University of North Texas
College of Science
Mathematics Department
MATH 1100
Fall 2022

Instructor Contact Information

Name	Jake Williams
Pronouns	He/Him/His
Office location	GAB 442A
Office hours	MW 2:30 pm –4:00 pm *Office hours are also available by appointment. Students who wish to make an appointment must do so by email, at least 48 hours in advance.*
Email Address	Jake.Williams@unt.edu *When sending an email, include course name, number and section, along with your full name in the subject header. Email without this information may not get opened. A response will be sent in a timely manner, but may occasionally take up to two (2) business days*

Course Information

Course Title	College Algebra
Course Number	MATH 1100
Course Section	130
Class meeting time	MWF from 11am – 11:50am in Wooten Halll (WH), Room 322
Class Recitations	Section 131 meets in GAB 511 on Thursday from 9am – 10:50am with Federico Diaz Section 132 meets in GAB 511 on Thursday from 10am – 11:50am with Faith Boaz Section 133 meets in GAB 511 on Thursday from 12pm – 1:50pm with Federico Diaz
Course Description	Designed to build technical proficiency in algebra for students who will need strong algebra skills in a higher-level mathematics course. Study of polynomial, radical, rational, logarithmic and exponential functions with applications; building functions from data; systems of equations. Note that MATH 1100 at UNT does not satisfy the mathematics component of the core curriculum. Students who feel they acquired solid algebra skills in high school are strongly encouraged to take the mathematics placement exam to begin in a higher-level mathematics course.
Course Pre-requisites	Two years of high school algebra and one year of geometry, and consent of department; or a grade of C or better in MATH 1010, MATH 1581 or MATH 1681. A grade of C or better in MATH 1100 is required when MATH 1100 is a prerequisite for other mathematics courses.

Course Title	College Algebra
Course Objectives	Upon successful completion of this course, students will: 1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses. 2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations. 3. Apply graphing techniques. 4. Evaluate all roots of higher degree polynomial and rational functions. 5. Recognize, solve and apply systems of linear equations using matrices.
Course Structure	This is a 16-week course that meets face-to-face in a classroom three times a week. The course will cover 8 modules and you will be assessed by completing 3 exams and a cumulative final exam.
Course Outline	View the Course Calendar for specific topics and dates.
Course Materials	McGraw-Hill's ALEKS. You will access your math course platform via Canvas. The course content (assignments, help tools, textbook, etc.) is delivered on the online platform Canvas (https://unt.instructure.com). Register in ALEKS the first class day of the semester. No extensions will be given for any missed assignments for any reason. Not having access to ALEKS is not an exception. ALEKS access will include eText College Algebra with Corequisite Support, 1e Edition, by Miller/Gerken. You **must** purchase the following: • COREQUISITE ALEKS 360CARD COLLEGE ALGEB. Publisher: McGraw-Hill ISBN: 9781266387142
Calculator policy	Graphing calculators (such as the TI-83 or TI-84 Plus) are not allowed in this course. Occasionally, you will be able to use a scientific calculator at instructor's discretion.
Teaching Philosophy	I encourage learning by asking my students open-ended questions and instilling the belief that everyone is capable of grasping mathematics. In my class, students must be able to answer questions thoroughly and in a well-organized manner, and my grading criteria will reflect this requirement. Once a unit has progressed enough, I will provide examples or homework problems designed to highlight how the same material can be applied to very different problem sets.

Course Technology & Skills

Minimum Technology Requirements	• Access to a Computer • Reliable internet access • Canvas Technical Requirements (https://clear.unt.edu/supported-technologies/canvas/requirements) • ALEKS Technical Requirements (https://www.aleks.com/support/system_requirements)
Computer Skills & Digital Literacy	• Using Canvas • Using email with attachments • Scanning documents and saving as PDF

Online Course System

The University is committed to providing a reliable online course system to all users. However, part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UIT Help Desk	UIT Help Desk http://www.unt.edu/helpdesk/index.htm
Email	helpdesk@unt.edu
Phone	940.565.2324
Phone hours	Sunday: noon – midnight Monday-Thursday: 8am – midnight Friday: 8am – 8pm Saturday: 9am – 5pm
In Person	Sage Hall, Room 130
Walk-In Availability	8am – 9pm
Laptop Checkout	8am – 7pm
Canvas technical requirements	For additional support, visit Canvas Technical Help (https://community.canvaslms.com/docs/DOC-10554-4212710328)

Assessment & Grading

Assignment	**Percentage of Final Grade**
Exam 1	15%
Exam 2	15%
Exam 3	15%
ALEKS Homework	20%
Recitation Grade	10%
Cumulative Final Exam	25%

Evaluation Procedures

Your course grade will be determined by the following:

- A = 90 – 100%
- B = 80 – 89%
- C = 70 – 79%
- D: 60 – 69%
- F: 0 – 59%

The instructor will **not** round more than 0.05 percentage points when calculating the final weighted average.

*Note: A grade of C or better is required for this course to serve as a prerequisite for any math course.

Exams and Assignments

ALEKS Homework

Homework will be given regularly. Most of your homework will be administered through ALEKS. Although much of your homework will be presented electronically through Canvas and ALEKS, working through the material on paper is essential for learning and developing the math skills in this course. At the end of the term, the three (3) lowest grades will be dropped from the calculation of the homework average.

Exams

There will be three (3) exams given during the semester. There are no retakes on exams.

Final Exam

The Final Exam is comprehensive and will test the student's math skills on all content covered throughout the entire semester. This exam will be taken during the last week of classes at the time specified in the official Final Exam Schedule.

Important Dates

Date	Importance of date
Aug 29	Classes Begin
Sept 5	Labor Day (no classes)
Nov 18	Last day for a student to drop a course with a W.
Nov 21	After this date, a student who qualifies may request an Incomplete.
Nov 23 – 25	Thanksgiving Break (University closed)
Dec 7 – 8	Pre-Finals Days
Dec 8	Last Regular Class Meeting
Dec 9	Reading Day (no classes)
Dec 10 – 16	Final Exams

Course Policies

Classroom Etiquette

Appropriate behavior (in-person and online) is expected of all students taking this course. Do not hold side conversations with classmates during class. Arrive to class promptly and do not leave until the scheduled ending time of the class. Put away all non-medical electronic devices such as cell phones, ear buds, headphones, etc. while in class, as these are distractions. Do not work on homework or unrelated assignments during class.

Course Requirements

As a general rule, average college students are expected to spend three (3) hours per week for each one (1) hour of class working on the course to be able to successfully learn the content. If you are an "average" college-level learner, you should spend about nine (9) hours per week if you expect to successfully complete this course. Adjust for more (or less) hours to accommodate your learning level.

Assignment Policy

- Please maintain a separate notebook for doing homework problems. Make sure to write down what section the problem is from and work out the problem by showing all your steps.
- Even though ALEKS may not require you to show all the steps in your work, I want to emphasize that you still need to do *all* the steps. At times, ALEKS only requires a final answer, which will be frustrating for some of you because you cannot receive partial credit for correct work.
- Assignments posted in ALEKS will be available as we progress through the semester.
- The due dates for the ALEKS assignments will be posted in ALEKS.
- Check ALEKS each day to be sure that you are keeping up with assignments and due dates.
- At the end of the term, the three (3) lowest grades will be dropped from the calculation of the homework average.

Exam Policy

There will be three (3) exams during the semester. Keep a record of all your scores. Be sure to review your exam once it has been reviewed by the instructor and officially graded. Be sure to review your exam upon receiving it. Check your written exam grade with the grade posted online to ensure that they are the same. Each exam is 15% of the course.

Late work Policy

A grade of zero will be assigned to any homework assignment not completed online and submitted by the due date and time. Technical difficulty, including loss of internet access, is not an excuse for not completing an assignment.

Exam Etiquette

- Place all papers, textbooks, notes, etc. in a backpack or a book bag and close it securely.
- Turn off/remove all electronic devices (unless medically necessary), this includes cell phones, headphones, laptops, smartwatches, etc.
- Handling of ANY such electronic devices during an exam will be construed as cheating (receiving unauthorized aid) and may result in a zero for that exam.
- Do <u>not</u> wear hats or caps with brims during exams.
- Do <u>not</u> share any materials during an exam. This includes, but is not limited to pencils, erasers, calculators, etc.
- Have only the exam, pencil(s), eraser and occasionally a straight-edge or an approved calculator out during an exam. There will be space to show work on the actual exam.
- You will <u>not</u> be permitted to have any of your own scratch paper during an exam.

Make-up Exam Policy	An exam may be taken prior to the scheduled date. I request a week's notice for this accommodation via email. In the event of a schedule conflict with a university function, dental/physician's appointment, wedding, formal, or whatever, the student must take the test early. If a student does not take a scheduled exam, a zero will be recorded for that exam and a notice may be sent through the registrar's office. If your final exam score is higher than one of your exam scores, then that exam grade will be replaced with final exam grade, up to a maximum grade of 75%. If you miss an exam, a zero will be recorded for that exam grade and your final exam score will replace that one zero, up to a maximum grade of 75%. If you receive a zero for academic dishonesty on an exam, the final exam score will NOT replace that zero.
Attendance Policy	Students are expected to attend class meetings regularly; attendance will be recorded every class meeting. It is important that you communicate with the professor prior to being absent, so you and the professor can discuss and mitigate the impact of the absence on your attainment of course learning goals. Please inform the professor if you are unable to attend class meetings because you are ill, in mindfulness of the health and safety of everyone in our community.
Class Participation	Participation is a required part of this course. This class is designed to be active and interactive. Much of what you will learn will evolve from in-class lectures, activities and discussions.
Instructor Responsibility and Feedback	Responsibility – As my role as the instructor of the course, my responsibility is to help students grow in their math confidence; instill good study habits; provide math content in a clear and organized manner; answer questions about topics, assignments, and expectations; direct students to additional campus resources as necessary. Feedback – In regard to emails, I plan to respond within 24-48 hours. Regarding returning exams with grades, I plan to have them returned within a week's time.
Syllabus Change Policy	I reserve the right to amend, append or otherwise make changes to this syllabus should the need arise. Any such change will first be discussed with the students and then announced in class.

Welcome to UNT!

- As members of the UNT community, we have all made a commitment to be part of an institution that respects and values the identities of the students and employees with whom we interact. UNT does not tolerate identity-based discrimination, harassment, and retaliation. UNT's full Non-Discrimination Policy can be found in the UNT Policies section of the syllabus.

UNT Policies

Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. Here are some general guidelines:

- While the freedom to express yourself is a fundamental human right, any communication that utilizes cruel and derogatory language on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law will not be tolerated.
- Treat your instructor and classmates with respect in any communication online or face-to-face, even when their opinion differs from your own.
- Ask for and use the correct name and pronouns for your instructor and classmates.
- Speak from personal experiences. Use "I" statements to share thoughts and feelings. Try not to speak on behalf of groups or other individuals' experiences.
- Use your critical thinking skills to challenge other people's ideas, instead of attacking individuals.
- Avoid using all caps while communicating digitally. This may be interpreted as "YELLING!"
- Be cautious when using humor or sarcasm in emails or discussion posts as tone can be difficult to interpret digitally.
- Avoid using "text-talk" unless explicitly permitted by your instructor.
- Proofread and fact-check your sources.
- Keep in mind that online posts can be permanent, so think first before you type.

See these Engagement Guidelines (https://clear.unt.edu/online-communication-tips) for more information.

Academic Integrity Policy

According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

Prohibition of Discrimination, Harassment, and Retaliation (Policy 16.004)	The University of North Texas (UNT) prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.
ADA Policy	UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodation at any time; however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the ODA website (https://disability.unt.edu/).
Drop/Withdrawal Policy	If a student is unable to complete this course, it is his/her responsibility to formally withdraw from the course. Students may drop a course before the 12th day of class from their student portal on my.unt.edu (and, depending on the date, may be eligible for at least a partial refund). After the 12th day of class, students may drop a course by completing the *Request to Drop* form at https://registrar.unt.edu/sites/default/files/drop_request_fillable_1.pdf The last date to withdraw from all your classes is **November 18**. If the student does not properly withdraw from the course but stops attending, s/he will receive a performance grade, usually an NP. If you are considering dropping, it is strongly recommended that you discuss the matter with me as soon as possible. Changes to the University's policy may affect this. Please contact the Registrar for further questions.
Emergency Notification and Procedures	UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

Retention of Student Records	Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Canvas, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See UNT Policy 10.10, Records Management and Retention for additional information.
Acceptable Student Behavior	Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. Visit UNT's Code of Student Conduct (https://deanofstudents.unt.edu/conduct) to learn more.
Access to Information	Students' access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail Eagle Connect (https://it.unt.edu/eagleconnect).
Survivor Advocacy	UNT is committed to providing a safe learning environment free of all forms of sexual misconduct. Federal laws and UNT policies prohibit discrimination on the basis of sex as well as sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking and/or sexual assault, there are campus resources available to provide support and assistance. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565-2648.
Student Perceptions of Teaching (SPOT)	Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during weeks 13, 14 and 15 of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey, they will receive a confirmation email that the survey has been submitted. For additional information, please visit the SPOT website (http://spot.unt.edu/) or email spot@unt.edu.

Class Recordings & Student Likenesses	Synchronous (live) sessions in this course may be recorded for students enrolled in this class section to refer to throughout the semester. Class recordings are the intellectual property of the university or instructor and are reserved for use only by students in this class and only for educational purposes. Students may not post or otherwise share the recordings outside the class, or outside the Canvas Learning Management System, in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action.
Use of Student Work	A student owns the copyright for all work (e.g., software, photographs, reports, presentations, and email postings) he or she creates within a class and the University is not entitled to use any student work without the student's permission unless all the following criteria are met: • The work is used only once. • The work is not used in its entirety. • Use of the work does not affect any potential profits from the work. • The student is not identified. • The work is identified as student work. If the use of the work does not meet all of the above criteria, then the University office or department using the work must obtain the student's written permission.

Academic Support & Student Services

Mental Health

- UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:
- Student Health and Wellness Center (https://studentaffairs.unt.edu/student-health-and-wellness-center)
- Counseling and Testing Services (https://studentaffairs.unt.edu/counseling-and-testing-services)
- UNT Care Team (https://studentaffairs.unt.edu/care)
- UNT Psychiatric Services (https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry)
- Individual Counseling (https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling)

Chosen Names

- A chosen name is a name that a person goes by that may or may not match their legal name. If you have a chosen name that is different from your legal name and would like that to be used in class, please let the instructor know. Below is a list of resources for updating your chosen name at UNT.
- UNT Records
- UNT ID Card
- UNT Email Address
- Legal Name
- **UNT euIDs cannot be changed at this time. The collaborating offices are working on a process to make this option accessible to UNT community members.*

Pronouns

- Pronouns (she/her, they/them, he/him, etc.) are a public way for people to address you, much like your name, and can be shared with a name when making an introduction, both virtually and in-person. Just as we ask and don't assume someone's name, we should also ask and not assume someone's pronouns.
- You can add your pronouns to your Canvas account so that they follow your name when posting to discussion boards, submitting assignments, etc.
- Below is a list of additional resources regarding pronouns and their usage:
- What are pronouns and why are they important?
- How do I use pronouns?
- How do I share my pronouns?
- How do I ask for another person's pronouns?
- How do I correct myself or others when the wrong pronoun is used?

Additional Student Support Services

- Registrar (https://registrar.unt.edu/registration)
- Financial Aid (https://financialaid.unt.edu)
- Student Legal Services (https://studentaffairs.unt.edu/student-legal-services)
- Career Center (https://careercenter.unt.edu)
- Multicultural Center (https://idea.unt.edu/multicultural-center)
- Counseling and Testing Services (https://studentaffairs.unt.edu/counseling-and-testing-services)
- Pride Alliance (https://idea.unt.edu/pridealliance)
- UNT Food Pantry (https://studentaffairs.unt.edu/food-pantry)

Academic Support Services

- Academic Resource Center (https://clear.unt.edu/canvas/student-resources)
- Academic Success Center (https://success.unt.edu/asc)
- UNT Libraries (https://library.unt.edu)
- Writing Center (https://writingcenter.unt.edu)
- Math Lab (https://learningcenter.unt.edu/math-lab)

Calendar

Week	Date	Topic
Week 1	08/29/22	M1A: Order of Operations & Fractions
	08/31/22	M1B: Simplify Radical Expression, Rationalizing & Rational Exponents
	09/02/22	M1C: Linear Equations & Inequalities
Week 2	09/05/22	Labor Day - No Classes
	09/07/22	M1D: Graphing Linear Equations M1E: Slope & Equations of Lines
	09/09/22	M1E: Slope & Equations of Lines (continued) M2A: Intro to Functions
Week 3	09/12/22	M2B: Domain & Range of Functions
	09/14/22	M2C: Distance & Midpoint Formula
	09/16/22	M2D: Piecewise functions
Week 4	09/19/22	M3A: Evaluate functions M3B: Average Rate of Change & Difference Quotient
	09/21/22	M3B: Average Rate of Change & Difference Quotient (continued) M3C: Algebra of functions
	09/23/22	M3D: Composition of functions M3E: Inverse Functions
Week 5	09/26/22	M3E: Inverse Functions (continued)
	09/28/22	**Exam 1**
	09/30/22	M4A: Abs Value Equations & Inequalities
Week 6	10/03/22	M4B: Complex Numbers M4C: Factoring
	10/05/22	M4C: Factoring (continued) M4D: Solve Equations & Inequalities by factoring
	10/07/22	M4D: Solve Equations & Inequalities by factoring (continued) M4E: Solve Equations using square root property, completing the square & quadratic formula
Week 7	10/10/22	M4E: Solve Equations using square root property, completing the square & quadratic formula (continued)
	10/12/22	M5A: Solve Rational Equations & inequalities
	10/14/22	M5A: Solve Rational Equations & inequalities (continued) M5B: Solve Radical Equations
Week 8	10/17/22	M5B: Solve Radical Equations (continued)
	10/19/22	M5C: Logarithms
	10/21/22	M5C: Logarithms (continued) M5D: Solve Exponential & Log Equations

Week 9	10/24/22	M5D: Solve Exponential & Log Equations (continued)
	10/26/22	**Exam 2**
	10/28/22	M6A: Transformations
Week 10	10/31/22	M6B: Symmetry & Even and Odd Functions M6C: Graphing Quadratic Functions
	11/02/22	M6C: Graphing Quadratic Functions (continued) M6D: Graphing Rational Functions
	11/04/22	M6D: Graphing Rational Functions (continued)
Week 11	11/07/22	M7A: Graphing Polynomial Functions
	11/09/22	M7A: Graphing Polynomial Functions M7B: Polynomial Division & Theorems
	11/11/22	M7B: Polynomial Division & Theorems (continued)
Week 12	11/14/22	M7C: Graphing Radical Functions M7D: Graphing Exponential Functions
	11/16/22	M7D: Graphing Exponential Functions (continued) M7E: Graphing Logarithmic Functions
	11/18/22	M7E: Graphing Logarithmic Functions (continued)
Week 13	**11/21/22**	**Exam 3**
	11/23/22	Thanksgiving - No classes
	11/25/22	Thanksgiving - No classes
Week 14	11/28/22	M8A: Linear Applications M8B: Quadratic Applications
	11/30/22	M8B: Quadratic Applications (continued) M8C: Exponential Applications
	12/02/22	M8C: Exponential Applications (continued) M8D: Systems (Matrix) Applications
Week 15	12/05/22	M8D: Systems (Matrix) Applications (continued)
	12/07/22	Review
	12/09/22	Reading Day - No classes
Week 16	**12/12/22**	**Final Exam (10:30am – 12:30pm)**