Math 1314.021DC College Algebra - Hybrid

Course Syllabus: Fall 2024

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

Instructor: Dr. Jackie Johnston

Office: MS - 120
Phone: 903-434-8305
Email: JJohnston@ntcc.edu

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	9:30 – 11:00 2:30 – 3:30	9:30 – 11:00 2:30 – 3:30	9:30 – 11:00 2:30 – 3:30	9:30 – 11:00 2:30 – 3:30	TEAMs Meeting by Appointment	TEAMs Meeting 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: 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.

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:

Critical Thinking Skills

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.

Communication Skills

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

Empirical and Quantitative Skills

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:
A series of engagement opportunities including in-class assignments/group work (Participation), which are 10% of final grade; online homework problems (OHM Lumen) are 30% of your final grade, module quizzes are 20%, Midterm and Final Exam are 40 % which will contribute to 60% of the final grade, **both the Midterm and Final Exams must be proctored**.

If you are unable to take your exams in-class (required unless there are extenuating circumstances) or at NTCC's Testing Center than students may use TEAMS as an online proctor. For TEAMS, students are required to have access to a computer with high-speed internet, a microphone, a webcam, and appropriate system rights to download and install the necessary software. Please note, the college does not provide this equipment. Detailed instructions on how to use TEAMs as an online proctor will be available in your Blackboard course.

Homework via OHM Lumen are graded when submitted.

Grade Breakdown:

Participation:	10%	In-class assignments/Group work
OHM-Lumen Homework:	30%	Online homework via Blackboard
Module quizzes:	20%	Online via Blackboard
Midterm Exam:	20%	In-Class
Final Exam:	20%	In-Class

100% - 90% = “A”
89% - 80% = “B”
79% - 70% = “C”
69% - 60% = “D”
Below 60% = “F”

Make-up exams will not be given unless the student has coordinated with the instructor prior to the exam.

Lumen OHM homework will require the use of “Late Passes” if not completed by the scheduled due date. Each student has 255 last passes that extend the assignment due date for 48 hours. Students may use more than one late pass per assignment that is past due.

Any missed work will be made up at the discretion of the instructor. **It is the student’s responsibility to contact the instructor.**

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 is available in your Blackboard course.

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.)

Inclusive Access Course: A discounted textbook fee is added to your student account to cover the cost of the required access code. You will access through Blackboard on the first-class day

Publisher: OpenStax
Date: 2018

ISBN Number:
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

Note: The NTCC Bookstore link is at www.ntcc.edu.

Optional Instructional Materials:
Print copy of the textbook is highly recommended. Research indicates that students learn more and retain it longer from hard copy text.

Minimum Technology Requirements:
A scientific calculator is required. **TI-83/84 is recommended**.

The TI-84 Online Calculators is available for individual purchase by students through the TI Store. A single license for the TI-84 Online Calculator is $20 per year and the single license for the TI Nspire CX II Online Calculator is $27.50 per year. Both online calculator solutions come with full math functionality. For a full list of specifications and a comparison chart of the various functionalities for each of the online calculator solutions, please click on the appropriate link below.

- **TI-84 Plus CE ONLINE Calculator** - $20.00 per year for an individual license
- **TI-Nspire CX II ONLINE Calculator** - $27.50 per year for an individual license.

The link to the TI Store where students can purchase their individual licenses is found below:

TI STORE

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 TEAMs 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.

You can download Blackboard Student for your smart phone from the Play store or the App store.

More information is available for Technology Requirements and Support under the Student Resources – Technical Support Tab in Blackboard.

Required Computer Literacy Skills:

As an online student you will have a much different "classroom" experience than a traditional student. In order to ensure that you are fully prepared for your online part of the course, following is a list of expectations and requirements: Students in a hybrid and/or on-line program should be comfortable with and possess the following skill sets:

1. Self-discipline
2. Problem solving skills
3. Critical thinking skills
4. Enjoy communication in the written word

As part of your online experience, you can expect to utilize a variety of technology mediums as part of your curriculum:

1. Communicate via email including sending attachments
2. Navigate the World Wide Web using a Web browser such as Internet Explorer
3. Use office applications such as Microsoft Office (or similar) to create documents

4. Be willing to learn how to communicate using a discussion board and upload assignments to a classroom Web site
5. Be comfortable uploading and downloading saved files
6. Have easy access to the Internet
7. Navigate Blackboard, including using the email component within Blackboard. Instructions and tutorials for this are provided in your course.

For more information or technical assistance on using the Learning Management System, please refer to the Home Page, Orientation Module, in the important technical requirement, information and support folder in Blackboard.

Course Structure and Overview:
This is a sixteen-week hybrid course where students are required to access graded activities on the Blackboard Learning Management System. A typical class involves general participation by all members in discussions, exercises and group work regarding mathematical principles and procedures being studied. Students are required to complete online homework, as well as other assignments. It is particularly important students keep up with course materials and assignments. Students are expected to watch instructional videos, read course textbook, and complete online assignments located in the Learning Management System, Blackboard by due dates.

Video Recording of Course Activities
Certain portions of this course may be recorded via video conferencing software to assist students in course material review or later viewing by a student who was not able to attend the live session. The recordings will be made available only to students within the course and will cease to be available upon completion of the course. Students may not retain, reproduce, or share recordings.

Communications:
Emails and phone messages will be responded to with 24 hours. If you do not receive a response within 24 hours, then the email or phone message was not received. Posts in the Discussion Forum "Questions, Comments, and/or Concerns?" will be monitored by the instructor. Responses by the instructor will be within 72 hours of post. Students are expected to abide by Netiquette rules when communicating online. See this link for details: Netiquette Rules.

The college's official means of communication is via your campus email address. I will use your campus email address and Blackboard 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.

Institutional/Course Policy:
No late work will be accepted without prior approval by the instructor. Students are always expected to be respectful toward classmates and professor! Review Student Conduct in the Student Handbook. It is the student's responsibility to check Blackboard for important information/announcements regarding the course. Students should be working on course material via Blackboard every week. Do not wait until the last minute to complete and submit assignments in case of technology issues.

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:
Absent a clear statement from a course instructor, use of or consultation with generative AI shall be treated analogously to assistance from another person (collusion). Generative AI is a subset of AI that utilizes machine learning models to create new, original content, such as images, text, or music, based on patterns and structures learned from existing data (Cornell, Center for Teaching Innovation). Unauthorized use of generative AI tools to complete an assignment or exam is not permitted. Students should acknowledge the use of generative AI and default to disclosing such assistance when in doubt. Individual course instructors may set their own policies regulating the use of generative AI tools in their courses, including allowing or disallowing some or all uses of such tools. Students who are unsure of policies regarding generative AI tools are encouraged to ask their instructors for clarification. (Adapted from the Stanford University Office of Community Standards-- accessed August 31, 2023)

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.

Eagle Assist
At Northeast Texas Community College, we understand that students often need support that extends beyond the classroom. "Eagle Assist" is the place to start when looking for that type of assistance. Our support system is here to help you succeed in both your academic and personal growth. www.ntcc.edu/eagleassist

Services provided:
- Mental Health Counseling
- Classroom Accommodations
- NTCC Care Center Food Pantry
- NTCC Care Center Hygiene Closet
- NTCC Care Center Cook Nook
- Financial Literacy
- Child Care Assistance
- Emergency Aid

Can't find what you are looking for? Send us a message at eagleassist@ntcc.edu
Mental Health Counseling Services are available to all NTCC students.

- Visit the following page to get your account activated:

www.thevirtualcaregroup.com/ntcc

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 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 adjust this timeline at any point in the term.)

Math1314.021DC Fall 2024(Subject to Change)

Weeks	**Topics**	**Assignments**	**Due Dates** **By 11:59 pm**
Week 1: 8/26/24 – 9/1/24	Orientation **Module 1:** Algebra Essentials – Sections 1.1 – 1.3	**Read through Orientation Module, complete Syllabus Acknowledgement Agreement, assigned Lumen Homework & Quiz.**	**9/1/24**
Week 2: 9/2/24 – 9/9/24 *Labor Day Holiday: 9/2/24*	**Modules 2 & 3**: Polynomial and Rational Expressions & Rectangular Coordinate System and Equations of Lines – Sections 1.4 – 1.6; 2.1 – 2.2	Read textbook & watch videos. Complete assigned online Lumen Homework and Quizzes.	9/8/24
Week 3: 9/9/24 – 9/15/24	**Module 4**: Equations and Inequalities – Sections 2.3, 2.5 – 2.7 *Section 2.4 will be covered later.*	Read textbook & watch section videos. Complete assigned online Lumen Homework and Quiz.	9/15/24
Week 4: 9/16/24 – 9/22/24	**Module 5**: Function Basics – Sections 3.1- 3.3	Read textbook & watch section videos. Complete assigned online Lumen Homework.	9/22/24
Week 5: 9/23/24 – 9/29/24	**Module 6:** Algebraic Operations on Functions – Sections 3.4 – 3.5, 3.7 *Section 3.6 is not covered.*	Read textbook & watch section videos. Complete assigned online Lumen Homework and Quiz.	9/29/24
Week 6: 9/30/24 – 10/6/24	**Module 7:** Linear Functions – Sections 4.1 – 4.2	Read textbook & watch section videos. Complete assigned online Lumen Homework and Quiz.	10/6/24
Week 7: 10/6/24 – 10/13/24	**Module 8:** Quadratic Functions- Sections 2.4, 5.1	Read textbook & watch section videos. Complete assigned online Lumen Homework and Quiz.	10/13/24
Week 8: 10/16/23 – 10/22/23	**Midterm Exam in class 10/15/24 -** Covering all sections from Week 1 through Week 7.	**Complete assigned online Lumen Homework & Quizzes**	10/20/24

Week 9: 10/21/24 – 10/27/24	**Module 9:** Power and Polynomial Functions – Sections 5.2 – 5.5	Read textbook & watch section videos. Complete assigned online Lumen Homework and Quiz.	10/27/24
Week 10: 10/28/24 – 11/3/24	**Module 10:** Rational and Radical Functions – Sections 5.6 – 5.8	Read textbook & watch section videos. Complete assigned online Lumen Homework and Quiz.	11/3/24
Week 11: 11/4/24 – 11/10/24	**Module 11:** Exponential and Logarithmic Functions – Sections 6.1 – 6.4	Read textbook & watch section videos. Complete assigned online Lumen Homework and Quiz.	11/10/24
Week 12: 11/11/24 – 11/17/24	**Module 12**: Exponential and Logarithmic Equations – Sections 6.5 – 6.7	Read textbook & watch section videos. Complete assigned online Lumen Homework and Quiz.	11/17/24
Week 13: 11/18/24 – 11/24/24 *Last Day to Withdraw from 16-Week Course: 11/19/24*	**Module 13:** Systems of Equations and Inequalities – Sections 7.1 – 7.5	Read textbook & watch section videos. Complete assigned online Lumen Homework and Quiz.	11/24/24
Week: 14: 11/25/24 – 12/1/24 *Thanksgiving Break: 11/27/24 – 11/29/24*	**Module 14**: Solve Systems with Matrices – Sections 7.5 – 7.6	Read textbook & watch section videos. Complete assigned online Lumen Homework and Quiz.	12/1/24
Week 15: 12/2/24 – 12/8/24	**Review for Final Exam**	Complete assigned online Lumen Homework and Quizzes.	12/8/24
Week 16: 12/9/24 – 12/12/24 *Last Class Day: 12/12/24* **Final Exam Week** *NTCC Graduation 12/13/24*	**Final Exam in class on 12/10/24** Covering sections from Week 9 through Week 15.	**Complete all assigned online Lumen Homework and Quizzes**	12/10/24