Fundamental Identities
	5.2 Verifying Trigonometric Identities	5.2 Verify Trig Identities
2	5.3 Sum and Difference Identities of Cosine	5.3 Sum/Diff Identity for Cosine
	5.4 Sum and Difference Identities of Sine and Tan	5.4 Sum/Diff Sine and Tangent
	5.5 Double-Angle Identities	5.5 Double-Angle Identities
	5.6 Half-Angle Identities	5.6 Half-Angle Identities
	Quiz 3: Ch 5	Quiz 3: Trigonometric Identities
	6.1 Inverse Circular Functions	6.1 Inverse Circular Functions
	6.2 Trigonometric Equations I	6.2 Trig Equations I
4	6.3 Trigonometric Equations II	6.3 Trig Equations II
	6.4 Equations for Inverse Trig Functions	6.4 Solve Inv Trig Equations
	<mark>Quiz 4: Ch 6</mark>	Quiz 4: Trigonometric Equations
	7.1 Law of Sines (no ambiguous case)	7.1 Law of Sines
	7.3 Law of Cosines	7.3 Law of Cosines
	7.4 Vectors, Operations, Dot Product	7.4 Vectors
E	8.2 Polar form of Complex Numbers	Polar Graphing Project (due 7/5)
	8.5 Polar Equations and Graphs	8.2 Complex Plane and Polar Form
		8.5 Polar Graphs and Equations
		**NO QUIZ FOR CH 7-8 BUT COVERED ON FINAL!
		ALL HOMEWORK/QUIZ ASSIGNMENTS DUE 7/5 BY 11:59PM
F	Final Exam (online and proctored)	Final: Ch 1-8 (due Wed, 7/6)

# $\begin{array}{c} \text{McLennan} \\ \text{COMMUNITY} \\ \text{COLLEGE} \end{array}$

# 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

#### <u>Title IX:</u>

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 <u>titleix@mclennan.edu</u> 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 <u>http://www.lighthouse-services.com/mclennan/</u>.

Go to McLennan's Title IX webpage at <u>www.mclennan.edu/titleix/</u>. 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 <a href="http://www.mclennan.edu/campus-resource-guide/">http://www.mclennan.edu/campus-resource-guide/</a>

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 <u>SuccessCoach@mclennan.edu</u>. 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 <u>https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html</u> to find out more about the emergency grant. The application can be found at <u>https://www.mclennan.edu/foundation/docs/Emergency\_Grant\_Application.pdf</u>.

#### MCC Academic Integrity Statement:

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

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

Go to <u>https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-and-Staff-Commons/requirements.html</u> 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 (<u>http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf</u>) 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 <u>Helpdesk@mclennan.edu</u> 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.