

**McLennan**  
C O M M U N I T Y  
**C O L L E G E**

WACO, TEXAS

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**COURSE SYLLABUS**

**AND**

**INSTRUCTOR PLAN**

**PLANE TRIGONOMETRY**

**MATHEMATICS – 1316 - 87**

**Alma G Wlazlinski**

**NOTE: This is a 16-week course.**

**NOTE: This is an internet 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.

## PLANE TRIGONOMETRY

### MATH 1316 SEC 87

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#### **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. Graphing calculator required.

#### **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. Semester Hours 3 (3 lec)

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

Math 1316 is an on-line course and will involve dedication to stay on course during the semester.


- ✓ Print out the calendar for Fall, 2021, Math 1316 Sec 86
- ✓ Dedicate consistent times during each week to dedicate to this course
- ✓ Use Chrome, OR Mozilla as the internet engine for proper viewing of graphs and other windows needed to complete all objectives of this course
- ✓ Listen and take notes of instructor videos or publisher's videos before attempting the assignments or you will spend double the time completing the homework
- ✓ Study the list of review homework problems listed under Review for Exams to be successful on the exams
- ✓ Email any concerns, suggestions, ideas to [awlazlinski@mcclennan.edu](mailto:awlazlinski@mcclennan.edu) as promptly as possible if:
  - Personal commitments have caused you to get behind the schedule
  - Additional time needed to complete weekly assignments
  - Personal provider problems causing delays
  - Issues with the program
  - Illness in terms of Covid, Delta strain

Please use proper and professional email etiquette by using the subject line to announce: **Math 1316 Sec 87** and your closing to have **your full name** for quick response to email. Use ONLY the MCC email address.

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|---|----|---|
| <br>Send | To | <a href="#">Alma G. Wlazlinski;</a>             |
|   | Cc |   |
| Subject   |    | Math 1316 Sec 87 then full name of registration |

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#### **Instructor Information:**

Instructor Name: Alma G. Wlazlinski  
MCC Email: [awlazlinski@mcclennan.edu](mailto:awlazlinski@mcclennan.edu)  
Office Phone Number: Voice mail only so leave phone number (254) 299-8871  
Office Location: Via Zoom and email  
Office/Teacher Conference Hours: **Monday/Wednesday RM 205 or Zoom: 5:00 pm to 6:00 pm (Zoom meeting ID: 978 5409 6473)**  
**Tuesday/Thursday: Zoom Office Hour (Zoom Meeting ID: 958 7514 8622)**  
**Friday: Zoom appoint. Scheduled by email request**

Other Instruction Information: **email addressed as time permits and on Monday through Thursday from 6:30 pm to 8:00 pm specifically**

**Required Text & Materials: This is an IA course...no access code needs to be purchased to sign into Pearson's website.**

Title: **Trigonometry 12<sup>th</sup> Edition**  
Author: Lial, Magaret; Hornsby, John; Schneider, David; Daniels, Callie  
Edition: 12<sup>th</sup> Edition  
Publisher: Pearson  
ISBN: 13:9780135924136

\*\*\*Textbook is optional. The MyMathLab Access code is what is required for the Title of Textbook

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Original Materials:



### **Trigonometry 12th Edition**

Author(s): Lial, Margaret | Hornsby, John | Schneider,  
David | Daniels, Callie

Textbook ISBN-13: 9780135924136

Series: **MyLab Math**

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

Michaelis Academic Bldg: enter on First Floor: Phone: 254o-299-8685

**Fall & Spring Hours:** Monday – Thursday: 7:45 am – 6:00 pm  
Friday: 7:45 am – noon

\*\*\*if ordering textbooks on-line, follow up with phone call to insure your order has been received\*\*\*

### **Methods of Teaching and Learning:**

This course is totally on-line and the lessons for each section are available as YouTube done by me or the Publisher's videos that have closed captioning available. It is vital that time be allotted to view and taking of notes to assist in the learning of the material.

Expectations of students:

- ✓ Expect students to communicate any concerns, questions, or situation via email
- ✓ Seek tutoring using Zoom office hours before becoming frustrated with the material
- ✓ Use tools for getting personal assistance from the publishers or send problem to me

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Sec 1.2 Angle Relationships & Similar Triangles

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Question 19, 1.2.49

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HW Score: 0%, 0 of 1  
Score: 0 of 1

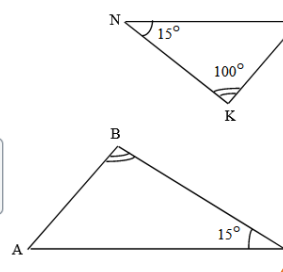
Find the unknown angle measure in the pair of similar triangles.

angle B = °

angle M = °

angle A = °

(Simplify your answers. Type an integer or a fraction.)



The 2 options “Help Me Solve This” and “View an Example” will help you

Click on arrow for “Get More Help” and then click on “Ask My Professor” to send it to me

Help Me Solve This View an Example Get More Help Clear All

- ✓ **All** Chapter Exams are online and timed with 2 attempts offered
- ✓ Final Exam must be proctored and will give details as the end of course approaches. A ½ sheet of any information will be allowed and there will be two ways to accomplish this:
  - ✓ Testing Center
  - ✓ Prospectus (on-line proctoring)
  - ✓ Zoom by available time

#### **Course Objectives and/or Competencies:**

This is a very valuable course for anyone taking Calculus and there is a direct correlation with understanding the material and success in the Calculus series, so heed my suggestion to be successful in your career goal.

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 radius
- Graph trigonometric functions and their transformations
- Prove trigonometric functions and their transformations
- Solve trigonometric equations
- Solve right and oblique triangles
- Use the concepts of trigonometry to solve applications

□ **Critical Thinking:** Students used inductive and deductive reasoning, explore problems using logical process of inquiry, analysis evaluation and synthesis. Assessment will use discussion, independent practice, collaborative experience, instructional technology. Use of departmental test bank and CAAP test.

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□ **Communications:** Students will submit written assignments involving topics related to Plane Trigonometry or other mathematics that they can then share with their instructor and/or colleagues in class via written, oral, and/or visual methods. Assessment will use at least one of the following: board work, class time explanation, case study presentation, poster board presentation, small group presentation, online collaboration, personal interview, or online presentation. Evaluation process will use departmental rubric for communication assessment.

□ **Empirical/Quantitative:** Students work on various mathematical problem solving skills throughout the course. The course focuses on the manipulation and analysis of numerical data or observable facts as presented in application problems and/or problem skill sets in which students demonstrate their ability to reach informed conclusions mathematical process. Assessment will include discussion, independent practice, collaborative experience, or instructional technology to include questions from a departmental test bank and the CAAP test.

### Course Outline or Schedule:

|                |  |
|----------------|--|
| <b>Week #1</b> | Introduction to course syllabus<br>Sign into MyMathLab<br>Sec 1.1 Angles<br>Sec 1.2 Angle Relationships and Similar Triangles  |
| <b>Week #2</b> | Sec 1.3 Trigonometric Functions<br>Sec 1.4 Using the Definitions of the Trigonometric Function<br>Sec 2.1 Trigonometric Functions of Acute Angles  |
| <b>Week #3</b> | <b>Exam on Chapter 1 is On-Line</b><br>Sec 2.2 Trigonometric Functions of Non-Acute Angles<br>Sec 2.3 Approximations of Trigonometric Function Values<br>Sec 2.4 Solutions and Applications of Right Triangles (watch video)                       |
| <b>Week #4</b> | Sec 2.4 Solutions and Applications of Right Triangles<br>Sec 2.5 Further Applications of Right Triangles<br>Sec 3.1 Radian Measure<br><i>Review for Exam 2 on MML and must have at least 80 on each section of Chapter 2</i>                       |
| <b>Week #5</b> | <b>Exam on Chapter 2 is on-line</b><br>Sec 3.2 Applications of Radian Measure<br>Sec 3.3 The Unit Circle and Circular Functions  |
| <b>Week #6</b> | Sec 3.4 Linear and Angular Speed<br><i>Review for Exam 3 on MML and all sections must have at least 80</i><br>Sec 4.1 Graphs of the Sine and Cosine Functions<br>Sec 4.2 Translations of the Graphs of the Sine and Cosine Functions (watch video) |
| <b>Week #7</b> | <b>Exam on Chapter 3</b><br>Sec 4.2 Translations of the Graphs of the Sine and Cosine Functions<br>Sec 4.3 Graphs of the Tangent and Cotangent Functions<br>Sec 4.4 Graphs of the Secant and Cosecant Functions                                    |

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|                 | Sec 4.5 Harmonic Motion (Watch video)   |
| <b>Week #8</b>  | Sec 4.2 Translations of the Graphs of the Sine and Cosine Functions<br>Sec 5.1 Fundamental Identities<br><i>Review for Exam 4 on MML and all sections must have at least 80</i><br><b>Exam on Chapter 4</b>     |
| <b>Week #9</b>  | Sec 5.2 Verifying Trigonometric Identities<br>Sec 5.3 Sum and Difference Identities for Cosine<br>Sec 5.4 Sum and Difference Identities for Sine and Tan  |
| <b>Week #10</b> | Sec 5.5 Double Angle Identities<br>Sec 5.6 Half-Angle Identities  |
| <b>Week #11</b> | Sec 6.1 Inverse Circular Functions<br>Sec 6.2 Trigonometric Equations I<br>Sec 6.3 Trigonometric Equations II (watch Video)<br><b>Exam on Chapter 5</b>   |
| <b>Week #12</b> | Sec 6.3 Trigonometric Equations II<br>Sec 6.4 Equations Involving Inverse Trigonometric Functions<br><i>Review for Exam on Chapter 6 on MML question list</i><br>Sec 7.1 Oblique Triangles and the Law of Sines |
| <b>Week #13</b> | Sec 7.2 Ambiguous Case of the Law of Sines<br>Sec 7.3 The Law of Cosines<br>Sec 8.2 Trigonometric (Polar) Form of Complex Numbers (watch video)<br><b>Exam on Chapter 6</b>                                     |
| <b>Week #14</b> | Sec 8.2 Trigonometric (Polar) Form of Complex Numbers<br>Sec 8.5 Polar Equations and Graphs<br><b>Exam on Chapter 7 &amp; 8</b>   |
| <b>Week #15</b> | <b>Catch up Week!</b><br>Review for Final Exam  |
| <b>Week #16</b> | <b><u>Monday or Tuesday...will give specific instructions on Week #14</u></b>   |

### Course Grading Information:

This course's assessment is weighted between four (4) components: Homework, Projects, Exams and Final Exam.

**Homework:** All homework will be done on the MyMathLab website and should be attempted after seeing podcasts, publisher videos, and/or completed notes. There is no limit on attempts but missing frequently on solutions is discouraging. Prepare to succeed and study to learn first. **For each objective, there is an 80% score minimum to proceed to the next objective.** This component is worth 20% of the course grade.

**Exams:** There are seven (7) chapter exams given one, all on-line. Each exam assesses the key objectives of the chapter and directly related to the assigned assignments (supporting the importance of completing the assignments). There are two (2) attempts possible to achieve success in this course. There is a tab labeled [Exam Review]

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listing the objectives and homework problems to review to help succeed on the exam. This Component is worth 50% of the course grade.

**Final Exam:** The Final Exam will be comprehensive and must be proctored to insure Integrity of course for transfer to a university of your choice. A ½ sheet of any notes will Be allowed to help memory recall of the material. The Final Exam should be taken at The Testing Center at MCC or with an approved proctor, such as a counselor or other Approved proctor status. Will be offering proctoring using Zoom. Notification must be done 2 weeks prior to final for special Arrangements. This component is worth 30% of the course Grade.

**Grade Distribution:**

|                      |                   |
|----------------------|-------------------|
| Homework (MyMathLab) | 20%               |
| Exams                | 50%               |
| <b>Final Exam</b>    | <b><u>30%</u></b> |
|                      | 100%              |

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

**Homework** must be completed with an 80 or better to be able to take the exam over the material. If you have gotten behind, an email MUST be sent informing on your need and the circumstances that caused the lack of meeting the due dates . Due dates for homework will be the due date of the Exam over the Chapter Material.

**Attendance** will depend on your active completion of sections assigned during each week's assignments listed on the calendar or syllabus tab located on MyMathLab. To be counted absent for the week:

1. you completed no homework sections for that week's assignments with at least an 80
2. only one homework section with at least an 80 and no exam taken
3. Student will be dropped if by Census Date (January 17th ), the MyMathLab access code has not been purchased\*\*\*\*\*
4. Student will be dropped for absences if 8 absences are posted on Brightspace for the above definitions by April 1<sup>st</sup>.

\*\*\*Failure to take the Final Exam will result in a 0 as a grade and F for the course\*\*\*\*

**Student Behavioral Expectations or Conduct Policy:**

- Having someone else do your online assignments is a violation of the academic 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 permanently placed on your transcripts as well as possible college action.
- You must be committed to participating in this course. Communication on homework problems have to be done via e- mail. Any problems you may be experiencing that will interfere with completion of the course must be communicated to me ASAP.  
Because this is an on-line course, absences are calculated twice weekly to insure participation in this course. On Wednesdays of each week, a homework must be completed with an 80 or better score to be present and by Fridays of each week an exam or homework must be completed. Send emails if there is illness or circumstances causing lack of participation.



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**[Click Here for the MCC Attendance/Absences Policy](https://www.mclennan.edu/highlander-guide/policies.html)**

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

Click on the link above for the college policies on attendance and absences. Review the previous sections of this syllabus for clear details,



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## 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](http://www.mclennan.edu/disability).

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

[disabilities@mclennan.edu](mailto: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](mailto: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/](http://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](mailto: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](https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf).

**MCC Academic Integrity Statement:**

Go to [www.mclennan.edu/academic-integrity](http://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. For more information about your student email account, go to [www.mclennan.edu/student-email](http://www.mclennan.edu/student-email).

**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](mailto:Helpdesk@mclennan.edu) for help.

You can find help on the McLennan website about connecting your McLennan email account to your mobile device:

- [Email Setup for iPhones and iPads](https://support.microsoft.com/en-us/office/set-up-an-outlook-account-in-the-ios-mail-app-b2de2161-cc1d-49ef-9ef9-81acd1c8e234?ui=en-us&rs=en-us&ad=us) (<https://support.microsoft.com/en-us/office/set-up-an-outlook-account-in-the-ios-mail-app-b2de2161-cc1d-49ef-9ef9-81acd1c8e234?ui=en-us&rs=en-us&ad=us>)
- [Email Setup for Androids](https://support.microsoft.com/en-us/office/set-up-email-in-android-email-app-71147974-7aca-491b-978a-ab15e360434c?ui=en-us&rs=en-us&ad=us) (<https://support.microsoft.com/en-us/office/set-up-email-in-android-email-app-71147974-7aca-491b-978a-ab15e360434c?ui=en-us&rs=en-us&ad=us>)

**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.

For more helpful information about technology at MCC, go to [MCC's Tech Support Cheat Sheet](#) or email [helpdesk@mclennan.edu](mailto:helpdesk@mclennan.edu).

**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.