Navajo Technical University   http://navajotech.edu

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Course Title: Pre-Calculus
Course #: *MATH-1240*
Credit Hours: *4*
Semester: *Spring 2022*

Instructor: *Abdulmtalb Hussen, Ph.D.*
Primary Contact: *Blackboard, WebAssign*
Email address: ahussen@navajotech.edu
Meetings: *In Person*
Class Location: *SUB 213*
Class Meeting Times: Monday & Wednesday 8:00 am – 9:40 am
Office: *Nursing Building 211*
Required Materials: *WebAssign access code*
Office Hours: *By Appointment*

Welcome to Math 1240_1- Pre-Calculus. I am so happy to get a chance to teach this course and am hoping that we have a very wonderful semester together.

Required Materials:

Textbooks: (Optional) Precalculus, 6th Edition by Robert F. Blitzer
        ISBN-13: 9780134757834
        ISBN-10: 0134757831
Tools: Scientific Calculator/Graph calculator

Required software: WebAssign Access code. WebAssign is accessed through Blackboard. You will use this to do online homework. The access code is needed to access the course. You can also access the text**. Please contact the book store to buy the access code as soon as possible**.

Mission Statement
Navajo Technical University's mission is to provide University readiness programs, certificates, associate, baccalaureate, and graduate degrees. Students, faculty, and staff will provide value to the Diné community through research, community engagement, service learning, and activities designed to foster cultural and environmental preservation and sustainable economic development. The University is committed to a high quality, student-oriented, hands-on-learning environment based on the Diné cultural principles: *Nitsáhákees, Nahátá, Íína, Siihasin.*

College trigonometry will cover lessons pertaining to Trigonometric functions, Trigonometric identities & equations, and Applications of trigonometry. Also, the course will be integrated to other fields of study to make it real and relevant. At times, the learning process relating to the Navajo culture in the areas of Nitsahakees, Nahatah, Iina, and Sihasin will be covered.

Schedule Disclaimer: The course schedule outlined in the table above is subject to adjustment depending on the needs of the class to focus more on a specific chapter.

Instructional Methods

Weekly modules will have online videos within our Blackboard course shell for each session. Students will be expected to read and practice all examples in each session, module topics and watch online videos throughout the week and complete the weekly exercises and assignments in a timely manner. You should ensure that you have completed the corresponding readings and videos and also assigned exercise problems. Assignments are due Sunday at midnight. Students may complete the assignments at any point during that window.

Course Requirements

Students are expected to study the notes for every session\ watch videos on Blackboard and complete lesson topic problems. Every week students will complete assignments of that session's content. There will be a midterm exam at the end of 8th week and a comprehensive final exam at the end of week 17. Students are encouraged to begin this week's module as soon as possible.

COURSE OUTCOMES
Students are expected to have a clear understanding of the ideas of Precalculus as a solid foundation for subsequent courses in mathematics and other disciplines as well as for direct application to real life situations. The content of the entire course covers topics from basic mathematics and develop them using practical and theoretical tools, building applications and making a strong support for Calculus classes. A student passing MATH1240 Precalculus course will be able to work with the concepts of functions (functions in general, exponential and logarithmic functions, polynomial and rational functions, trigonometric functions, etc), to solve a system of linear and non-linear equations and inequalities, to make basic operations with matrices, to apply mathematical induction method, to work with trigonometric functions and their properties, and to apply them in problems related to other branches of Science: Calculus, Algebra, Physics, Chemistry, Biology, Pharmacy, Engineering, Statistics, etc.

COURSE MEASUREMENTS
Complete reading assignments, homework assignments, exams, projects, and quizzes.

Course Activities

MATH 1240 Schedule, Spring 2022	
Week	Chapters Covered
1 01/17	Syllabus & Chapter 1: Section 1.1 Martin Luther King Jr. Day, Jan 17, 2022 Last Day Add/Drop Classes w/out W, Jan 21, 2022
2 01/24	Chapter 1: Section 1.2 & Section 1.4
3 01/31	Chapter 1: Section 1.5 & Section 1.6 & Quiz 1
4 02/07	Chapter 1: Section 1.7 & Section 1.8 & Section 1.9
5 02/14	Chapter 2: Section 2.1 & Section 2.2 & Section 2.3 Quiz 2
6 02/21	Chapter 2: Section 2.4 Holiday – President's Day, Feb 21, 2022 Spring Graduation Petitions Due, Feb 25, 2022
7 02/28	Chapter 2: Section 2.5 & Section 2.6 & Section 2.7& Quiz 3
8 03/07	Review & Midterm Exam
9 03/14	Spring Break Mar 14 – 18, 2022
10 03/21	Chapter 3: Section 3.1 & Section 3.2 & Section 3.3
11 03/28	Chapter 4: Section 4.1 & Section 4.2 & Quiz 4 Last day to Withdraw With a W, Mar 31, 2022
12 04/04	Chapter 4: Section 4.3 & Section 4.4
13 04/11	Chapter 4: Section 4.5 & Section 4.6 & Quiz 5
14 04/18	Chapter 4 & 5: Section 4.7 & Section 5.1
15 04/25	Chapter 5: Section 5.2 & Section 5.3 & Quiz 6
16 05/02	Chapter 5: Section 5.4 &Section 5.5
17 05/09	Final Exam

Grading

Quizzes	20%
Homework/ Classwork	20%

In Class Activities	5%
Midterm	25%
Attendance	5%
Final Exam	25%
Total	100%

Grading Scale:

Class Percentage	Letter Grade
90-100 %	A
80-89 %	B
70-79 %	C
60-69 %	D
< 60 %	F

Grading Policy

Each student must do his or her own homework and case studies. Discussion among students on homework and cases is encouraged for clarification of assignments, technical details of using software, and structuring major steps of solutions - especially on the course's Web site. Students must do their own work on the homework and exam. Cheating and Plagiarism are strictly forbidden. Cheating includes but is not limited to: plagiarism, submission of work that is not the student's own, submission or use of falsified data, unauthorized access to exam or assignment, use of unauthorized material during an exam, supplying or communicating unauthorized information for an assignment or exam.

Participation

Students are expected to attend and participate in all class activities- as listed above, as it **is 10% of the grade**. Points will be given to students who actively participate in class activities including field trips, laboratories, and ask questions of guest speakers and other presenters.

Cell phone and head phone use
Please turn cell phones off or place them on silence or vibrate mode **before** coming to class. Also, answer cell phones **outside of class** (not in the classroom). Exercising cell phone use courtesy is appreciated by both the instructor and classmates. Headphones are to be removed before coming to class.

Attendance Policy

Students are expected to regularly attend all classes for which they are registered. A percentage of the student's grade will be based on class attendance and participation. Absence from class, regardless of the reason, does not relieve the student of his/her responsibility to

complete all course work by the required deadlines. Furthermore, it is the student's responsibility to obtain notes, handouts, and any other information covered when absent from class and to arrange to make up any in-class assignments or tests if permitted by the instructor. Incomplete or missing assignments will necessarily affect the student's grades. Instructors will report excessive and/or unexplained absences to the Counseling Department for investigation and potential intervention. **Instructors may drop students from the class after three (3) absences unless prior arrangements are made with the instructor to make up work and the instructor deems any excuse acceptable.**

Study Time Outside of Class for Face-to-Face Courses
For every credit hour spent in a class, a student is expected to spend two hours (2) outside of class studying the course materials.

Study Time for Hybrid or Blended Courses
For a hybrid or blended course of one (1) credit hour, a student is expected to spend three (3) hours per week studying the course materials.

Study Time for Online Courses
For an online course of one (1) credit hour, a student is expected to spend four hours (4) per week studying the course materials.

Academic Integrity

Integrity (honesty) is expected of every student in all academic work. The guiding principle of academic integrity is that a student's submitted work must be the student's own. Students who engage in academic dishonesty diminish their education and bring discredit to the University community. Avoid situations likely to compromise academic integrity such as: cheating, facilitating academic dishonesty, and plagiarism; modifying academic work to obtain additional credit in the same class unless approved in advance by the instructor, failure to observe rules of academic integrity established by the instructor.

Diné Philosophy of Education

The Diné Philosophy of Education (DPE) is incorporated into every class for students to become aware of and to understand the significance of the four Diné philosophical elements, including its affiliation with the four directions, four sacred mountains, the four set of thought processes and so forth: Nitsáhákees, Nahát'á, Íína and Siih Hasin which are essential and relevant to self-identity, respect and wisdom to achieve career goals successfully.

Students with Disabilities

The Navajo Technical University and the Mathematics Department are committed to serving all enrolled students in a non-discriminatory and accommodating manner. Any student who feels he/she may need an accommodation based on the impact of disability, or needs special accommodations should inform NTU in accordance with the procedures of the subsection

entitled "Students with Disabilities" under Section 7: Student Support Programs, NTU Student Handbook.