NORTHEAST TEXAS

Math 0114.088 Foundations of College Algebra

Course Syllabus: Fall 2024

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

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| Office | Monday | Tuesday | Wednesday | Thursday | Friday | Online |
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| Hours | Email | Email | Email | Email | Email | Email |
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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 is a learning support to develop the skills and understanding needed to be successful in college-level algebra. Topics include: the study of numeracy and the real number system, algebraic concepts, notation, and reasoning, quantitative relationships, mathematical models, and problem solving. Technology and communication will be embedded throughout the course. No college credit.

Prerequisite: 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:

- 0114.1 Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts.
- 0114.2 Define, represent, and perform operations on real numbers, applying numeric reasoning to investigate and describe quantitative relationships and solve real world problems in a variety of contexts.
- 0114.3 Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations.
- 0114.4 Apply algebraic reasoning to manipulate expressions and equations to solve real world problems.
- 0114.5 Use graphs, tables, and technology to analyze, interpret, and compare data sets.
- 0114.6 Construct and use mathematical models in verbal, algebraic, graphical, and tabular form to solve problems from a variety of contexts and to make predictions and decisions.

Evaluation/Grading Policy:

Satisfactory (CR): MATH 1314 "C" or better No Credit (NC): MATH 1314 "F, W, or NC"

Required Instructional Materials:

All instructional material will be embedded in your Math1314 course in the Blackboard.

Optional Instructional Materials:

None

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

Minimum Technology Requirements:

A free online TI-83 will be available in Blackboard for PCs.

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 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.

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 <u>Student Resources –</u> <u>Technical Support Tab in Blackboard</u>.

Required Computer Literacy Skills:

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:

In this course students are required to access activities on the Blackboard Learning Management System. A typical class involves general participation by all members in discussions regarding mathematical principles and procedures being studied. It is very 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.

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. Please send messages to instructor email, <u>krussell@ntcc.edu</u>, instead of using the Blackboard messaging system. Blackboard messages are not received as quickly. Students are expected to abide by Netiquette rules when communicating online. See this link for details: <u>Netiquette Rules</u>.

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.

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. <u>www.ntcc.edu/eagleassist</u>

Services provided:

- · Mental Health Counseling
- · <u>Classroom Accommodations</u>
- <u>NTCC Care Center Food Pantry</u>
- NTCC Care Center Hygiene Closet
- NTCC Care Center Cook Nook
- · Financial Literacy
- · <u>Child Care Assistance</u>
- Emergency Aid

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

• Visit the following page to get your account activated: <u>www.thevirtualcaregroup.com/ntcc</u>

*Dual credit students please email jstewart@ntcc.edu if interested.

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.

Math 0114.088 and 1314.088 Course Schedule Fall 2024

Tentative Course Timeline (*note* instructor reserves the right to make adjustments to this timeline at any point in the term):

| Week | Math 0114 and 1314 Fall 2024 Topics & Assignments | Due Dates |
|--------|---|-----------|
| Week 1 | Become familiar with Blackboard Watch Welcome Video Register with Lumen Ohm using Inclusive Access | 9/1/24 |
| | Complete Syllabus Acknowledgement Agreement and Discussion #1: Introductions | |
| | Module 1: Algebra Essentials Review textbook section material Complete assigned online HW problems and Quiz | |
| Week 2 | Module 1 Sections 1.2 and 1.3 | 0/8/24 |
| Week 2 | Module 2: Polynomial & Rational Expressions Review textbook section material Complete assigned online HW problems | 9/8/24 |
| | Module 2 Sections 1.4, 1.5, and 1.6 | |
| Week 3 | Module 3: Equations & Inequalities Review textbook section material Complete assigned online HW problems and Quiz | 9/15/24 |
| | Module 3 Sections 2.1 and 2.2 | |
| Week 4 | Module 4: Equations & Inequalities Review textbook section material Complete assigned online HW problems and Quiz | 9/22/24 |
| | Module 4 Sections 2.5, 2.6, and 2.7 | |
| Week 5 | Modules 5: Function Basics Review textbook section material Complete assigned online HW problems and Quiz | 9/29/24 |
| | Module 5 Sections 3.1, 3.2, 3.3 | |
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| Week 6 | Modules 6: Algebraic Operations on Functions Review textbook section material Complete assigned online HW problems and Quiz | 10/6/24 |
| | Module 6 Sections 3.4, 3.5, 3.7 | |

| | Week 7 | Modules 7: Linear Functions Review textbook section material Complete assigned online HW problems and Quiz Module 7 Sections 4.1a, 4.1b, 4.2, Properties of Functions SLO | 10/13/24 |
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| Week 8 | Complete & review all assignments to help prepare for Midterm Exam: Modules 1 - 7 | 10/20/24 |
|---------|---|----------|
| | Complete Discussion #2 | 10/20/24 |
| | Complete Midterm Exam due by 10/20/24 | 10/20/24 |
| Week 9 | Module 8: Quadratic Functions Review textbook section material Complete assigned online HW problems and Quiz | 10/27/24 |
| | Module 8 Sections 2.4, 5.1a, 5.1b, Graphing SLO | |
| Week 10 | Module 9: Polynomial Functions Review textbook section material Complete assigned online HW problems and Quiz | 11/3/24 |
| | Module 9 Sections 5.2, 5.3, 5.4, 5.5, Roots of Polynomials SLO | |
| Week 11 | Module 11: Exponential and Logarithmic Functions Review textbook section material Complete assigned online HW problems and Quiz | 11/10/24 |
| | Module 11 Sections 6.1, 6.2, 6.3, 6.4 | |
| Week 12 | Module 12: Exponential and Logarithmic Equations Review textbook section material Complete assigned online HW problems and Quiz | 11/17/24 |
| | Module 12 Sections 6.5, 6.6, 6.7 | |
| | Last Day to Withdraw with a "W" | 11/19/24 |
| Week 13 | Module 14: Solve Systems with Matrices Review textbook section material Complete assigned online HW problems and Quiz | 11/24/24 |
| | Module 14 Sections 7.5, 7.6 | |
| Week 14 | Begin Reviewing for Final Exam Begin work on Discussion #3 | 12/1/24 |
| | Complete assigned online HW problems Solving Various Equations SLO and Solving Systems with Matrices SLO | |
| Week 15 | Complete Discussion #3: Final Discussion | 12/8/24 |
| | Complete Final Exam due by 12/8/24 | |