DAKOTA COLLEGE AT BOTTINEAU

COURSE SYLLABUS

Course Prefix/Number/Title:

Math 105 Trigonometry

Credits:

3

Course Description:

Angle measure, trigonometric and inverse trigonometric functions, trigonometric identities and equations, parametric and polar coordinates, and general applications.

Prequisities:

ASC 93, ASC 94 or placement score

Course Objectives:

1. Students will be able to work with angular measure in degrees and radians as evidenced by classroom activities and objective tests
2. Students will be able to work with trigonometric and inverse trigonometric functions as evidenced by classroom activities and objective tests
3. Students will be able to use trigonometric identities as evidenced by classroom activities and objective tests
4. Students will be able to solve trigonometric equations as evidenced by classroom activities and objective tests
5. Students will demonstrate an understanding of how to solve real world problems using trigonometry as evidenced by classroom activities and objective tests
6. Students will be able to graph equations and polar coordinates.

Instructor:

Scott Johnson

Office:

Nelson Science Center 110

Office Hours:

MWF 2:00

Phone:

(701)-228-5474

Email:

scott.allen.johnson@dakotacollege.edu

Lecture/Lab Schedule:

MWF 1:00, NSC 124

Textbook:

Trigonometry by John D. Baley and Gary Sarell, 3rd edition. McGraw Hill Publishing, 2003

Course Requirements:

The sequential nature of mathematics deems it necessary for students to attend class on a regular basis, therefore one of the course requirements is regular attendance. Grades will be based on exams using the following scale. Exams cannot be made up without special permission from the professor. FINAL EXAM WILL BE GIVEN DURING THE SCHEDULED TIME.

A = 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
F = 59-0%

Tentative Course Outline:

Equations and Inequalities
Coordinates and Graphs
Functions
Polynomial and Rational Functions
Exponential and Logarithmic Functions
Systems of Linear Equations and Matrices

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s):

Competency/Goal 3: Demonstrates the ability to solve a variety of mathematical problems

General Education Competency 3: Demonstrates mathematical understanding.
Learning Outcome 1: Utilizes appropriate mathematical techniques
Learning Outcome 2: Employs critical thinking skills

Relationship to Campus Focus:

Mathematics 105 emphasizes technology through the use of graphic calculators and nature through wildlife population modeling.

Classroom Policies:

Please refrain from any behavior that would disrupt the class. Cell phones can only be used in emergency situations and they must be turned to vibrate. The academic environment is an open and harassment free environment. Participation is encouraged.

Student Email Policy:

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Academic Integrity:

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities or Special Needs:

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX:

Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.

AI Student Policy:
Unless otherwise indicated in the course syllabus, or in individual instructions for course assignments, or in the absence of the express consent of the course instructor, students are not allowed to utilize generative AI to help produce any of their academic work. Any violation of this policy will be considered an act of academic dishonesty as outlined within the Dakota College Code of Student Life.

RESPONSIBILITIES

Students	• Responsible to follow the syllabus and assignment instructions regarding use of generative AI for all academic work. • Obtain permission of the instructor prior to the use of generative AI that is outside of the syllabus or assignment instructions. Provide appropriate rationale for how the use of generative AI will enhance the learning experience for the assignment. • In instances where generative AI is permissible, appropriately cite the generative AI program used and indicate where in the assignment it was used, in a brief submission statement.
Faculty	• Determine if the use of generative AI could enhance student learning in any assignment of project. • Clearly indicate in all course syllabi if generative AI is allowable for any academic work.

	• If allowable, give specific parameters for how and when generative AI may be used. • If a violation of generative AI for the individual course/syllabus is suspected, discuss the concern with the student. If violation is still suspected, inform the appropriate semester coordinator/program director.