



Mathematics Northeast College

Math 1350: Mathematics for Elementary Teachers I
CRN84016 – Spring 2012

Northline Campus | Tuesday, Thursday | 11:00 – 12:30pm
3 hour lecture course / 48 hours per semester / 16 weeks

Textbook: A Problem Solving Approach to Mathematics for Elementary Teachers, 10th ed
By Billstein, Libeskind, and Lott

Instructor: Charles Gabi

Instructor Contact Information: chaes.gabi@hccs.edu, 713-718-2435

Office location and hours: Northline Room 321; M Tu W Th 9-9:30, Tu Th 2-2:30 By Appointment

Course Description

MATH 1350: 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.

Prerequisites

MATH 1314 or the equivalent.

Course Goal

This course is intended for students who are planning on majoring in Elementary Education

Course Student Learning Outcomes (SLO):

1. Analyze information using Sets, Venn Diagrams, and Logic to make conclusions based on data.
2. Understand Relations and Functions.
3. Correctly choose and apply the four basic arithmetic operations with whole numbers, decimals, fractions and signed numbers to estimate and solve application problems.
4. Explain various types of number systems.

Learning Objectives

Students will:

- 1.1 understand sets, set notation and set operations
- 1.2 understand the fundamentals of logic
- 2.1 understand relations and functions
- 3.1 Perform the arithmetic of whole numbers, integers, rational numbers, decimals and real numbers
- 3.2 Understand prime and composite numbers
- 3.3 Define divisibility and perform the divisibility tests
- 3.4 Define and compute the least common multiple and the greatest common divisor of two integers
- 3.5 Convert a repeating decimal to rational form
- 4.1 Explain various types number systems

Course Policies

Exam policy:

There are three major exams and a comprehensive final exam. Each major exam will count 20%. The final exam will count 20%.

Homework policy: Homework will be online using MYMATHLAB. The course ID: **gabi93693**.
Homework will count 10% of your grade.

MyMathLab for MATH 1350:

You are REQUIRED to use MyMathLab to do online homework for this course. MyMathLab is available

on any computer with internet access. **Register TODAY!**

Once you register with MyMathLab, you can log in to MyMathLab anytime at www.coursecompass.com. When you log in to MyMathLab and click on the “Math for Elementary Teachers II” link, you can:

- Click the “DO HOMEWORK” link to access the online homework assignments
- Click the “GRADEBOOK” link to check your MyMathLab homework grades
- Click the “Chapter Contents” link to view an online version of the textbook (including exercises and solutions), as well as online video clips and PowerPoint presentations that accompany the textbook, and much more.

Graded MyMathLab Homework (required):

I will assign homework assignments to be completed online in MyMathLab. Log in to MyMathLab, click “MATH 1350 SPRING 2012 and click “DO HOMEWORK” to select and work on an assignment. For each exercise, you can choose “Help Me Solve This” for hints or “View an Example” for more help. You can also e-mail questions to me, view an appropriate section of the textbook and, in some cases, view a video clip or a PowerPoint presentation. A template on the left side of the screen enables you to create fractions, exponents, radicals, etc. for typing in your answers. **You can attempt each exercise until you get it right, and you do not have to complete an entire assignment in one sitting. You can continue to improve your grade on each assignment, up to 100%.** Each assignment has a due date by which it must be completed. Once a due date has passed for an assignment, you will no longer be able to access it.

DON'T PUT OFF THE MYMATHLAB ASSIGNMENTS!

Work on them soon after they are assigned, while the material is fresh in your mind!

Your MyMathLab average can have a major impact on your overall grade!

Make-up policy:

There will be no make-up exams or make-up quizzes in this class. If you miss one exam, it would be replaced with final exam score. If you miss the second exam, it will be zero and you should most likely drop the course. If you miss a quiz, then you will receive a ZERO for that quiz. You can drop up to 2 quizzes. \

\Final Examination:

The final examination is comprehensive. The problems cover all the material required in the course. The final exam is worth 25% of the course grade.

Grading policy:

Exam 1 15%
Exam 2 15%
Exam 3 15%
Class Project. 15%
Homework Avg. 15%
Final Exam 25%

Your final course grade is based on the following standard HCCS scale

Final	$90 \leq \text{Avg} \leq$	$80 \leq \text{Avg} <$	$70 \leq \text{Avg} <$	$60 \leq \text{Avg} <$	$\text{Avg} < 60$
Average	100	90	80	70	
Final Course	A	B	C	D	F
Grade					

Course Outline:

TEXT REFERENCE

Chapter 2 – **Numeration Systems and Sets** Sections: 2-1, 2-2, 2-3

The unit begins with an optional introduction to Logic. It continues with discussions of numeration systems (Hindu-Arabic, Egyptian, Roman), bases, sets and set notation, and set operations.

Chapter 3 – **Whole Numbers and Their Operations**

Sections: 3-1, 3-2, 3-3, 3-4, 3-5

This unit includes algorithms for whole number arithmetic and estimation.

Exam 1 Covers: Chapter 2 & 3

Chapter 4 – **Algebraic Thinking** Sections: 4-1, 4-2, 4-3

This chapter includes patterns, solving equations, word problems, and functions.

Chapter 5 – **Integers and Number Theory** Sections: 5-1, 5-2, 5-3, 5-4, 5-5

This chapter investigates integers and the operations of addition, subtraction, multiplication and division. It includes prime numbers and the Greatest Common Divisor and Least Common Multiple.

Exam 2 Covers: Chapter 4 & 5

Chapter 6 – **Rational Numbers as Fractions** Sections: 6-1, 6-2, 6-3

This chapter investigates rational numbers in fraction form. The four arithmetic operations are covered.

Chapter 7 – **Decimals and Real Numbers** Sections: 7-1, 7-2, 7-3, 7-4

This chapter introduces decimals as fractions and as an extension of the base-ten system. This unit includes operations on decimals, properties of decimals, and real numbers.

Chapter 8 – **Proportional Reasoning, Percents, and Applications**

Sections: 8-1, 8-2

This chapter introduces ratios, proportions, and percents.

Exam 3 covers: Chapter 6, 7, & 8

Final Exam is a comprehensive exam and covers chapter 2 – 8.

Institutional Policies

Withdrawal policy:

If your name is on the roll at the end of the term, you WILL receive a grade. If you wish to drop the class, then it is your responsibility to do that before the final drop date (**Official Record Day**). Neither you nor your instructor will be able to perform the drop after the final drop date. Please refer to the following notice before dropping the class.

NOTICE: Students who take a course three or more times will face significant tuition or fee increases at HCC and other Texas public colleges and universities. In addition, state law dictates that students are allowed a maximum of 6 course withdrawals during their entire college career. Starting in the fall of 2007, students with more than 6 drops will be required to pay additional fees. Prior to course withdrawal, you must confer with your professor or counselor about your study habits, homework, test-taking skills, attendance, course participation, and tutoring or other assistance that is available.

The final withdrawal deadline is at 4:30pm March 29, 2012. Remember to allow a 24-hour response time when communicating via email or telephone with professor and/or counselor. Requests received after the deadline will not be processed.

Academic Honesty:

At Houston Community College, academic integrity is expected of all its members and stakeholders. Academic dishonesty includes, but is not limited to, the willful attempt to misrepresent one's work, cheat, plagiarize, or impede other students' scholastic progress. Scholastic dishonesty is treated with the utmost seriousness by the instructor and the College. Please refer to the **Student Handbook** for specific information related to professional conduct and scholastic dishonesty.

AskOnline Tutoring

Students can get *free* assistance, 24 hours a day, 7 days a week, in Mathematics, English and many other subjects, at www.hccs.askonline.net. Typically, posted questions will be answered by an HCC tutor or faculty member within 24 hours (usually under 6 hours).

Americans with Disabilities Act (ADA): “Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at “**your college**” at the beginning of each semester. Faculty are authorized to provide only the accommodations requested by the Disability Support Services Office.” The preceding information concerning disabilities must appear in your syllabus.

Let's have a wonderful semester!!!

