MAH 1314 050 DC: College Algebra
Course Syllabus: Fall 2023

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

Instructor: Cassidi Jacobs M.S.
Office: Ore City High School Room 308
Phone: (903) 968-3300 [OCH Main Office Number]
Email: cjacobs@ntcc.edu

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	10:33-11:21AM	10:33-11:21AM	10:33-11:21AM	10:33-11:21AM	10:33-11:21AM	By Appointment

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: In-depth study and applications of polynomial, rational, radical, exponential, and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included as time permits. Three hours credit.

Prerequisite(s): 1) TSI Not Complete – Multiple Measures Placement with Corequisite Model
or 2) TSI Complete Status

Student Learning Outcomes:

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.

1314.4   Evaluate all roots of higher degree polynomial functions

1314.5   Recognize, solve, and apply systems of linear equations using matrices.

Core Curriculum Purpose and Objectives:
Through the core curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world; develop principles of personal and social responsibility for living in a diverse world; and advance intellectual and practical skills that are essential for all learning.

Courses in the foundation area of mathematics focus on quantitative literacy in logic, patterns, and relationships. In addition, these courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

Program Student Learning Outcomes:

<u>Critical Thinking Skills</u>

CT.1   Students will demonstrate the ability to 1) analyze complex issues, 2) synthesize information, and 3) evaluate the logic, validity, and relevance of data.

<u>Communication Skills</u>

CS.1   Students will effectively develop, interpret and express ideas through written communication.

<u>Empirical and Quantitative Skills</u>

EQS.1   Students will manipulate numerical data or observable facts by organizing and converting relevant information into mathematical or empirical form

EQS.2   Students will analyze numerical data or observable facts by processing information with correct calculations, explicit notations, and appropriate technology.

EQS.3   Students will draw informed conclusions from numerical data or observable facts that are accurate, complete, and relevant to the investigation.

Evaluation/Grading Policy: There will be four major exams and a comprehensive final exam. Homework will be online through Blackboard (provided by MyOpenMath). Homework grading is automatically computer generated. Exams will be returned with in one week of completion.

a. Homework, Quizzes and Class Participation: 30%
d. Exams: 50%
e. Final Exam: 20%

A = 90-100   B = 80-89   C = 70-79   D = 60-69   F = below 60

Required Instructional Materials: All required materials are OER (OpenStax and MyOpenMath) and are provided through Blackboard.

Optional Instructional Materials: A handheld calculator of your choice is permitted.

Minimum Technology Requirements: Since all resources are provided via Blackboard stable internet connection and a laptop are required.

Required Computer Literacy Skills: Since all homework, lecture recordings, and notes will be provided through Blackboard. Familiarity with Blackboard, email, and uploading documents is required.

Course Structure and Overview: Students will attend and participate in lectures and group work, and do on-line activities (homework and/or quizzes). Student outcomes will be assessed by a combination of some or all of the following: homework grades, quiz grades, major exam grades, and a comprehensive final exam.

Communications: Emails will be responded to within 24 hours during the school week, and within 48 hours on the weekend. Emails can be sent to cjacobs@ntcc.edu or jacobsc@ocisd.net. No cellular communication is permitted unless through SchoolStatus in order to satisfy OCISD communication policies.

Institutional/Course Policy: Student attendance and withdrawal policies can be found in the NTCC Student Handbook: https://www.ntcc.edu/sites/default/files/2023-07/PTA%20Student%20Policy%20Procedure%20Handbook%202023-2024.pdf.

Students will be given ten late passes for homework through MyOpenMath. Each late pass will grant the student an additional 48 hours to work on the homework. Makeup exams are not permitted. If a student misses an exam for a school related reason, they can arrange to take the exam before the missed exam is administered to the rest of the class. If an exam is missed for any other reason the final exam will be permitted to replace up to one missed exam. Cell phones are not permitted to be used during class for any reason.

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.

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 accommodations 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 accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. 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 Timeline (*note* instructor reserves the right to make adjustments to this timeline at any point in the term):

Math 1314 Weekly Schedule
This schedule is subject to change.

Week	Topic, Exams, and Important Dates
1	Introduction, Syllabus Information, Linear and Rational Equations
2	Complex Numbers, Quadratic Equations
3	Rational and Radical Equations, Review, Exam 1
4	Basics of Functions and Their Graphs
5	Linear Functions and Slope, Transformations of Functions
6	Combinations of Functions, Composite Functions, Inverse Functions
7	Review and Exam 2
8	Quadratic Functions, Polynomial Functions and Their Graphs
9	Dividing Polynomials; Remainder and Factor Theorems; Zeros of Polynomials
10	Rational Functions, Review, Exam 3
11	Exponential Functions, Logarithmic Functions
12	Properties of Logarithms, Exponential and Logarithmic Equations
13	Thanksgiving Break *Last day to withdraw with a 'W', Tuesday, November 21st
14	Exponential and Logarithmic Applications, Matrix Solutions to Linear Systems
15	Exam 4 and Review for Final Exam
16	Final Exam