NORTHEAST TEXAS COMMUNITY COLLEGE

Math 1314.881 TR College Algebra

Course Syllabus: Summer 1 2026

"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

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Weekday	Office Hours
Monday	OL
Tuesday	OL
Wednesday	OL
Thursday	OL
Friday	OL

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

Course Description:

This course covers the development of the complex number system, solutions of quadratic equations and systems involving quadratics, relations, functions, inverses, ratio, proportion, and variation, theory of equations, progressions, matrices, exponential and logarithmic functions, permutations, combinations, and probability as time permits.

Prerequisite(s): Appropriate TSI score / TSI placement with multiple measures
Co-requisite: MATH 1314 College Algebra with TSI Placement.

Student Learning Outcomes:

Upon successful completion of this course, students will:

1314.1 Demonstrate understanding and knowledge of properties of functions, which include domain and range, operations, compositions, and inverses.

1314.2 Recognize and apply polynomial, rational, radical, exponential, and logarithmic functions and solve related equations.

1314.3 Apply graphing techniques of transformations and combinations to common algebraic functions.

1314.4 Use linear mathematical models to problem-solve.

1314.5 Evaluate all roots of higher degree polynomial functions.

1314.6 Recognize, solve and apply systems of linear equations using matrices.

Evaluation/Grading Policy:

The breakdown of the course requirements is as follows:

%	Requirement
75%	Comprehensive Exams
25%	Assignments

Semester grades will be earned as follows

Percentage	Letter Grade
90% and above	A
80 %–89%	B
70 %–79%	C
60%–69 %	D
59.9% and below	F

Using the Normal Style text insert full detailed grading policies

Required Instructional Materials:

Good news: your textbook for this class is available for free online, in web view and PDF format! You can also purchase a print version, if you prefer, via the campus bookstore or from OpenStax on Amazon.com. The free PDF format for both the 1st and 2nd editions is available in your Blackboard course. You may use either.

You can use whichever formats you want. Web view is recommended -- the responsive design works seamlessly on any device. If you buy on Amazon, make sure you use the link on your book page on openstax.org so you get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.)

Publisher: OpenStax: Print: ISBN-10: 1-938168-38-0 or ISBN-: 978-1-938168-38-3
Digital: ISBN-10: 1-947172-12-3 or ISBN-13: 978-1-947172-12-8

ISBN Number: See Above

Optional Instructional Materials:

None

Minimum Technology Requirements:
Scientific Calculator recommended

Required Computer Literacy Skills:

Ability to read and comprehend at a college level. Independently motivated and responsible. Capable of self-instruction. Has access to a computer, printer and internet connection.

Below are some technical requirements for using Blackboard that will help your experience in this course.

You will see the NTCC Tech Support email address and phone number below. Please contact them if you run into any technical problems during the semester. Please let your instructor know you are having difficulties as well.

If you need further NTCC technical support services, please contact Austin Baker or Mary Lou Pemberton at:
abaker@ntcc.edu or 903-434-8279
mpemberton@ntcc.edu or 903-434-8270

Blackboard will work on both a Mac and a PC. (Chrome Books are known to have issues with Blackboard.) It is best to access Blackboard through Fire-Fox or Chrome as your web browser. If you have trouble with any of the activities working properly, you might change your web browser as your first solution. The Default Browser in Windows 10 is Edge. This browser does not do well with Blackboard! If you will go to Windows Accessories you will find Internet Explorer still on your computer but is not your default browser. If you have any difficulties navigating with Edge, close it and go to Internet Explorer.

To use Remote Proctor Now and/or Zoom you must have access to a computer with high-speed internet, a microphone, a Webcam, and appropriate systems rights to download any necessary software. Please note, the college does not provide this equipment.

Course Structure and Overview:
This is an online class. Students are expected to access graded activities, reply to messages, engage in discussion posts, utilize pdf textbooks and view videos on Blackboard online delivery of instruction.

Communications:
Phone messages and email will be responded to within six hours of receipt. All graded work will be returned the next class meeting after it is submitted.

Institutional/Course Policy:
Cell phone usage in the classroom will be coordinated by the professor. Students are expected to be respectful to classmates, professor and themselves. Students will be warned when using a phone inappropriately. A student will be removed from class if any disruption continues.

The college's official means of communication is via your campus email address. I will use your campus email address, but mainly Blackboard course messages to communicate with you outside of class. Make sure you keep your campus email cleaned out and below the limit so you can receive important messages. Check your Blackboard course messages daily.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements:
In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be

necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (http://www.ntcc.edu/) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

Statement Regarding the Use of Artificial Intelligence (AI) Technology:

Employees and students shall be permitted to explore artificial intelligence (AI) and implement its use in and out of the classroom in accordance with policy and administrative regulations. The use of AI shall only be as a support tool to enhance student outcomes or as necessary to engage in research and shall never take the place of faculty, staff, and student decision-making. Any use of AI must comply with law, policy, and administrative regulations relating to student and employee privacy and data security. A student shall only use AI tools with faculty permission and shall be expected to produce original work and properly credit sources, including AI tools used in creating the work.

Example:
APA (7th edition)
OpenAI. (2026). ChatGPT (March 25 version) [Large language model]. https://chat.openai.com/
MLA (9th edition)
OpenAI. ChatGPT. 25 Mar. 2026, https://chat.openai.com/.

Employees or students who use AI tools to deceptively harm, bully, or harass others shall be disciplined in accordance with policy. [See DH, DIA series, FFD series, FFE, FLB, and the FM series] AI Use by Employees and Students. Northeast Texas Community College 225500 TECHNOLOGY RESOURCES CRB ARTIFICIAL INTELLIGENCE (LOCAL) DATE ISSUED: 12/8/2025 1 of 1 UPDATE 50 CRB(LOCAL)-AJC Adopted: 12/16/2025

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodation for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodation as required to afford equal educational opportunity. It is the student's responsibility to request accommodation. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student

education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Tentative Course Schedule:

Course Outline:

I. Equations and Inequalities
   - A. Linear Equations and Rational Equations
   - B. Quadratic Equations
   - C. Models and Applications

II. Functions and Graphs
   - A. Linear Functions and Slope
   - B. Transformations of Functions
   - C. Combinations of Functions
   - D. Inverse Functions
   - E. Distance and Midpoint Formulas; Circles

III. Polynomial and Rational Functions
   - A. Quadratic Functions
   - B. Polynomial Functions and Their Graphs
   - C. Zeros of Polynomial Functions
   - D. Modeling Using Variation

IV. Exponential and Logarithmic Functions
   - A. Exponential Functions
   - B. Logarithmic Functions
   - C. Properties of Logarithms
   - D. Exponential and Logarithmic Equations
   - E. Exponential Growth and Decay

V. Systems of Equations and Inequalities
   - A. Systems of Linear Equations in Two Variables
   - B. Systems of Linear Equations in Three Variables

VI. Matrices and Determinants

VII. Counting and Probability

Tentative Course Timeline with Sections and Problems Assigned: (*note*) Instructor reserves the right to make adjustments to this timeline at any point in the term.

Midterm Homework and Examination due Thursday June 25th, 2026
Sections: [1.1 – 1.6; 2.1 – 2.6; 3.1 – 3.2] Problems: {5, 10, 15, 20, 25, 30, 35, 40}

Final Homework and Examination due Thursday July 9th, 2026
Sections: [4.1 – 4.3; 5.1 – 5.2; 6.1, 6.3; 7.1, 7.5, 7.6; 9.5, 9.7] Problems: {7, 14, 21, 28, 35}