



Mathematics for Teachers II - MATH 1351.089

Course Syllabus: Summer II 2018

"Northeast Texas Community College exists to provide responsible, exemplary learning opportunities."

Dr. Leah Reagan

Office: Humanities Bldg., 128B

Email: lreagan@ntcc.edu (Professor will respond within 24 hours. You may also reach me through Remind 101 via text message.)

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	Online via email	Online via email	Online via email	Online via email	Online via email	Professor checks email often

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Catalog Course Description (include prerequisites): Three hours credit. Concepts of geometry, probability, and statistics, as well as applications of the properties of real numbers to concepts of measurement with emphasis on problem solving and critical thinking. This course is designed specifically for students who seek middle grade (4 through 8) teacher certification. Prerequisite: MATH 1350 and College Algebra or the equivalent.

Required Textbook(s):

Long, DeTemple, Millman (2015). Mathematical Reasoning for Elementary Teachers, 7th Edition. If you have taken Math 1350 within the last year, you do NOT have to purchase anything. Your MyMathLab code will still work. If it's been over a year, you will need to purchase a new access code. Note: The NTCC Bookstore link is at www.ntcc.edu.

Publisher: Pearson

ISBN Number: 0-321-75992-3 (Book with MyMathLab access code)

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

Recommended Reading(s):

None

Student Learning Outcomes:

Upon successful completion of this course, students will

1351.1 Recognize, name, compare, and measure two- and three-dimensional shapes.

1351.2 Determine congruent and similar objects through geometric constructions.

1351.3 Use geometric concepts to illustrate symmetries, size transformations, and tessellations.

1351.4 Use probabilities, simulations, and counting techniques to solve problems and analyze games.

1351.5 Select and use appropriate statistical methods to analyze data and reason statistically.

SCANS Skills:

N/A

Lectures & Discussions:

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 email accounts daily AND log in to MyMathLab to make sure they receive all communications from the Professor.

Evaluation/Grading Policy:

Three major 100 point examinations will be given, and together they will count for 50% of your total grade. If an exam is missed or failed, the highest possible make-up grade is a 70 (with instructor notification prior to the exam missed).

Online homework utilizing MyMathLab will be worth 30% of the total grade. All due dates are posted on MyMathLab. Homework is due on the due date...no exceptions.

A comprehensive final examination will contribute 20% to the final grade.

Tests/Exams:

Three Online Tests	50%
Online Homework Assignments	30%
Final Exam	20 %

TOTAL	100 %

"A" - 90%

"B" - 80%

"C" - 70%

"D" - 60%

"F" - Below 60%

Assignments

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

Course Outline

- I. Probability
 - 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
 - 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

Other Course Requirements:

Students should have a computer that is Internet accessible, and they should have the ability to navigate through a website, use a chat room, post remarks to a discussion board, and email.

Student Responsibilities/Expectations:

Being an online student requires you to keep up with all assignments and Exams on their DUE DATES. This takes intrinsic motivation and commitment to the course.

NTCC Academic Honesty Statement:

"Students are expected to complete course work in an honest manner, using their intellects and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. NTCC upholds the highest standards of academic integrity. This course will follow the NTCC Academic Honesty policy stated in the Student Handbook."

Academic Ethics

The college expects all students to engage in academic pursuits in a manner that is beyond reproach. Students are expected to maintain complete honesty and integrity in their academic pursuit. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. Refer to the student handbook for more information on this subject.

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 arrange an appointment with a College counselor to obtain a Request for Accommodations form. For more information, please refer to the NTCC Catalog or Student Handbook.

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.

Other Course Policies:

The college's official means of communication is via your campus email address. I will use your campus email address, Blackboard, and MyStatLab 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.