

Mathematics for Teachers I – MATH 1350.88

Course Syllabus: Summer I 2018

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

Dr. Leah Reagan

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within 24 hours).

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	Online office	Online office	Online office	Online office	As needed	Professor
	hours via	hours via	hours via	hours via		checks
	email	email	email	email		emails
						multiple
						times a day.

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): This course includes concepts of sets, functions, numeration systems, number theory, and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314 (College Algebra) or its equivalent.

Required Textbook(s):

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

You are required to purchase the loose-leaf textook (cheaper) and the MyMathLab access code (They are sold as a money-saving bundle in the NTCC bookstore). ISBN:

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.

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

Publisher: Pearson, Boston, MA

Recommended Reading(s):

None

Student Learning Outcomes:

Upon successful completion of this course, students will

The student will be able to:

- **1350.1** Systematically solve problems using various strategies.
- **1350.2** Perform and model addition, subtraction, multiplication, and division on sets, subsets, and various number sets.
- **1350.3** Explore patterns and sequences as inductive and intuitive methods for problem solving.
- **1350.4** Apply and use properties of the real number system.
- **1350.5** Solve applications using fractions, decimals, percents, ratios, and proportions.

SCANS Skills:

N/A

Lectures and 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, which 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).

The average of a series of homework assignments will be worth 30% 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.

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

Tests/Exams:

3 Exams	50%
Final Exam	20%
Online Assignments (MyMathLab)	30%
TOTAL	100%

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

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

- 1.1 An Introduction to Problem Solving
- 1.2 Polya's Problem-Solving Principles
- 1.3 More Problem-Solving Strategies
- 1.4 Algebra as a Problem-Solving Strategy
- 1.5 Additional Problem-Solving Strategies
- 1.6 Reasoning Mathematically
- 2.1 Sets and Operations on Sets
- 2.2 Sets, Counting, and the Whole Numbers
- 2.3 Addition and Subtraction of Whole Numbers
- 2.4 Multiplication and Division of Whole Numbers

EXAM 1(Chapters 1 & 2)

- 3.2 Algorithms for Adding and Subtracting Whole Numbers
- 3.3 Algorithms for Multiplication and Division of Whole Numbers
- 3.4 Mental Arithmetic and Estimation
- 4.1 Divisibility of Natural Numbers
- 4.2 Tests for Divisibility
- 4.3 Greatest Common Divisors and Least Common Multiples

EXAM 2 (Chapters 3 & 4)

- 5.1 Representation of Integers
- 5.2 Addition and Subtraction of Integers
- 5.3 Multiplication and Division of Integers
- 6.1 The Basic Concepts of Fractions and Rational Numbers
- 6.2 Addition and Subtraction of Fractions
- 6.3 Multiplication and Division of Fractions
- 7.1 Decimals and Real Numbers
- 7.2 Computations with Decimals
- 7.3 Proportional Reasoning
- 7.4 Percent

EXAM 3 (Chapters 5, 6, & 7)

COMPREHENSIVE FINAL EXAM (Over all chapters)

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:

Attendance:

Students are expected to check in to the class often (DAILY IN THE SUMMER) on Blackboard and MyMathLab to find the assignments and communications from the instructor. 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 in the online section of this class must submit weekly assignments on the due dates to remain enrolled in the class. The instructor reserves the right to administratively drop a student who goes beyond two weeks in turning in online assignments unless the instructor is notified and given a valid reason for late assignments.

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 whenhe 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 toobtain information concerning the child's college records without the written consent of thestudent. 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 MyMathLab 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.