Course Title: Introductory and Intermediate Algebra

Credit Hours: FOUR
Semester: Spring 2022
Cap:

Faculty: Trib Choudhary   **E-mail**: tribtharu@yahoo.com, tchoudhary@najvajotech.edu
Office   **Office Phone**: 505-782-6010 Message)
Office Hours (face-to-face/online)
Preferred Communication (email and/or text; will respond within 24 hours)
Class Location: A:Shiwi College and Career Readiness Center
Class Meeting Times: M – W   9:00 – 10:40 AM. Hybrid

Required Materials:
Textbooks: INTRODUCTORY AND INTERMEDIATE ALGEBRA by BITTINGER, BEE-
                CHER AND JOHNSON. 6th Edition.
Tools:
Lab Fee (if applicable):

University 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, Nahat'á, Iiná, Sii Hasin.*

Course Description
MTH-1215 Introductory and Intermediate Algebra

A study of linear and quadratic functions, and an introduction to polynomial, absolute value, rational, radical, exponential and functions. A development of strategies for solving single and 2-variable equations and contextual problems. 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). Prerequisite: A grade of C or better in MTH 113 or equivalent.

Course Assessments

Connections to Program Assessment (course-embedded measures)

Course Activities

			Section		Topic
1	Jan	17			MLK Day (Holiday)
2	Jan	19	2.1, 2.2	114, 120	Solving Equation using the Addition and Multiplication Principles
3	Jan	24	2.1, 2.2	129, 138	Solving Equation using the Addition and Multiplication Principles
4	Jan	26	2.3, 2.4	147	Solving Equation using the Multiplication Principle. Frmula
5	Jan	31	2.5	163	Percent
6	Feb	2	2.6	176	Percent Word Problems
7	Feb	7	2.7	211	Solving Inequality
8	Feb	9	3.2	224	Graphing Linear Function
9	Feb	14	3.3	236	Graphing Linear Function
10	Feb	16	3.4	258	Slope of a Line
11	Feb	21	4.1	269	Exponents
12	Feb	23	4.2	283	Exponents and Scientific Notation
13	Feb	28	4.3	291	Collecting Like Terms
14	Mar	2	4.4	301	Addition and Subtraction of Polynomials
15	Mar	7			Preparation for Midterm
16	Mar	9			**Midterm**
17	Mar	14			**Spring Break**
18	Mar	16			**Spring Break**
19	Mar	21	4.5	311	Multiplication of Polynomials
20	Mar	23	4.6	328	Special Products
21	Mar	28	4.8	348	Dividing Polynomials, Synthetic Division.
22	Mar	30	5.1	357	Introduction to Factoring
23	Apr	4	5.2, 5.3	382, 384	Factoring Trinomials
24	Apr	6	5.5, 5.6	386	Factoring Trinomials
25	Apr	11	6.1 - 6.2	436	Multiplying and Dividing Rational Expressions
26	Apr	13	6.4	451	Adding Rational Expressions
27	Apr	18	6.5	461	Adding and Subtracting Rational Expressions
28	Apr	20	6.6	471	Complex Rational Expressions (Maybe NO)

29	Apr	25	6.7	477	Solving Rational Eqauations
30	Apr	27	8.1	594	System of Equations in 2 Variables using Graph
31	May	2	8.2	600	System of Equations in 2 Variables. Substitution Method
32	May	4	8.3	609	System of Equations in 2 Variables. Elimination Method
33	May	9			Preparation for Final
	May	11			**Final**

A - 85++
B - 75-84
C - 65-74
D - 55-64

Grading Plan

Homework	20%	A = 100-90%
Quizzes	12%	B = 89-80%
Project(s)	%	C = 79-70%
Mid-term exam	30%	D = 69-60%
Final exam	35%	F = <60%
Class participation	3%	

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 3% 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 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 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 class, a student is expected to spend two hours outside of class studying the 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 the 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 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**. 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 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, Nahat'á, Iiná and Sih 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 A:Shiwi College and Career Readiness Cente 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 Handbook4