



Foundations of Mathematical Reasoning – MATH 0304

Course Syllabus: Spring 2024

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

Instructor: Marguerite Morris

Office: MS 109

Phone: 903-573-0057

Email: mgmorris@ntcc.edu (preferred method of contact)

Office	Monday	Tuesday	Wednesday	Thursday	Friday	Online
Hours		8:20-9:20 12:00-12:30		8:20-9:20 12:00-12:30		

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: MATH 0304 surveys a variety of mathematical topics needed to prepare students for a gateway college-level mathematics course. Topics include: numeracy with an emphasis on estimation and fluency with large numbers; evaluating expressions and formulas; rates, ratios, and proportions; percentages; solving equations; linear models; data interpretations including graphs and tables; verbal, algebraic and graphical representations of functions; exponential models. No college credit.

Prerequisite(s): TSI Incomplete Status with Multiple Measures Placement on TSI Placement Chart

Corequisite(s): 1) EDUC 1100 2) MATH 0100 if TSI Incomplete Status with Multiple Measures Placement as posted on TSI Placement Chart is required.

Student Learning Outcomes:

0304.1 Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts.

0304.2 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.

0304.3 Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations.

0304.4 Apply algebraic reasoning to manipulate expressions and equations to solve real world problems.

0304.5 Use graphs, tables, and technology to analyze, interpret, and compare data sets.

0304.6 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.

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: The grade for this course will be based on the following:

1. Homework – Homework is completed online through MyMathLab. Each homework assignment will be due by class time the next time the class meets; however, it will remain open until class time the day of each exam after which time you will not be able to access it. Because of the value and importance of homework, all the assigned homework will be averaged together to count for 35% of your final course grade.
2. Attendance: Daily attendance will be posted in Blackboard and will count as 10% of your course grade.
3. Participation: Weekly participation grades will be posted in Blackboard. Participation grades will consist of participating in class with whatever instructions are given by the instructor as well as the possibility of take-home assignments. The participation grade will count for 15% of your grade.
4. Since this is an eight-week course, there will only be two exams, a midterm, and a comprehensive final exam. Each exam will count 20% of your grade. Each student is required to take both exams. Should you be unable to take the midterm exam in class, or if you fail it, you will have the option to take a makeup exam in the testing center. That exam will be available for one week. The final exam grade can also replace the midterm exam grade if it is missing or if it is a low test grade.

The percentage breakdown is as follows:

Homework assignments	35%
Attendance	10%
Participation	15%
Midterm Exam	20%
Final Exam	20%

A = 90-100%, B = 80-89%, C = 70-79%, F = 69% or lower

Required Instructional Materials: 1) Access to MyMathLab (Inclusive Access) 2) Graphing calculator (TI-84, TI-84 Plus, or similar) 3) Writing materials – Pencils, eraser

Publisher: Pearson (2017)

Optional Instructional Materials: *Path to College Mathematics*

Publisher: Pearson (2017)

Optional Instructional Materials: *Path to College Mathematics textbook*, ISBN 0-13-465440-4

Minimum Technology Requirements: Graphing calculator (TI-84, TI-84 Plus, or similar)

Required Computer Literacy Skills: Basic computer skills to access online resources.

Course Structure and Overview: This course will be taught in a traditional manner with class time consisting of instruction, practice and possibly an activity. Because this is an eight-week course, it is imperative that students attend class and fully participate in the learning activities and assignments in order to obtain the necessary skills to be successful in your college math course. In addition, students are required to complete online homework, as well as two exams, a midterm exam, and a comprehensive final exam.

Communications: Emails will be responded to within 24 hours during the week and 48 hours on the weekend. The college's official means of communication is via your campus email address. Your instructors will use your campus email 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. You may also call or text me on my cell phone; however, do so before 10:00 p.m.

Institutional/Course Policies: The policies for this course will include the following:

- Students are expected to be in class unless attending a school sanctioned event. If that is the case, the student or coach is responsible for notifying the teacher of the absence. In the event of an absence, the student is still responsible for the homework assigned.
- Late work is accepted for this course up until the midterm exam and then again until the final exam.
- Cell phones should be set to silent and preferably put away in a backpack or purse. The main goal concerning cell phone usage is not to disturb others.

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.

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

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

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

<u>DATE</u>	<u>TOPICS</u>	<u>ASSIGNMENTS</u>	<u>DUE DATES</u>
Day 1 Jan 16	Introductions/Syllabus Mathematical Symbols and Vocabulary	1.2 or Homework Worksheet	1/18/2024
Day 2 Jan 18	Exponents, Order of Operations, Variable Expressions	1.3	1/23/2024
Day 3 Jan 23	Operations on Real Numbers Simplifying Expressions and Solving Basic Equations	1.4, 2.1, 2.2	1/25/2024
Day 4 Jan 25	More Equations and Problem Solving	2.3, 2.4	1/30/2024
Day 5 Jan 30	Percents and Finance	2.5	2/1/2024
Day 6 Feb 1	Ratios, Rates, and Proportions	Appendix D	2/6/2024
Day 7 Feb 6	Midterm Review (All topics covered since January 16)	In class review or MML Review	2/8/2024
Day 8 Feb 8	Midterm Exam	In class exam	2/8/2024
Day 9 Feb 13	Graphing Linear Equations	3.1	2/15/2024
Day 10 Feb 15	Intercepts, Slopes, and Rate of Change	3.2	2/20/2024
Day 11 Feb 20	Equations of Lines	3.3	2/22/2024
Day 12 Feb 22	Exponents and Scientific Notation	4.1, 4.4	2/27/2024
Day 13 Feb 27	Reading, Interpreting, and Creating Graphs	R 4	2/27/2024
Day 14 Feb 29	Mean, Median, Mode	8.1	3/5/2024
Day 15 Mar 5	Final Exam Review (All topics covered since January 16)	In class review or MML Review	3/7/2024
Day 16 Mar 7	Final Exam	In class final exam	3/7/2024