Math 10A 55304 – Spring 2015	MTWTH 1:00 – 2:15
Mr. Ron Reimer	Room: FEM 4
Office: Fem 1F	Ext: 3355
Hours: Tu, W, 11:00 – 12:00, Th 10:00–11:00	

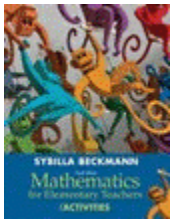
STRUCTURE AND CONCEPTS IN MATHEMATICS I

COURSE DESCRIPTION: This course is designed for prospective elementary school teachers. It will study problem solving strategies and skills, number sequences, set theory, ancient numeration systems, number theory, rational and irrational numbers, computation algorithms, and applications of mathematics.

OBJECTIVES:

A. Apply inductive and deductive reasoning to solve various types of problems using a variety of problem solving methods including, but not limited to, making a table, looking for a pattern, draw a picture, work backwards, guess and check and algebraic equations.
B. Use set theory and Venn diagrams to model information
C. Study ancient numeration systems and positional systems other than base ten in order to appreciate the historical foundation of mathematics and to understand the basis and merit of our base ten numeration system.
D. Learn and apply basic properties of number theory to solve problems.
E. Develop an understanding of the set of rational numbers as a subset of the reals and the algorithms used to perform operations on the rational numbers.
F. Understand the relationship between rational and irrational decimal numbers and the basis for the algorithms used to perform operations on decimal numbers.
G. Apply the concepts of decimals, ratios and proportions to solve application problems.

REQUIRED TEXT: Skills Review for Mathematics for Elementary Teachers with Activities, Fourth Edition



- Beckmann, Sybilla
- Textbook ISBN-10: 0321825721
- Textbook ISBN-13: 9780321825728

REQUIRED WEB ACCESS: My Math Lab

Course ID: reimer08672

January 19	M	Martin Luther King Jr Day
January 22	Th	Last day to drop without receiving a “W”
February 10	Tu	Last day to drop a full term course
February 13 – 16	F – M	Presidents Weekend
March 13	F	Final Exam, 1:00 – 2:15 pm, FEM 4

Attendence: In order to maintain continuity of subject matter regular attendance is imperative in any academic course. You are expected to attend all class sessions, arrive on time and stay for the entire session. If you have accumulated more than 2 absences on February 10, 2015 you will be dropped from this course. Do not be late to class. If you are not present when role is taken you will be marked absent, it is your responsibility to inform me if you arrive after role has been taken.

Homework: Homework is to be done on standard notebook paper. If using a spiral notebook please tear off the shredded edge. Homework will have two parts. The first part will consist of odd numbered problems for which the answers are available in the back of the book. It will be graded based on completeness. To be complete the problems need to be written down as they are given in the book (except word problems), all important steps must be shown (show work as I do in class) and the solution must be given. The second part will consist of even numbered problems. It is to be done on a separate piece of paper and will be graded based on completeness and accuracy as time allows. Homework will be 25% of your grade.

Exams: The midterm exams will make up the majority of your grade in this course. In most cases a midterm exam will follow the completion of a chapter in the textbook and cover the material discussed in that chapter only. If appropriate a midterm exam may cover more or less than one chapter in the text. Midterm exams will be 65% of your grade.

Final Exam: There will be a comprehensive final exam at the end of this course. If you have 2 or fewer absences and 2 or fewer tardy marks at the end of the semester and if it helps you I will replace your lowest midterm exam score with your final exam score. The final exam will be 10% of your grade. The final exam date for this course is Wednesday March 13, 2015, 1:00 – 2:15.

Catagory	Weight
Homework	25%
Exams	65%
Final Exam	10%

Overall Percentage	Grade
90<100	A
80<90	B
70<80	C
60<70	D
0<60	F

Example of how to calculate your grade. If your homework average is 90, exam average is 78 and your final exam is 80, then you can compute your grade as follows:

$$(.25)(90)+(.65)(78)+(.10)(80)=81.2$$

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Academic Dishonesty

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences ranging from a failing grade on a specific assignment to a failing grade in the course.