Combo Intro/Interm Algebra 4 Credit Hours Spring 2022 – MTH 1215

Instructor: Jose Ernie Vanguardia Email: jvanguardia@navajotech.edu

Office: Tech Rm 322 Office Phone Number: 505-387-7401

Office Hours: M/W 9:00 12::00pm (by appointment)

Office Hours Online: Email anytime but will respond within 24 hours Monday-Thursday, will

respond within 48 hours Friday-Sunday.

Class Location& Meeting Times: Student Union Building 213

Required Materials:

Textbooks: Introductory and Intermediate Algebra, 6th Edition

Bittinger, Beecher and Johnson; Publishers: Pearson.

ISBN-10: 0-321-91789-8

ISBN-13: 978-0-321-91789-8

Tools: Scientific Calculator

Math 1215-1 - 2:00-3:40 (MW Traditional – Face-to-Face SUB 213) Math 1215-2 - 8:00-9:40 (TR Traditional – Face-to-Face) SUB 213) Math 1215-3 - 3:00-4:40 (TR Traditional – Face-to-Face) SUB 213)

Lab Fee: None 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, Īína, Siihasin*.

Course Description

Intermediate Algebra will cover lessons pertaining to Rational Expressions and Equations, Graphs, Functions and Applications, Systems of Equations, Inequalities, Radical Expressions, Equations and Functions, and Quadratic Equations and 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 as well as other cultures will be covered.

Course Objectives

After successfully completing this course:

- 1. Students will apply intermediate algebra computation rules
- 2. Students will define / describe intermediate algebra concepts
- 3. Students will solve problems involving intermediate algebra
- 4. Students will use algebraic formulas to demonstrate skills in solving real-world problems.
- 5. Students will solve problems involving missing dimension(s) of geometric figures.

Week	Chapters	Assignments	Quizzes
1-2	Review	Review classes	
	Chapter 1 Introduction to Real Numbers and		
	Algebraic Expressions		
	Chapter 2 Solving Equations and Inequalities		
3	Review Chapter 3 Graphs of Linear Equations		
4	Chapter 4 Polynomials: Operations	TBD	QUIZ #1
5	Chapter 5 Polynomials: Factoring	TBD	
6	Chapter 5 Polynomials: Factoring	TBD	QUIZ #2
6	Chapter 6 Rational Expressions and Equations		
7	Chapter 6 Rational Expressions and Equations		
8	MIDTERM EXAM		
9	Chapter 7 Graphs, Functions and Applications	TBD	QUIZ #3
10-11	, Chapter 8 Systems of Equations & Chapter	TBD	
12	9 More on Inequalities	TBD	QUIZ #4
13	Chapter 10 Radical Expressions, Equations, and	TBD	QUIZ #5
	Functions		
14	Chapter 11 Quadratic Equations and Functions	TBD	
15	Chapter 11 Quadratic Equations and Function	TBD	QUIZ #6
16	FINAL EXAM		

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.

COURSE OUTCOMES	COURSE	
	MEASUREMENTS	
Students will apply techniques and strategies in solving basic	Complete reading	
and intermediate algebra computation skills	assignments, homework	

Students will solve real-world application problems that	assignments, exams,
measures basic and intermediate algebra skills	projects, and quizzes.
Students will use algebraic formulas to demonstrate skills in	
solving real-world problems	
Students will solve problems involving missing dimension(s) of	
geometric figures	

Grading Plan:

Homework	15%	$A \rightarrow 100 \text{ to } 90\%$
Quizzes	25%	B → 80 to 89%
		C → 70 to 79%
Attendance	10%	D → 60 to 69%
Midterms / Finals	50%	F → 59% and below

Federal Compliance - Credit Hour Allocation: 2:1

• For every credit hour spent in a class, a student is expected to spend two (2) hours outside of class studying the course materials.

Attendance Policy

The students are required to follow the course schedule. To promote integrity of attendance, the students will be awarded 10% of the total grade based on attendance earned throughout the semester. Furthermore, a student who misses 4 or more days of classes for the entire semester (not necessarily consecutive days), including excused and unexcused absences, may be given with a grade of "F". Also, if a student is absent for 3 or more days before withdrawal due date that are not necessarily consecutive days, he or she may be dropped from the class.

Note: (1) Missing a lot of classes may jeopardize a student's chance to earn enough percentage to pass. (2) Absences will not jeopardize attendance percentage but missed works are never excused. Rare instances will not be sufficient to jeopardize grades but recurring instances may. See also Late Assignments / Work

Late Assignments or Work

Due dates are assigned during the class. Practice assignments done in class are due the same day unless the teacher assigns an extension date of submission. Submitting work beyond the date will incur a grade penalty. Scores will be capped to 60% for up to 3-day late submissions. Submitting work that is 2 weeks late will not receive any more grades but the teacher will accept the work for completion purposes.

Make-up Quiz / Test:

A student who misses a quiz / test can schedule a make-up Test. The window of

opportunity for the make-up assessment is up to a week after the quiz / test date. The teacher may opt not to give any make-up assessment beyond the week or upon returning the graded quiz. Failure to do the quiz/test means a grade of zero for that particular assessment.

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 Learning

Nitsáhákees – higher ordered thinking skills Nahátáh – motivation; task-based planning Íína – livelihood education; practical knowledge Sihasin – application and affirmation of the three philosophies

Student with Disabilities

The Navajo Technical University and the General Science program 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 the instructor privately of such so that accommodations arrangement can be made. Students who need an accommodation should also contact the Vocational Rehabilitation Counselor, at phone number is 786-4138.