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Intermediate Algebra 4 Credit Hours Spring 2022 – MATH 1215 (H6A)

Instructor: Dr. Henry Fowler Email: hfowler@navajotech.edu

Office Hour: Monday 12 pm to 1 pm; **Phone:** 928-209-5557

Tuesday 9 am to 12 pm &

4 pm to 5 pm & by appointment

Class Location & Meeting Times:

Via Zoom/Math XL

https://navajotech.textbookx.com/institutional/index.php?action=browse#/books/3230011/

M/W: 1:00 pm - 2:40 pm

https://navajotech.zoom.us/j/86762712987

Required Materials:

Textbook: Introductory and Intermediate Algebra, 6th Edition

Bittinger, Beecher and Johnson; Publishers: Pearson.

ISBN-13: 978-0134686486 (see below, you only need to purchase the standalone access

code)

MATH XL Access Code (Standalone access code - 6 months): (price may vary)

ISBN-13: 978-0321878359

NOTE: (YOU WILL ONLY NEED TO PURCHASE THE STANDALONE ACCESS

CODE – Your book will be on-line - digital)

A site where you can purchase the standalone Math XL access code (6 months) (two options below to purchase the Access Code) -

Directly from Pearson Company

https://mlm.pearson.com/northamerica/mathxl/students/getregistered/index.html? gl=1*1ri7ann* ga*MTc2OTgxNjc4MS4xNjI5MDUwNDM0 * ga K8MHCWK5EH*MTY0MjA0NzA5Ny4yLjEuMTY0MjA0NzE0NS4w

NTU on-line bookstore

 $\underline{https://navajotech.textbookx.com/institutional/index.php?action=browse\#/books/3230011}_{/}$

More information contact:

Francine Bia (Chinle Campus Bookstore)

Email: fbia@navajotech.edu

Kami Morgan (Crownpoint Bookstore) Email: <u>kami.morgan@navajotech.edu</u>

Telephone: 505-387-7497

Tools: Scientific Calculator

Every student is required to have a laptop. For 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. This course requires a reliable Internet service. The course syllabus may change.

Laptop information:

Laptop and Hotspot rental:

Donovan Sam

Email: <u>dsam@navajotech.edu</u> (Chinle Campus)

Phone: 505.387.7363 / 505.786.4208 (Crownpoint Campus)

Email: its@navajotech.edu

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.

Sa'ah Naagháí Bik'eh Hózhóón

Nitsáhákees

- 1. Expectations ("bik'eh" means according to it)
- a. K'é: work together and assist each other
- b. K'éí: know your environment and surrounding
- c. Hózhó: nurture your wellness and mind
- d. Ko': flexible and adapt
- e. Hooghan: grow and mature (Sa'ah)

Nahat'á

- 2. Communication (ahi[dahane')
- a. Navajo Technical University webpage
- b. Emails
- c. Phone, text and message
- d. Regularly/continuously (**Naagháí**) check your email; "**hí**" refers to the idea of sequence and "**náá**" refers to repetition

Iiná

- 3. Promote vigilant
- a. Yéego hada'iinolní
- b. Sin dóó t'eesh bee nidakai

Sihasin

4. Achieve/assure

K'é: work together and assist each other

K'éí: know your environment and surrounding

Hózhó: nurture your wellness and mind

Specific objectives for students: It is essential for students to attend all classes.

COURSE REQUIREMENT:

- 1. An access to a reliable Internet.
- 2. A laptop or computer is required.
- 3. All assignments and exams are on-line using Math XL.
- 4. Work on assigned homework assignments.
- 5. Take all scheduled quizzes/exams.
- 6. Complete all homework assignments by due dates.
- 7. Check NTU email regularly
- 8. Self-motivated to be successful in this class.
- 9. It is important that students are actively engaged in class activities. Questions are welcome in the classroom. Students are welcome to schedule an appointment with the instructor for extra help.
- 10. T' áá Hó Ájí t'éego Yá'át'éego iiná ájiiliih

TEACHING STRATEGIES AND TECHNIQUES:

The following teaching methods and instructional approaches will take place throughout the semester.

1. Use Math XL to work on the course assignments, quizzes and exams.

- 2. Use Math XL resources such as on-line tutoring and video clips
- 3. Use You-Tube math resources
- 4. Math lessons presented using Zoom
- 5. Encourage a peer study group session. Design your own peer study group to study.

Learning Platform:

This class will use the Zoom learning platform to deliver instruction. A Zoom link will be email out to your email. And uses Math XL for the class assignments and exams.

Zoom Instruction Protocol:

- Stay muted unless you're talking to reduce background noise
- Use chat to participate in class or to raise questions
- Make sure you sit in a well-lit and quiet place

Assessments:

Pre/post Survey. At the beginning and at the end of the semester, students will complete an attitudinal survey to ascertain growth in competence and confidence in mathematics. The survey will help identify opportunities to improve the course in the future. **Classroom Assessments.** Classroom Assessments are ungraded activities conducted in class. They provide feedback on whether or not students understand course material so that adjustments can be made before the end of the term. They are ungraded.

- 1. **Assignments.** Every week students will have assignments. Assignments are due on Sundays at 11:59 pm.
- 2. **Quizzes.** At the end of each chapter there will be a quiz. A total of six quizzes will take place by the end of the semester.
- 3. **Exams.** There will be a final and mid-term exam.

Date	Week	Chapters	Assignments	Quizzes
January 17	1	Holiday – No class		
January 19		Syllabus Chapter 1 – Introduction to Real Numbers and Algebraic Expressions	Sign-up – Math XL	
January 24	2	Chapter 2 - Solving Equations and Inequalities Chapters 2.1; 2.2; 2.3	Math XL	
January 26		Chapters 2.4; 2.5; 2.7		
January 31	3	Graphs of Linear Equations Chapters 3.1 & 3.2	Math XL	QUIZ #1
February 2		Chapter 3.3 & 3.4		
February 7	4	Chapter 4 - Polynomials: Operations	Math XL	

		Chapters 4.1; 4.2; 4.3; 4.4		
February 9		Chapter 4.5; 4.6; 4.7; 4.8		
February 14	5	Chapter 5 – Polynomials: Factoring	Math XL	QUIZ
		Chapters 5.1; 5.2; 5.3; 5.5		#2
February 16		Chapters 5.6; 5.7; 5.8		
February 21	6	Holiday	Math XL	
February 23		Chapter 6 – Rational Expressions and Equations		
		Chapters 6.1; 6.2; 6.3; 6.4		
February 28	7	Chapters 6.5; 6.6; 6.7	Math XL	QUIZ
				#3
March 2		Study Day for the Midterm Exam		
March 7 – 11	8	MIDTERM EXAM Week	Math XL	
(midterm		Mid-Term Exam Monday, March 7		
week)				
March 7				
Midterm Exam				
March 14-18		Spring Break		
March 21	9	Chapter 7 – Graphs, Functions and Applications	Math XL	
		Chapters 7.1; 7.2; 7.3		
March 23		Chapters 7.4 & 7.5		
March 28	10	Chapter 8 – Systems of Equations & Chapter	Math XL	QUIZ
		Chapters 8.1 & 8.2		#4
March 30		Chapter 8.3		
April 4	11	Chapter 9 – More on Inequalities	Math XL	QUIZ
		Chapters 9.1; 9.2; 9.3		#5
April 6		Continue Chapter 9		
April 11	12	Chapter 10 – Radical Expressions, Equations, and	Math XL	
		Functions		
		Chapters 10.2 & 10.3		
April 13		Chapters 10.4 & 10.5		
April 18	13	Chapter 10 – Radical Expressions, Equations, and	Math XL	QUIZ
		Functions -Continue		#6
		Chapter 10.6		
April 20		Continue Chapter 10		
April 25	14	Chapter 11 – Quadratic Equations and Function	Math XL	
		Chapter 11.1		
April 27				
May 2	15	Study Day		
May 4				
May 9	16	FINAL EXAM -Final Exam due Monday, May 9	Math XL	
Final Exam				
Week				
March 7-10				

The Math 1215 will be delivered as hybrid class. Zoom platform will be utilized and Math Xl.

Any Issue with MATH XL Contact Student Support:

https://mlm.pearson.com/northamerica/mathxl/students/support/index.html

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 and	Complete reading	
intermediate algebra computation skills	assignments, homework	
Students will solve real-world application problems that measures	assignments, exams,	
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	7	
geometric figures		

Grading Plan:

15%
25%
10%
50%

 $A \rightarrow 100 \text{ to } 90\%$

 $B \rightarrow 80 \text{ to } 89\%$

 $C \rightarrow 70 \text{ to } 79\%$

 $D \rightarrow 60 \text{ to } 69\%$

 $F \rightarrow 59\%$ 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.

Course Policies

Grading Policy

Student accountability is one key component to success. In order to achieve desired results in learning concepts in Intermediate Algebra, the students are encouraged to practice solving problems to reinforce the lesson. Furthermore, class participation will allow the students to share their ideas through their different learning styles. Cheating and plagiarism are strictly forbidden of which include copying other student's work, lifting text from copyrighted published work, and other similar forms of infringement.

Class Expectations

- 1. Class starts on time and ends on time.
- 2. Participate in class activities.
- 3. In case of emergency notify the teacher.
- 4. Be respectful at all times.

Participation

Students are expected to attend and participate in all class activities and scheduled class time.

Attendance Policy

The students are required to follow the course schedule and attend all the classes. Missing over four classes may result an F grade or lower your grade by 15 percent.

Late Assignments or Work

Assignments due date is on Sundays at 11:59 pm. Submitting work beyond the date will incur a grade penalty. Late work is deducted 10 percent a day for lateness.

Quiz / Exams:

See syllabus when quizzes are given and exams. All quizzes and exams are on-line using the Math XL.

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 505-786-4138.

Skyhawk Email: All students are required to use Skyhawk email as the official communication resource within NTU. This is a federal requirement and policy.

IT contact information:

Donovan Sam

Email: dsam@navajotech.edu



How to Register and Enroll in Your Course

Welcome to MathXL! Your instructor has set up a MathXL course for you.

The course name is: MATH 1215 H6A

It is based on this textbook: Bittinger: Introductory & Intermediate Algebra, 6e

To join this course, you need to register for MathXL and then enroll in the course.

1. Registering for MathXL

Before you begin, make sure you have the access code that comes with your MathXL Access Kit.

To register or buy access, go to www.mathxl.com, click the **Student** button in the Register section, and then follow the instructions on the screen.

Enter your Course ID: XL43-3189-9023-1272

Enter your access code or purchase access.

2. Enrolling in your instructor's course

After registering, log in to MathXL with your username and password. To enroll in this course, enter the following Course ID:

The Course ID for your course is: XL43-3189-9023-1272

Need more help?

To get more help with registering and enrolling, go to <u>Student Support</u> and get help with setting up your computer, signing in to your course, frequently asked questions, or contacting Technical Support.