



Course Title: MATH 1220 College Algebra

Credit Hours: 4

Semester: Spring 2022

Cap: 10

Faculty: Michael Williams

E-mail: mwilliams@navajotech.edu

Office: None

Office Phone: None

Office Hours: None. I will maintain high availability through email.

Preferred Communication: mwilliams@navajotech.edu

Class Location: ACCRC 102

Class Meeting Times: Saturday 8:00 am – 11:20 am

Required Materials: We will use the Cengage online platform called WebAssign.

Most of the teachers at NTU are using an online platform from the publishing house named Cengage. Cengage's mathematics online platform is called WebAssign. WebAssign is where all our assignments and problems are. We also have access to "College Algebra", 10th edition by Ron Larson. This is a wonderful book. In fact, I think of it as the definitive undergraduate Algebra textbook. And the news gets even better. Embedded within the textbook are fantastic videos by a guy named Dana Mosely. Dana is known online as Cool Math Guy. He is incredibly good at explaining things.

Because most teachers are using Cengage, that means students can pay \$120 one time each semester for Cengage Unlimited and have access to all their course materials for all their classes that semester. It is a good deal.

Here is what you need to do: <https://www.cengage.com/student/>

Purchase a 4-month license for Cengage Unlimited, if you have not already done so for another class. The NTU bookstore probably has licenses for sale, too, if you want to charge against your financial aid disbursement. After you get dialed in to Cengage Unlimited, then there will come a point where you need to input our Class Key to connect with our class.

Our Class Key is: **unmg.nm 3946 7810**

You may want to copy and paste that directly into the field.

I put a greeting message that reads, “You have successfully connected to our College Algebra course at Ashiwi College for the Spring 2022 semester.”

If you see that message, then you know you are in the right place.

How Our Class Works: We will meet for about 3.5 hours every Saturday and look at problems, think about problems, talk about them, and work through them. My goal is to help you get prepared for your next three Calculus classes and upper division applied mathematics courses like Vector Analysis, Linear Algebra, Ordinary Differential Equations, Partial Differential Equations, if you decide to go that route. Even if you are not going that route and College Algebra is the last mathematics class you will ever take in your life, then I want you to leave on a good note and have fond memories of your relationship with mathematics.

There are no exams. There is only the work we do on our WebAssign assignments. When you look at our assignments, then you may notice there is an awful lot of work. I assign more work than I know anyone can do. I do not expect you to do everything. I also do not expect you to get the right answer all the time. That is not what is important to me. The reason I assign a lot of problems is because I want you to develop vision and recognition of *problem types*. There is an infinite number of possible problems, but there are only a few different problem types. Recognizing problem types is what is important to me. We will talk more about this in class.

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

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. The course involves four hours of lecture per week and students must have a command of basic algebraic skills such as factoring and basic equation-solving. Prerequisites: A grade of C or better in MATH1215 or satisfactory placement scores.

Course Outcomes	Course Assessments
Preparation for advanced mathematics, science, and engineering courses.	Assigned problems in Cengage WebAssign

Course Activities

We will work through all or parts of several chapters in the book. We will work on assigned problems. When you have trouble and get stuck, then I will make a video for the entire class showing how to do the problem, and I will explain concepts.

All assignments will open on the first day of class, and all assignments will be due on Sunday, May 8, 2022, at 11:55 pm. You will want to work steadily to stay in pace with the class, and you will want to submit your assignments regularly. I am hoping that most of you will stay in frequent contact with me and not hesitate to ask for help. I am here to help you through this.

Grading Plan

Assignments: 100 %

Grades fall along the usual percentage lines, but I do a fair amount of curving to bring the lower end of the class up.

Note: This marks the end of the syllabus that I am actively writing or editing. From here until the end is information that may or may not pertain to our class and is included boilerplate from A:shiwi College and Navajo Technical University.

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.

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.

A:shiwí Philosophy of Education

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. The A:shiwí Philosophy of Education will be the essential elements of preparing students to develop indigenous and western teachings. The A:shiwí core values of hon i:yyułashik'yanna:wa (respect), hon delank'oha:willa:wa (kindness and empathy), hon i:yyayumola:wa (honesty and trustworthiness), and hon kohoł lewuna:wediyahnan, wan hon kela i:tsemanna (think critically). These indigenous ways of knowing will allow learners to develop positive self-identity, respect, kindness, and critical thinking skills to achieve life goals successfully.

Students with Disabilities

The Navajo Technical University and the A:shiwí College and Career Readiness Center 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.