TEXT: **Trigonometry**, 11th Edition. Lial, Hornsby, Schneider, Daniels
ISBN: 9780134306025

In addition, you can purchase the MyMathLab access code only at [http://www.coursecompass.com](http://www.coursecompass.com) CourseCompass is now MyLab and Mastering.

**IMPORTANT NOTE**
Attendance for certification purposes is having purchased the MML access code, logged into MML and answered the Discussion Board questions.

SOFTWARE: MyMathLab, CourseCompass Interactive math software is required for participation in this course. All homework, tests, and comprehensive final exam will be given within MyMathLab. [http://www.coursecompass.com](http://www.coursecompass.com). You may purchase MyMathLab access code with the e-book online. The course ID is: reyes15504

CATALOG DESCRIPTION: This is a Texas Common Course Number. This is a Core Curriculum course selected by the colleges of DCCCD.

**Prerequisite:** MATH 1314 or equivalent.

**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. (3 Lec.)

**Student Learning Outcomes:**

Upon successful completion of this course, students will:

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

MATH 1316 is a **Tier I** course in the **Quantitative Reasoning** learning category. Knowledge and skills that are important to your success in other college courses will be introduced and reinforced in Tier I. The **Quantitative Reasoning** category promotes the application of mathematics to increase your ability to solve “real-world” problems. When you are quantitatively literate, you can use logic and critical thinking in new way. [www.dcccd.edu/core](http://www.dcccd.edu/core)
**Core Objectives:**
MATH 1316 is part of the Mathematics Foundational Component Area 020.

i. Courses in this category focus on quantitative literacy in logic, patterns, and relationships.

ii. Courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

iii. MATH 1316 develops the following Core Objectives:
   - **Critical Thinking (CT)** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
   - **Communication (COMM)** - to include effective development, interpretation and expression of ideas through written and visual communication
   - **Empirical and Quantitative Skills (EQS)** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

MATH 1316 develops **Critical Thinking**, **Communication**, and **Empirical and Quantitative Skills** by requiring students to solve and analyze applications of trig functions and their graphs.

**COURSE MATERIALS**
In this course, we will use a software program called MyMathLab that will be assessed via the Internet. You will use this program to practice homework problems, participate on the Discussion Board and take SAMPLE tests.

MyMathLab is an interactive website where you can:
- Self-test to improve your math skills.
- Study more efficiently. Create personalized study plans with exercises that match your textbook.
- Get help when you need it. Includes multimedia learning aids like videos and animations.
- Talk to a live tutor via a toll free number.

**SOFTWARE AND SYSTEM REQUIREMENTS**
Mozilla Firefox and Google Chrome are the recommended and supported browsers for this course. The course also has the following options for system requirements:

- Windows 7.0 or higher
- Mac OS x 10.8 or higher

Students are encouraged to use the Browser Check on the initial page within the MLP system in order to check and/or update (free download) the following software requirements:

- Adobe Flash Player version 11.9 or higher
- Adobe Reader version XI or higher

If you experience technical problems while using MyMathLab, you may contact Technical Support at (800) 677-6337, Monday – Friday 6am – 7pm CST and Sunday 3pm – 10pm.

**COURSE PROCEDURES AND POLICIES:**
CONTACTING YOUR INSTRUCTOR
All work for this course is done online. You will use MyMathLab to view section video presentations, participate on the discussion board, practice homework exercises, and take SAMPLE tests. Make sure you practice the online homework problems and SAMPLE tests before taking an exam. Your main communication with your instructor will be via email and discussion board. To ensure a prompt response when emailing your instructor you must include your name and write the course for which you are enrolled (MATH 1316) and the section number in the subject line of all email correspondences. I should respond to your email within 24 hours Monday through Thursday. If I don’t respond to your email within 48 hours (Monday – Thursday), then please call my office number and leave a message. Emails sent on Friday, Saturday, or Sunday will be answered by the end of the day on Monday of the following week.

INSTITUTIONAL POLICIES
Institutional Policies of Brookhaven College may be found at the following link:
https://www.Brookhavencollege.edu/syllabusaddendum

The institutional policies covered are:

- Drop/Withdrawal Policy
- Six Drop Rule
- Repeating this Course
- Financial Aid Statement
- Financial Aid Certification of Attendance
- International Students
- Religious Holidays
- ADA Statement
- Academic Integrity
- Grade Reports
- Family Educational Rights and Privacy Act (FERPA)
- Institutional Equity
- Instructors Right to Modify

DROP/WITHDRAWAL POLICY
Attendance is an important part of your success. Attendance will be marked each week by recording the time spent viewing the video lectures, participation on the Discussion Board, completion of SAMPLE Tests and homework.
You are expected to watch all section video presentations in the MyMathLab classroom. If you do not have a high-speed Internet connection, these presentations are also available via the Digital Video Tutor which accompanied your textbook if you ordered the appropriate value pack. The videos contain instruction on each objective that is to be covered in the course. If you don’t watch the videos it is equivalent to not coming to class.

Additional time off line, doing assigned review work is also expected. It has been observed that taking a class at the college level requires 2-3 hours outside of class for every credit hour for the course per week. This means that since this is a 3 credit hour course, you are expected to spend 6-9 hours per week studying for this course. In other words, you should be spending at least 3 hours a week viewing the lesson videos and another 6 to 9 per week hours doing homework and taking practice tests. You will be expected to follow the course calendar and complete all assignments on or before the given deadlines.

Students are expected to participate in class regularly and to consult the instructor when participation/attendance is not possible for any extended period of time. If you are unable to complete this course, you must withdraw from it by June 24, 2020. Withdrawing from a course is a formal procedure, which YOU must initiate. I cannot do it for you.

**ACADEMIC INTEGRITY**: Scholastic dishonesty is a violation of the Student Code of Conduct and is punishable as stated in college policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion. The purpose of the Student Code of Conduct is to provide guidelines for the educational environment of the Dallas County Community College District. This environment views students in a holistic manner, encouraging and inviting them to learn and grow independently. Such an environment presupposes both rights and responsibilities. For more information, refer to the DCCCD Student Code of Conduct (https://www1.dcccd.edu/catalog/ss/code.cfm).

*We, the Math Department of BHC, take issues of dishonesty very seriously. If a student is caught violating any policy of the Testing Center, or an instructor’s own policy for their particular class, the following consequences will be enforced: The minimum penalty a student will receive is a zero for the assignment/exam and the maximum penalty will be to receive an F for the course and/or academic suspension.*

As with any online course, you are expected to do your own work. By starting the work in this course you are agreeing to follow the honor system. Any indication that you are being dishonest will result in taking your tests at the Brookhaven College Testing Center, receiving an F for the course and/or academic suspension. This is at the instructor’s discretion.

**ONLINE EXPECTATIONS**
The theme of this online class is respect. I will email you with respect and I expect the same treatment from you. In addition, I ask that you also be respectful to classmates when communicating via email or discussion board.

**DISCUSSION BOARD**

Discussion Forums:
Under the “Discussion Board” tab you will be able to introduce yourself. In addition, this is where you post questions and your classmates can help you. I will be reading these discussions and communicate via the discussion board. The Discussion Board should contain questions over the material that is covered for the week and you will have a chance to discuss homework.
problems with other students in the course. This will also help you to prepare for the upcoming Test. This allows you to illustrate your understanding of the material and to help other students in the course. You will be able to learn from other students in the class, which may also help you to understand the material better.

**GOING TO CLASS**

For the purposes of “Going to Class” we will use the following format:

1. **GO TO CLASS.** Before you begin a section, you must first watch the lesson video for that section. Under the Course Menu, you will find a tab entitled, “Homework.” You should start here. You will find a link to the lesson videos, the multimedia textbook, the homework, and any other assignments that you may need to complete for the week. Before you view the lesson videos, I suggest that you read through the multimedia textbook. The multimedia textbook will have be several icons available to you. There is an “Audio” icon, a “You Try It,” and an “Animation” icon. The Audio icon will read that portion of the textbook to you, the “You Try It” icon will allow you to work corresponding problems as you move along and the Animation icon will present that portion of the lesson in animated form. It is strongly suggested that you use the “You Try It,” and “Animation” icons regularly. They will help you to get a good understanding of the material before you attempt the homework.

2. **PRACTICE HOMEWORK PROBLEMS COVERED IN THE SECTION.** Click on the “Homework” tab which is located on the left side of the screen in MML. I highly recommend that you achieve a score of 70% or better on each homework assignment before you move on to the next assignment. Achieving this score will ensure that you have mastered enough of the material to understand and do well on the next section. Each homework assignment is a prerequisite of the other.

3. **DISCUSSION BOARD TO ASK/ANSWER STUDENT QUESTIONS.**

4. **TAKE SAMPLE TEST.** Once you have practiced all of the homework that the test will cover (see course calendar on pages to follow) you should take the SAMPLE Test. The SAMPLE Tests are designed to give you an idea as to how you will perform on the actual test. If you score a 28% on the SAMPLE Test you will probably make somewhat of the same score on the actual exam. You may take the SAMPLE Test only one time. Your Final Exam can replace your test score earned on Tests 1, 2, or 4 if it is higher. **The final exam cannot replace test 3 (the identities test).**

5. **STUDY PLAN.** Once you take the sample test, a study plan will automatically be generated. The Study Plan is located under the Lessons menu as well. Complete all items in the study plan.

6. **TAKE THE TEST.** Make sure you read the syllabus and know the date to take each tests. Please make sure that you make arrangements with your schedule so you can take all tests by the deadline. No makeup exams will be given unless absence is excused by the instructor.

**TAKING EXAMS**

You will have 4 chapter exams plus 1 comprehensive final exam. All exams will be taken online on the computer. All exams are timed. You should take the SAMPLE tests before taking the “actual” test. This will help you to get comfortable taking a timed test.

Summer 2020
HELP AND AVAILABLE RESOURCES:

- If you need help navigating through the MyMathLab Interactive website, go to the Announcements page and there you will find a link to Online Student Help.

- Don’t forget, MyMathLab includes FREE access to the AW Tutor Center. Just call toll free (888)777-0463, Sunday to Thursday 4PM – 11PM.

- A link to the Student Solutions Manual to accompany the textbook is available under “Chapter Contents” menu and under Course Information. Look at the top for the tab “Tools for Success.” Here you will also find TI Graphing Calculator Tutorials. The solutions manual contains worked out solutions to the odd-numbered problems in your textbook. You may find this to be very helpful when completing the review exercises assigned from your textbook before going to take the tests.

- Brookhaven College has a STEM Resource Center that offers free assistance and other resources to students enrolled in this course. The lab is equipped with computers with appropriate plug-ins and Internet access so that video lectures can be viewed and homework can be done in the lab. You should not depend on the lab entirely to complete work for this course, you should have your own personal computer with the appropriate Internet access. However, the STEM Resource Center is available if you experience temporary technical problems with your personal computer, or you are own campus and would like to get some of your work done. The STEM Resource Center is located in K137.

If you experience technical problems while using MyMathLab, you may contact Technical Support at (800) 677-6337, Monday – Friday 6am – 7pm CST and Sunday 3pm – 10pm.

EVALUATION PROCEDURES

Tests: 60% of the final grade; Final Exam 20% of the final grade; MML homework 10%; and MML quizzes 10%. Drop the lowest test grade and replace it with the final exam. THE GRADE ON THE IDENTIES TEST (CHAPTERS 5 & 6) CANNOT BE REPLACED. There will be no extensions of deadlines without instructor approval.

The scale used to determine the final course grade is:

- 90 to 100 A
- 80 to 89 B
- 70 to 79 C
- 60 to 69 D
- 0 to 59 F
- Withdrawal W

TI Graphing calculator required. TI-84 PLUS calculator recommended. NO TI-89 OR TI-92 OR TI-NSPIRE.

Incomplete grades are given when an unforeseen emergency prevents a student from completing the work in a course. The division Dean must approve all “I” grades.
INSTRUCTOR’S RIGHT TO MODIFY: The instructor has the right to add, delete, or revise segments of this course syllabus.

IMPORTANT DATES:

Summer Academic Semester, 2020
Summer I:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>May 25 (Monday)</td>
<td>Memorial Day Holiday</td>
</tr>
<tr>
<td>June 4 (Thursday)</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>June 8 (Monday)</td>
<td>4th Class Day (Certification Date)</td>
</tr>
<tr>
<td><strong>June 24 (Wednesday)</strong>*</td>
<td><strong>Last Day to Withdraw</strong> *</td>
</tr>
<tr>
<td>July 1 (Wednesday)</td>
<td>Final Exams/Summer I Ends</td>
</tr>
<tr>
<td>July 3 (Friday)</td>
<td>Fourth of July Holiday</td>
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<tr>
<td>July 6 (Monday)</td>
<td>Last Day for faculty to submit grades</td>
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<td></td>
<td>electronically through eConnect to the</td>
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<td>Registrar’s Office.</td>
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*Last Day to Withdraw is the last day that students may withdraw from the course without penalty.
Although this is an online course, you are allowed to work somewhat at your own pace. The following is a course calendar which has been created to help you finish the course on time. These deadlines must be followed very closely. This course starts **June 4, 2020** and ends **July 1, 2020**. The last day to drop this course with a “W” is **June 24, 2020**. **Students are strongly encouraged to pay close attention to all deadlines.** All exams may be taken on or before the required date as long as the corresponding homework for the tests has been completed. Exams will not be accepted after the given **deadline**.

### Course Calendar

<table>
<thead>
<tr>
<th>WEEK</th>
<th>SECTIONS</th>
<th>DEADLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 1</strong> 6/4</td>
<td>Register in MyMathLab, Complete MML Orientation, Answer Discussion Board Questions</td>
<td>Complete by 6/6</td>
</tr>
<tr>
<td><strong>Day 2</strong> 6/5</td>
<td>1.1: Angles 1.2: Angle Relationships and Similar Triangles</td>
<td>1.1 Homework due 6/7 1.2 Homework due 6/7 Quiz #1 – due 6/8</td>
</tr>
<tr>
<td><strong>Day 3</strong> 6/8</td>
<td>1.3: Trigonometric Functions 1.4: Using the Definitions of the Trigonometric Functions</td>
<td>1.3 Homework due 6/9 1.4 Homework due 6/9 Quiz #2 – due 6/10</td>
</tr>
<tr>
<td><strong>Day 4</strong> 6/9</td>
<td>2.1: Trigonometric Functions of Acute Angles 2.2: Trigonometric Functions of Non-Acute Angles</td>
<td>2.1 Homework due 6/10 2.2 Homework due 6/10</td>
</tr>
<tr>
<td><strong>Day 5</strong> 6/10</td>
<td>2.3: Finding Trigonometric Functions Values Using a Calculator 2.4: Solving Right Triangles</td>
<td>2.3 Homework due 6/11 2.4 Homework due 6/11</td>
</tr>
<tr>
<td><strong>Day 6</strong> 6/11</td>
<td>2.5: Further Applications of Right Triangles Take SAMPLE Test for Chapters 1 &amp; 2</td>
<td>2.5 Homework due 6/12 Quiz #3 – due 6/12 Test #1 Due: 6/13 by 11:59 pm</td>
</tr>
<tr>
<td><strong>Day 7</strong> 6/12</td>
<td>3.1: Radian Measure 3.2: Application of Radian Measure</td>
<td>3.1 Homework due 6/14 3.2 Homework due 6/14</td>
</tr>
<tr>
<td><strong>Day 8</strong> 6/15</td>
<td>3.3: The Unit Circle and Circular Functions 3.4: Linear and Angular Speed</td>
<td>3.3 Homework due 6/16 3.4 Homework due 6/16 Quiz #4 – due 6/17</td>
</tr>
<tr>
<td><strong>Day 9</strong> 6/16</td>
<td>4.1: Graphs of the Sine and Cosine Functions 4.2: Translations of the Graphs of the Sine and Cosine Functions</td>
<td>4.1 Homework due 6/17 4.2 Homework due 6/17</td>
</tr>
<tr>
<td><strong>Day 10</strong> 6/17</td>
<td>4.3: Graphs of the Tangent and Cotangent Functions 4.4: Graphs of the Secant and Cosecant Functions</td>
<td>4.3 Homework due 6/18 4.4 Homework due 6/18 Quiz #5 – due 6/18 Test #2 Due: 6/19 by...</td>
</tr>
<tr>
<td>WEEK</td>
<td>SECTIONS</td>
<td>DEADLINE</td>
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<tr>
<td></td>
<td>Take SAMPLE Test for Chapters 3 &amp; 4</td>
<td>11:59 pm</td>
</tr>
</tbody>
</table>
| Day 11 6/18 | 5.1: Fundamental Identities
5.2: Verifying Trigonometric Identities | 5.1 Homework due 6/19
5.2 Homework due 6/19 |
| Day 12 6/19 | 5.3: Sum and Difference Identities for Cosine
5.4: Sum and Difference Identities for Sine and Tangent | 5.3 Homework due 6/20
Quiz #6 due 6/21
5.4 Homework due 6/22 |
| Day 13 6/22 | 5.5: Double-Angle Identities
5.6: Half-Angle Identities | 5.5 Homework due 6/23
5.6 Homework due 6/23
Quiz #7 due 6/24 |
| Day 14 6/23 | 6.1: Inverse Circular Functions
6.2: Trigonometric Equations I | 6.1 Homework due 6/24
6.2 Homework due 6/24 |
| Day 15 6/24 | 6.3: Trigonometric Equations II
Take SAMPLE Test for Chapters 5 & 6 | 6.3 Homework due 6/25
Quiz #8 due 6/25
Test #3 Due: 6/26 by 11:59 pm |
| Day 16 6/25 | 7.1: Oblique Triangles and the Law of Sines
7.2: The Ambiguous case of the Law of Sines | 7.1 Homework due 6/27
7.2 Homework due 6/27 |
| Day 17 6/26 | 7.3: The Law of Cosines
7.4: Vectors, Operations, and the Dot Product
7.5: Applications of Vectors
Take SAMPLE Test for Chapter 7 | 7.3 Homework due 6/27
Quiz #9 due 6/27
7.4 Homework due 6/28
7.5 Homework due 6/28
Quiz #10 due 6/28
Test #4 Due: 6/29 by 11:59 pm |
| Day 18 6/29 | 8.1: Complex Numbers
8.2: Trigonometric (Polar) Form of Complex Numbers | 8.1 Homework due 6/30
8.2 Homework due 6/30 |
| Day 19 6/30 | 8.3: The Product and Quotients Theorems
8.4: De Moivre’s Theorem; Powers and Roots of Complex Numbers | 8.3 Homework due 6/30
8.4 Homework due 6/30
Quiz #11 due 6/30 |
| Day 20 7/1 | Final Exam | Final Exam Due: 7/1 by 11:59pm |