MATH 1351.933 Mathematics for Teachers II, Synchronous
Course Syllabus: Fall 2022

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

Instructor: Dr. Leah Reagan
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Office Hours:	Monday	Tuesday	Wednesday	Thursday		
	10:30 – 11:00 1:30 – 3:30	10:30 – 11:00 1:30 – 3:30	10:30 – 11:00 1:30 – 3:30	10:30 – 11:00 1:30 – 3:30		Professor checks email and Remind 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.

Course Delivery Method: This class is a once-a-week class on Wednesday from 4:30 – 7:20 p.m. This delivery method is called **Synchronous Learning**, which means that although you will be learning from a distance (at home), you will virtually attend a class session each week (on Zoom or TEAMs), at the same time as your instructor and classmates. If you cannot attend the class at that time, I will record the lesson and post it as a video in Blackboard for you to watch at your convenience. All work, such as homework, quizzes, exams, etc. will be online using MyMathLab.

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

Student Learning Outcomes:

1351.1   Apply fundamental terms of geometry such as points, line, 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 50% of your total grade (worth 25% 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. We will discuss your proctoring options in our Wednesday evening class.

The average of a series of homework assignments will be worth 35% 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.

 Quizzes (over each chapter) will count for 15% of your overall average.

Tests/Exams:

Midterm Exam	25%
Final Exam	25%
Online Assignments (MyMathLab)	35%
Quizzes (MyMathLab)	15%

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:
978-0-321-91474-3   LONG/MATHEMATICAL REASONING BINDER TEXT W/MYMATHLAB
Both the loose-leaf textbook and the MyMathLab code will work for BOTH 1350 & 1351. You only have to purchase them once.

Optional Instructional Materials: None

Minimum Technology Requirements: Students should have a computer at home that is Internet accessible. It is recommended that students have a graphing calculator. The TI-84 is preferred, but other models may be approved by the instructor. You will be using this calculator for both courses.

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 synchronous course where students are required to access graded activities on MyMathLab via the Blackboard Learning Management System. Students are expected to attend weekly class meetings on Wednesdays from 4:30 – 7:20 p.m. Students are required to complete online homework in addition to chapter quizzes, 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
    A. The Basics of Probability
    B. Applications of Counting Principles to Probability
    C. Permuations and Combinations
    D. Odds, Expected Values, Geometric Probability, and Simulations

II. Statistics
    A. Organizing and Representing Data
    B. Measuring the Center and Variation of Data
    C. Statistical Inference

III. Congruence, Constructions, and Similarity
    A. Congruent Triangles
    B. Constructing Geometric Figures
    C. Similar Triangles
    D. Networks

IV. Transformations, Symmetries, and Tilings
    A. Rigid Motions and Similarity Transformations
    B. Patterns and Symmetries
    C. Tilings and Escher-like Designs

V. Measurement
    A. The Measurement Process
    B. Area and Perimeter
    C. The Pythagorean Theorem
    D. Volume
    E. Surface Area

VI. Geometric Figures
    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

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 jstewart@ntcc.edu if interested.

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):

		Assignment Name:	Due Date:	
		ORIENTATION	Week 1	
		CHAPTER 9 HOMEWORK & Quiz	Week 1	
		CHAPTER 10 HOMEWORK & Quiz	Week 2	
		CHAPTER 11 HOMEWORK & Quiz	Week 3	
		REVIEW FOR MIDTERM EXAM	Week 4	
	***	MIDTERM EXAM (chapters 9, 10, 11)	Week 4	
		CHAPTER 12 HOMEWORK & Quiz	Week 5	
		CHAPTER 13 HOMEWORK & Quiz	Week 6	

		CHAPTER 14 HOMEWORK & Quiz	Week 7	
		REVIEW for FINAL EXAM (Chapters 12, 13, 14)	Week 7-8	
	***	***FINAL EXAM (Chapters 12, 13, 14)***	***Week 8***	