



# MATH 1316.042,43,44 DC – College Trigonometry

Course Syllabus: Fall 2022

*“Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed.”*

**Instructor: Ann Jenkins, M.S.**

Associate Professor of Mathematics

**Office:** MPHS – Room 207

**Phone:** 903 – 575 -2020

**Email:** [ajenkins@ntcc.edu](mailto:ajenkins@ntcc.edu) or [sjenkins@mpisd.net](mailto:sjenkins@mpisd.net)

Office	Monday	Tuesday	Wednesday	Thursday	Friday	Online
Hours	7:30-8:00 am	7:30-8:00 am	7:30-8:00 am	7:30-8:00 am	7:30-8:00 am	8-3:57
	2:05-255 pm	2:05-255 pm	2:05-255 pm	2:05-255 pm	2:05-255 pm	By Remind

***This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.***

*Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.*

**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 helpful. Three hours credit.

**Prerequisite(s):** MATH 1314 or its equivalent or an appropriate placement score

**Student Learning Outcomes:**

1316.1 Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.

1316.2 Graph trigonometric functions and their transformations.

1316.3 Prove trigonometric identities.

1316.4 Solve trigonometric equations.

1316.5 Solve right and oblique triangles.

1316.6 Use the concepts of trigonometry to solve applications.

**Core Curriculum Purpose and Objectives:**

Through the core curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world; develop principles of personal and social responsibility for living in a diverse world; and advance intellectual and practical skills that are essential for all learning.

Courses in the foundation area of mathematics focus on quantitative literacy in logic, patterns, and

relationships. In addition, these courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

### **Program Student Learning Outcomes:**

#### Critical Thinking Skills

CT.1 Students will demonstrate the ability to 1) analyze complex issues, 2) synthesize information, and 3) evaluate the logic, validity, and relevance of data.

#### Communication Skills

CS.1 Students will effectively develop, interpret and express ideas through written communication.

#### Empirical and Quantitative Skills

EQS.1 Students will manipulate numerical data or observable facts by organizing and converting relevant information into mathematical or empirical form

EQS.2 Students will analyze numerical data or observable facts by processing information with correct calculations, explicit notations, and appropriate technology.

EQS.3 Students will draw informed conclusions from numerical data or observable facts that are accurate, complete, and relevant to the investigation.

Evaluation/Grading Policy: Average of exams 60%

Daily/Homework 20%

Final Exam 20%

“A” 90-100

“B” 80-89

“C” 70-79

“D” 60-69

“F” below 60

There will be no exemptions from the college final.

Exams will be given after each chapter in a proctored environment.

Required Instructional Materials:

Sullivan/Sullivan, Precalculus Concepts through Functions – A Right Triangle Approach to Trigonometry, 4th Edition, 2019

A graphing calculator is required for this class.

Publisher: Pearson, Boston, MA

ISBN Number: 13: 978-0—13-468698-1

**Optional Instructional Materials:** None

**Minimum Technology Requirements:** Access to a computer with internet

**Required Computer Literacy Skills:** Knowledge of Blackboard

**Course Structure and Overview:** Students will be required to complete daily assignments and demonstrate knowledge through proctored testing.

**Communications:** I will respond to email messages within 24 hours and Remind messages within 12 hours.

**Institutional/Course Policy:** Regular and punctual attendance is expected. Attendance requirements must be followed for MPHS. Students are expected to complete assignments as scheduled. All rules for MPHS must be followed. No late work is accepted, and an unexcused absence from a test will result in a 0 on the test.

### **Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements**

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (<http://www.ntcc.edu/>) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

### **NTCC Academic Honesty/Ethics Statement:**

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

### **ADA Statement:**

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

### **Family Educational Rights and Privacy Act (FERPA):**

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education

institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

**Tentative Course Timeline (\*note\* instructor reserves the right to make adjustments to this timeline at any point in the term):**

**Course Schedule: (Subject to Change)**

<u>Weeks</u>	<u>Topics</u>	<u>Assignments</u>	<u>Due Dates</u>
Week 1: 8/17/22 – 8/26/22	Ch 5 Trigonometric Functions 5.1-5.2	Problems as assigned in class	8/25/22
Week 2: 8/29/22 – 9/2/22	Trigonometric Functions 5.3-5.5	Problems as assigned in class	9/2/22
Week 3: 9/5/22 HOLIDAY 9/6/22-9/9/22	Trigonometric Functions 5.6-5.8	Problems as assigned in class Ch 5 Test Review	9/9/22
Week 4: 9/12/22-9/15/22	Ch 5 TEST Analytic Trigonometry 6.1	Ch 5 Test Review <b>CH 5 Test</b> Problems as assigned in class	9/16/22
Week 5: 9/19/22-9/23/22	Analytic Trigonometry 6.2-6.3	Problems as assigned in class	9/23/22
Week 6: 9/26/22-9/30/22	Analytic Trigonometry 6.4-6.5	Problems as assigned in class	9/30/22
Week 7: 10/3/22-10/7/22	Analytic Trigonometry 6.5-6.6	Problems as assigned in class	10/7/22
Week 8: 10/10/22-10/14/22	Chapter 6 Review and Test	<b>Ch 6 TEST</b> Problems as assigned in class	10/14/22
Week 9: 10/17/22-10/21/22	Applications of Right Triangles 7.1	Problems as assigned in class	10/21/22
Week 10: 10/24/22-10/28/22	Applications of Right Triangles 7.2-7.3	Problems as assigned in class	10/28/22
Week 11: 10/31/22-11/4/22	Applications of Right Triangles 7.4 -7.5	Problems as assigned in class	11/4/22
Week 12: 11/7/22-11/11/22	Applications of Right Triangles 7.5 Test Review	Problems as assigned in class Ch. 8 Test Review	11/11/22
Week 13: 11/14/22-11/18/22	Analytic Geometry 9.1-9.2	<b>Ch 7 TEST</b> Problems as assigned in class	11/18/22
Week 14: 11/21/22-11/22/22 <b>Thanksgiving 11/23-11/25</b>	Analytic Geometry 9.3-9.7	Problems as assigned in class	11/22/22
Week 15: 11/28/22-12/2/22	Semester Test Review	Semester Test Review	12/2/22
Week 16: 12/5/22-12/9/22	Final Exam	<b>Semester TEST</b>	12/9/22