



# MATH 1351.083 Mathematics for Teachers II, 2<sup>nd</sup> 8 weeks

## Course Syllabus: Fall 2025

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

**Instructor: Dr. Leah Reagan**

**Office: MS-118**

**Phone: 903-434-8290**

**Email: [lreagan@ntcc.edu](mailto:lreagan@ntcc.edu) (email or TEAMs is the fastest way to reach me)**

<b>Office</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>		
<b>Hours:</b>	1:00 – 3:30	1:00 – 3:30	1:00 – 3:30	1:00 – 3:30		Professor checks email and TEAMs texts multiple times daily.

***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 intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on problem-solving and critical thinking. Three hours credit.

**Prerequisite(s):** MATH 1314 with a grade of "C" or better

### **Student Learning Outcomes:**

- 1351.1 Apply fundamental terms of geometry such as points, lines, and planes to describe two- and three-dimensional figures.
- 1351.2 Make and test conjectures about figures and geometric relationships.
- 1351.3 Use a variety of methods to identify and justify congruency and similarity of geometric objects.
- 1351.4 Perform geometric transformations.
- 1351.5 Demonstrate fundamental probability techniques and apply those techniques to solve problems.
- 1351.6 Explain the use of data collection and statistics as tools to reach reasonable conclusions.
- 1351.7 Recognize, examine, and utilize the basic principles of describing and presenting data.
- 1351.8 Perform measurement processes and explain the concept of a unit of measurement.
- 1351.9 Develop and use formulas for the perimeter, area, and volume for a variety of figures.

## 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.

## Evaluations/Grading Policy:

Two exams will be given, a midterm and a final, which will count for 60% of your total grade (worth 30% each). If an exam is missed or failed, the highest possible make-up grade is a 70 (with instructor notification prior to the exam missed). **The final exam must be proctored.** You have 3 proctoring options:

- 1) You may come to campus and use our NTCC testing center to proctor your Final Exam (free), or
- 2) You may use another college testing center, but you must send me the Proctor Form (located in Bb) at least a week ahead of the exam (and realize there will probably be a fee involved at that testing center), or
- 3) You may use TEAMS to record yourself at your home, on your computer. This is FREE and I do recommend it. It will record you taking your exam, and then it will send me the recording. The instructions for recording yourself using TEAMS is in Bb.

The average of a series of homework assignments will be worth 40% of the total grade (all homework is on MyMathLab). All homework due dates are posted on MyMathLab. Homework is due on the due date...no exceptions.

## Tests/Exams:

Midterm Exam	30%
Final Exam	30%
Online Assignments (MyMathLab)	40%

TOTAL ----- 100%

"A"	90%
"B"	80%
"C"	70%
"D"	60%
"F"	Below 60%

**Required Instructional Materials:** If you've already taken Math 1350 from me within the last year, then you will not have to purchase anything new for this class. If you haven't taken it from me, you will need to purchase the following:

Long, DeTemple, Millman (2015). Mathematical Reasoning for Elementary Teachers, 7th Edition

**Publisher:** Pearson, Boston, MA

**ISBN Number:**

You already purchased the Inclusive Access code below when you registered for this class.

LONG	9780134766751	Inclusive Access - Mathematical Reasoning Digital Text w/MyLab Access	7th
------	---------------	---	-----

**Minimum Technology Requirements:**

Scientific Calculator required. TI-83 or TI-84 is preferred.

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

- [TI-84 Plus CE ONLINE Calculator](#) - \$20.00 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 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:** Students should have the ability to navigate through a website, use a chat room, post remarks to a discussion board, and email. They must also be able to navigate Blackboard to access posted materials and MyMathLab assignments.

### **Course Structure and Overview:**

This is an 8-week online course where students are required to access graded activities on MyMathLab via the Blackboard Learning Management System. Students are required to complete online homework in MyMathLab, and over the course of the semester, a midterm exam and a final exam. It is very important students keep up with course materials and assignments since this is a very fast-paced, college-level course. Students are expected to watch posted instructional videos, read the course textbook, and complete online assignments located in MyMathLab, by the due dates.

### **COURSE OUTLINE:**

All problems assigned to each section are located in the Homework tab in MyMathLab. Dates for each section are located in your MyMathLab Calendar.

- I. Probability - Chapter 14 Homework
  - A. The Basics of Probability
  - B. Applications of Counting Principles to Probability
  - C. Permutations and Combinations
  - D. Odds, Expected Values, Geometric Probability, and Simulations
- II. Statistics - Chapter 13 Homework
  - A. Organizing and Representing Data
  - B. Measuring the Center and Variation of Data
  - C. Statistical Inference
- III. Congruence, Constructions, and Similarity - Chapter 12 Homework
  - A. Congruent Triangles
  - B. Constructing Geometric Figures
  - C. Similar Triangles
  - D. Networks
- IV. Transformations, Symmetries, and Tilings - Chapter 11 Homework
  - A. Rigid Motions and Similarity Transformations
  - B. Patterns and Symmetries
  - C. Tilings and Escher-like Designs
- V. Measurement - Chapter 10 Homework
  - A. The Measurement Process
  - B. Area and Perimeter
  - C. The Pythagorean Theorem

- D. Volume
- E. Surface Area

#### VI. Geometric Figures - Chapter 9 Homework

- A. Figures in the Plane
- B. Curves and Polygons in the Plane
- C. Figures in Space

#### **Communications:**

Emails will be responded to within 24 hours. Students are expected to abide by Netiquette rules when communicating online. See this link for details:

<https://coursedesign.colostate.edu/obj/corerulesnet.html>.

The college's official means of communication is via your campus email address. Your instructor will use your campus email, Blackboard, and TEAMS texting to communicate with you. You need to check these often throughout the week in case your instructor sends out new information. Also, make sure you keep your campus email cleaned out and below the limit so you can receive important messages.

#### **Institutional/Course Policy:**

Since this is an online class, students must be self-motivated to keep up with the due dates, turn in assignments ON TIME, and take Exams as scheduled. Students need to check their TEAMS accounts daily AND log in daily to MyMathLab to make sure they receive all communications from the professor.

No late work will be accepted without prior approval by the instructor. It is the student's responsibility to check their Blackboard and NTCC email accounts, as well as TEAMS texting, for important information/announcements regarding the course. Students should be working on course material via Blackboard and MyMathLab every day. Do not wait until the last minute to complete and submit assignments in case of technology issues.

#### **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](http://www.ntcc.edu/eagleassist)

Services provided:

- Mental Health Counseling
- Classroom Accommodations
- NTCC Care Center Food & Hygiene Closet
- Financial Literacy
- Tutoring

Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, mental health, alcohol or other drugs, identities, finances, etc.

Mental Health Counseling Services are available on campus- in person and online - to all NTCC students at no cost. If you are experiencing concerns, seeking help is a courageous thing to do. You can contact us directly at [counselingcenter@ntcc.edu](mailto:counselingcenter@ntcc.edu) or call 903-434-7825. Open Monday-Thursday, 8am-6pm, Friday, 8am-12pm.

## **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.

### **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)

### **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>Assignment Name:</u>	<u>Due Date:</u> Due by midnight	
WEEK 1		CHAPTER 9 HOMEWORK – Geometric Figures	10/26	
WEEK 2		CHAPTER 10 HOMEWORK - Measurement	11/2	
WEEK 3		CHAPTER 11 HOMEWORK – Transformations, Symmetries, & Tilings	11/9	
WEEK 4		REVIEW FOR MIDTERM EXAM	11/15	
	***	MIDTERM EXAM (chapters 9, 10, 11)- Exam opens at 8:00 a.m. on the 1 <sup>st</sup> day and closes at midnight on the 2 <sup>nd</sup> day.	Exam will open at 8:00 a.m. on 11/15 & will close at midnight on 11/16.	
WEEK 5		CHAPTER 12 HOMEWORK – Congruence, Constructions, & Similarity	11/21	
WEEK 6		CHAPTER 13 HOMEWORK - Statistics	11/25	
WEEK 7		CHAPTER 14 HOMEWORK - Probability	12/2	
WEEK 8		REVIEW for FINAL EXAM (Chapters 12, 13, 14)	12/9	
	***	FINAL EXAM (Chapters 12, 13, 14)  **MUST BE PROCTORED	EXAM opens on 12/8 and closes at midnight on 12/9.	

<b>2025 Fall Semester</b>	
Faculty/Staff In-Service	8/18/2025 - 8/21/2025
First Class Day (16-week, 1st 8-week, 1st 5-week sessions)	8/25/2025
Late Registration Ends	8/29/2025
Labor Day Holiday	9/1/2025
Fall Census (1st 8-week session)	9/2/2025
Fall Census (16-week session)	9/10/2025
Last Day to Withdraw with a Grade of "W" (1st 8-week session)	10/7/2025
Last Class Day (1st 8-week session)	10/17/2025
First Class Day (2nd 8-week session)	10/20/2025
Deadline for Fall Graduation Application	10/23/2025
Fall Census (2nd 8-week session)	10/27/2025
Last Day to Withdraw with a Grade of "W" (16-week session)	11/18/2025
<b>Last Day to Withdraw with a Grade of "W" (2nd 8-week session)</b>	<b>11/25/2025</b>
Thanksgiving Break	11/26/2025 - 11/28/2025
Last Class Day (16-week session, 2nd 8-week session)	12/4/2025
Final Examinations	12/5/2025 - 12/11/2025
Fall Graduation	12/12/2025
Offices Close at 12:00 p.m. for Holiday Break	12/19/2025
<b>2025 December Intersession</b>	
Registration	12/10/2025
First Class Day	12/12/2025
Late Registration Ends	12/15/2025
December Census	12/17/2025
Last Day to Withdraw with a Grade of "W"	1/2/2026
Last Class Day/Final Examinations	1/9/2026

### *Course Identifier Codes*

DC	Dual Credit
FE	Flex Entry Schedule
HN	Honors
HY	Hybrid
IN	Independent Study

MY	Mathways
ST	Stacked
TR	Traditional Schedule
TV	Two-Way Video
VC	Virtual College of Texas