



# Corequisite for Foundations of Mathematical Reasoning – MATH 0100.991

Course Syllabus: Fall 2024

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

**Instructor:** Mark Ellermann

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	Online	Online	Online	Online	Online	8 AM to 9 PM

***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 0100 will contain essential foundational concepts needed for success in MATH 0304 but not frequently mastered by students who do not exhibit adequate preparation for the following topics: 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 1300 2) MATH 0304 if TSI Incomplete Status with Multiple Measures Placement as posted on TSI Placement Chart is required.

### **Student Learning Outcomes:**

0404.1 Develop number sense and the ability to apply concepts of numeracy to investigate and describe quantitative relationships and solve real-world problems in a variety of contexts.

0404.2 Use proportional reasoning to solve problems that require ratios, rates, proportions, and scaling.

0404.3 Transition from specific and numeric reasoning to general and abstract reasoning using the language and structure of algebra to investigate, represent, and solve problems.

0404.4 Understand and critically evaluate statements that appear in the popular media (especially in presenting medical information) involving risk and arguments based on probability.

0404.5 Understand, interpret, and make decisions based on financial information commonly presented

to consumers.

0404.6 Understand that quantitative information presented in the media and by other entities can sometimes be useful and sometimes misleading.

### **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:**

**Homework** will be completed weekly.

Electronic grades will be reviewed and posted within 3 days of the assignment's due date.

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

Homework	35%
Exams	40%
Final Exam	25%

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

### **Required Instructional Materials:**

- 1) MyMathLab Access (Electronic - Required)
- 2) 3-ring binder for this class (recommended)
- 3) Writing materials – Pencils, eraser, highlighters

**Publisher: Pearson**

**Optional Instructional Materials:** Path to College Mathematics (Elayn Martin-Gay) ISBN 0-13-

465440-4 (optional) Note: The NTCC Bookstore link is at [www.ntcc.edu](http://www.ntcc.edu)

**Minimum Technology Requirements:**

Graphing calculator (TI-84, TI-84 Plus, or approval by instructor)  
Smartphone App or Physical scanner to scan paperwork

**Required Computer Literacy Skills:**

Basic computer skills to access online resources and information  
Ability to upload a scanned document

**Course Structure and Overview:** This is a 16-week online course that meets parallel to the co-requisite courses, Foundations of Mathematical Reasoning (MATH 0304) and Learning Frameworks (EDUC 1300). Class participation is replicated by the expectation that the student will complete working problems in the Foundations course notebook that involve the analytical skills need to apply the mathematical and statistical principles taught in MATH 0304. Students are required to complete both paper and online homework, and over the course of the semester, three exams and a final exam. It is very important students complete the assigned tasks on time and fully participate in the learning activities and assignments.

**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 Remind, 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.

**Institutional/Course Policy:**

Late work is accepted up to one week after the assigned due date, not to exceed the last day of class for the semester.

Exams must be completed by the assigned due date. No make-up exams will be allowed. In the event that you miss an exam, your final exam grade will be used as a substitute for ONE missing exam. If all exams are taken throughout the semester, the final exam grade will be used to replace the lowest exam grade (if lower than the final exam score).

All assignments and exams must be completed to achieve the desired goals of the course.

## **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):**

<u>Weeks</u>	<u>Topics</u>	<u>Assignments</u>	<u>Due Dates</u> (Due by 11:59pm CST)
Week 1:	Equivalent Percentages, Decimals, and Fractions	R.3	9/9/2024
Week 2:	Simplifying Algebraic Expressions	2.1 / 2.3	9/9/2024
Week 3:	Rates and Ratios	Appendix C	9/16/2024
Week 4:	Equivalent Percentages, Decimals, and Fractions Simplifying Algebraic Expressions	Review / Exam 1	9/23/2024
Week 5:	Scatter Plots  Plotting and identifying linear intercepts and slopes	3.1	9/30/2024
Week 6:	Slopes	3.2	10/7/2024
Week 7:	Writing Equations of Lines	3.3	10/14/2024
Week 8:	Equivalent Percentages, Decimals, and Fractions Simplifying Algebraic Expressions Rates and Ratios Scatter Plots Plotting and identifying linear intercepts and slopes	Review/ Exam 2	10/21/2024
Week 9:	Exponents	4.1	10/28/2024
Week 10:	Geometry	6.2	11/4/2024
Week 11:	Weight and Mass  Capacity	Conversion with US Measures	11/11/2024

Week 12:	Understanding the Metric System	Metric System	11/18/2024
Week 13	Equivalent Percentages, Decimals, and Fractions Simplifying Algebraic Expressions Rates and Ratios Scatter Plots Plotting and identifying linear intercepts and slopes Graphing from the equation of a line Exponents	Review / Exam 3	11/25/2024
Week 14:	Final Exam Review becomes available	Review	12/2/2024
Week 15	Final Exam Review	Review	12/9/2024
Week 16:		Final Exam	12/10/2024