Course Title: College Algebra
Course #: MATH 1220

Credit Hours: 4
Semester: Fall 2022
Cap: 10

Faculty: Mohamed Illafe　　　　　　　　　**E-mail**: millafe@navajotech.edu
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Office Hours: (face-to-face, hybrid, or online):　online: Email anytime but will respond within 24 hours Monday-Thursday, will respond within 48 hours Friday-Sunday.
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Preferred Communication (email and/or text; will respond within 24 hours):

Modality (face-to-face, hybrid, or online): Face-to-Face
Class Location and Meeting Times (if face-to-face): Mod 9 MW 10:00 – 11:40
Meeting Hours and Online Hours (if hybrid):

Required Materials: **WebAssign Access Code Please get this from the bookstore ASAP.**

Textbooks: **Textbook (not required):** College Algebra

　　　　　　　　By Ron Larson, 10th Edition
　　　　　　　　ISBN-13: 978-1-337-28229-1
　　　　　　　　ISBN-10: 1-337-28229-4

Tools:　Scientific Calculator/Graph calculator

Laptop and Internet Access: Every student is required to own a laptop and have internet access.

Lab Fee (if applicable): None

Prerequisite: "C"or above in MATH 1215 (Intermediate Algebra) or satisfactory Placement score. Each student is required to have a looptop. Students who don't have laptops, the cost of the laptops will be deducted from their Pell grant and then NTU will purchase laptops for them.

Mission, Vision, and Philosophy
Mission: Navajo Technical University honors Diné culture and language, while educating for the future.

Vision: Navajo Technical University provides an excellent educational experience in a supportive, culturally diverse environment, enabling all community members to grow intellectually, culturally, and economically.

Philosophy: Through the teachings of Nitsáhákees (thinking), Nahátá (planning), Íína (implementing), and Siihasin (reflection), students acquire quality education in diverse fields, while preserving cultural values and gaining economic opportunities.

Course Description
The study of equations, functions and graphs, reviewing linear and quadratic functions, and concentrating on polynomial, rational, exponential and logarithmic functions. Emphasizes algebraic problem-solving skills and graphical representation of functions. 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 as well as other cultures (multi-cultural studies).

COURSE OUTCOMES

COURSE OUTCOMES	COURSE MEASUREMENTS
Students will build on their knowledge of polynomial, rational, absolute value, radical, exponential and logarithm functions in the following contexts:	
Use function notation; perform function arithmetic, including composition; find inverse functions.	Formative assessment Complete reading assignments, homework assignments, exams.
Graph and interpret key feature of functions, e.g., intercepts, leading term, end behavior, asymptotes.	
Solve equations algebraically to answer questions about graphs, and use graphs to estimate solutions to equations.	
Solve contextual problems by identifying the appropriate type of function given the context and creating a formula based on the information given.	
Communicate mathematical information using proper notation and verbal explanations.	
Use matrix notation; perform matrix arithmetic, including determinants; find inverse matrix.	
Use and identify sequence, series and summation notations; use and compute nth term and sum.	
Calculate probability with different cases.	

Course Activities

Week	Date	Chapters	Assignments
1		Chapter 1	Reading/Homework Assignments
2		Chapter 1	Reading/Homework Assignments

3		Chapter 2	Reading/Homework Assignments
4		Chapter 2	Reading/Homework Assignments
5		Chapter 3	Reading/Homework Assignments
6		Chapter 3	Reading/Homework Assignments
7		Chapter 4	Reading/Homework Assignments
8		Mid term	Reading/Homework Assignments
9		Chapter 5	Reading/Homework Assignments
10		Chapter 5	Reading/Homework Assignments
11		Chapter 6	Reading/Homework Assignments
12		Chapter 6	Reading/Homework Assignments
13		Chapter 7	Reading/Homework Assignments
14		Chapter 7	Reading/Homework Assignments
15		Chapter 8	Reading/Homework Assignments
16		Chapter 8	Reading/Homework Assignments
17		Final	Reading/Homework Assignments

Fall Semester 2021

Pre-Registration Begins	Apr 26
Faculty Return	Aug 16
Navajo Nation Code Talkers Day	Aug 13
New Student Orientation	Aug 19
On-Site Registration	Aug 20
Instruction Begins	Aug 23
Late Registration w/fee	Aug 24-25
Last Day to Add/Drop Classes w/out W	Aug 27
HOLIDAY - Labor Day	Sep 6
Fall Graduation Petition due	Oct 1
Mid Term Exams	Oct 11-15
Fall Break	Oct 21-22
Last Day to Withdraw With a W	Nov 1
HOLIDAY - Veterans Day observed	Nov 11
HOLIDAY - Thanksgiving Day	Nov 25
HOLIDAY - Navajo Family Day	Nov 26
Final Exams	Dec 13-16
Grades due to Registrar	Dec 16
FALL GRADUATION	Dec 17
HOLIDAY – Christmas	Dec 24

COURSE MEASUREMENTS

Complete reading assignments, homework assignments, quizzes and exams.

Grading Plan

Homework	25%	A = 100 - 90%
Mid-term	20%	B = 89 - 80%
Final Exam	25%	C = 79 - 70%
Quizzes	25%	D = 69 - 60%
Participation & Attendance	5%	F < 60%

Dropping Class: It is the student's responsibility to find out when is the last day of dropping classes.

Grading Policy
Students must do their own work. Cheating and plagiarism are strictly forbidden. Cheating includes (but is not limited to) plagiarism, submission of work that is not one's own, submission or use of falsified data, unauthorized access to exams or assignments, use of unauthorized material during an exam, or supplying or communicating unauthorized information for assignments or exams.

Participation
Students are expected to attend and participate in all class activities. Points will be given to students who actively participate in class activities including guest speakers, field trips, laboratories, and all other classroom events.

Cell phone and headphone use
Please turn cell phones off **before** coming to class. Cell phone courtesy is essential to quality classroom learning. Headphones must be removed before coming to class.

Attendance Policy
Students are expected to attend all class sessions. If more than ten minutes late, students will be counted as absent. 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 responsibility to complete all course work by 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 in class, a student is expected to spend two hours outside of class studying course materials.

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

Study Time for Online Courses
For an online course of one credit hour, a student is expected to spend four hours per week studying 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**. The use of another person's ideas or work claimed as your own without acknowledging the original source is known as plagiarism and is prohibited**.

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.

At NTU's Zuni Campus, the A:shiwi Philosophy of Education offers essential elements for helping students develop Indigenous and Western understandings. Yam de bena: dap haydoshna: akkya hon detsemak a:wannikwa da: hon de:tsemak a:ts'umme. *Our language and ceremonies allow our people to maintain strength and knowledge.* A:shiwi core values of hon i:yyułashik'yanna:wa (respect), hon delank'oha:willa:wa (kindness and empathy), hon i:yyayumoła:wa (honesty and trustworthiness), and hon kohoł lewuna:wediyahnan, wan hon kela i:tsemanna (think critically) are central to attaining strength and knowledge. They help learners develop positive self-identity, respect, kindness, and critical thinking skills to achieve life goals successfully.

Students with Disabilities
Navajo Technical University is committed to serving all students in a non-discriminatory and accommodating manner. Any student who feels that she or he may need special accommodations should contact the Accommodations Office (http://www.navajotech.edu/student-services#accomodations-services) in accordance with the university's Disability Accommodations Policy (see http://www.navajotech.edu/images/about/policiesDocs/Disability_Exhibit-A_6-26-2018.pdf).

Email Address
Students are required to use NTU's email address for all communications with faculty and staff.

Final Exam Date:

Final exam will be on Monday of the week number sixteen 16.