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

CATALOG DESCRIPTION: Prerequisites: Mathematics 1314 or equivalent.
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)
This course is the prerequisite for MATH 2412 and Physics 1401.

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

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.

CHAPTERS/UNITS COVERED:

   Chapter 1: Trigonometric Functions
   Chapter 2: Acute Angles and Right Triangles
   Chapter 3: Radian Measure and the Unit Circle
   Chapter 4: Graphs of the Circular Functions
Chapter 5: Trigonometric Identities
Chapter 6: Inverse Circular Functions and Trigonometric Equations
Chapter 7: Applications of Trigonometry and Vectors
Chapter 8: Complex Numbers, Polar Equations, and Parametric Equations
This class meets on MTWRF according to the CFBISD schedule. For special help students are encouraged to attend Ms. Kim’s tutorial hours. As BHC students you may also go to the Math Lab, K137. Consult your instructor or check the bulletin board in K137 for the appropriate hours.

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

EVALUATION PROCEDURES

Your final course average is a weighted average. The following weights (percentages) will be used to determine your final course grade.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Homework Average</td>
<td>10%</td>
</tr>
<tr>
<td>Quiz Average</td>
<td>10%</td>
</tr>
<tr>
<td>Test Average (4 tests)</td>
<td>60%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>
The scale used to determine your final performance 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 N-Spire, TI-89 OR TI-92.

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.

**IMPORTANT DATES**

January 2 (Thursday)  College buildings and offices open
January 13 (Monday)  Faculty Reports
January 20 (Monday)  Dr. Martin Luther King, Jr. Day - Holiday
January 21 (Tuesday) Classes Begin
February 3 (Monday)  12th Class Day (Certification Date)
February 27 - 28 (Thursday thru Friday) Professional Development Days -- Thursday and Friday day classes will not meet. Friday evening, Saturday and Sunday classes will meet.

March 2 (Monday)  Classes Resume
March 16-20 (Monday thru Friday) Spring Break - College buildings and offices will be closed for the week.
March 23 (Monday) Classes Resume
April 10 (Friday)  Holiday
April 13 (Monday)  Classes Resume
April 16 (Thursday)* Last Day to Withdraw*
May 11-14 (Monday thru Thursday) Final Exams
May 14 (Thursday) Semester Ends
May 18 (Monday)  Last Day for faculty to submit grades electronically through eConnect to the Registrar's Office.
May Graduation  Ceremony dates may vary at the colleges depending on space available.
Comprehensive Final Exam Include Chapter 8 during Final Exam Week. Final Exam will be given in class.