

SPRING 2005
MATHEMATICS 208 – CLASS NUMBER 1046
MODERN MATH FOR ELEMENTARY TEACHING – 3 UNITS
10:00–11:15 A.M. MONDAYS & WEDNESDAYS AT BELL TOWER 1494

Instructor

Robert Diaz

Office Hours

11:15–12:15 A.M. Mondays & Wednesdays, or by appointment at BTW 1145

Web page and Email

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Course Information

Current issues of modern math curriculum including abstract thinking and problem solving approaches to teaching. Content covers systems of numeration, nature of numbers and fundamental operations, relations and functions, properties of integers, rational and real numbers, and mathematical modeling. Problem solving strategies and geometric interpretations are stressed. Designed for students intending to teach in K–8. This course is not open to students who have credit for Calculus. GenEd: B3.

We will cover Chapters 1–9 of the textbook. In particular, we will discuss how to teach and what to teach in regards to elementary math education.

Course Structure

We will open each class session by discussing homework, past material, or other ideas that may be of interest. Then, we shall discuss the material at hand. Last, we may also engage in group problem solving.

Required Textbook

[1] Musser, Gary L., Burger, William F., & Peterson, Blake E. *Mathematics for Elementary Teachers: A Contemporary Approach*, sixth edition. New Jersey: John Wiley & Sons Inc., 2003.

Other Supplies

A set of colored pencils/pens, index cards and a stapler are strongly recommended. Please note that calculators of any sort are not necessary and thus are forbidden from being used in this course.

Free Tutoring Lab

The math tutoring center is now located at room 1512. It will be open 10:00 A.M.–7:00 P.M. Mondays–Thursdays, and also on Fridays (TBA).

Homework

The purpose of written homework in this course is to develop skills in understanding and communicating mathematics. It is not to give you busy work or drill. Don't think of your homework paper as a certificate proving that you have done the assignment. Think of it as an exercise in learning and in reporting what you have learned.

Homework will be assigned daily consisting of exercises from the text. It is your responsibility to have all of the problems correctly completed by the following class meeting. I may spot check homework on a random basis. Homework will be handed in as a packet on testing days. Show all your work and make sure that it is stapled together in chronological order. If I don't like what I see, then I will not grade your exam until you fix it (this includes legibility). No late homework will be accepted. To compensate for emergencies, the lowest homework grade will be dropped at the end of the semester.

Testing

This is your opportunity to demonstrate what you have mastered. I will be offering test taking and study strategies frequently. This will be better detailed as the course progresses. I may on occasion give an in class quiz which will count towards your assignments grade.

There will be six exams, a midterm and a final. The midterm will be cumulative (its date will be announced in class). There is a cumulative common final exam which will be held on Wednesday, May 18 at 10:30–12:30 A.M. There will not be any make up exams for any reason (excluding religious reasons).

Academic Dishonesty

Cheating will be dealt with as prescribed by the current CSUCI catalog.

Basis of Grading

- Grade Constitution:

Component	Percent
Final Examination	25%
Exams	40%
Midterm	10%
Assignments	25%

- Grades will be distributed as follows:

90–100%	A
80–89%	B
70–79%	C
60–69%	D
0–59%	F

I may also use +/- grades.

Students with Disabilities and Student Athletes

Present me with the proper paperwork and the appropriate accommodations will be made accordingly. It will be your responsibility to make necessary arrangements in advance.

Class Conduct

There should be no talking during the class discussion. Any student who persists in this will be asked to leave the class. Punctuality is expected. Arriving late is distracting to other students. On the rare occasion that you arrive late to class, enter the room quietly and find the seat nearest the door. Have cellular phones, pagers, music players deactivated at all times. Please treat all of your colleagues with dignity and respect at all times. If you have any other questions or concerns please inquire.

Course Objectives

We plan to cover the following topics:

- Introduction to Problem Solving.
- Sets, Whole Numbers and Numeration.
- Whole-Number Computation – Mental, Electronic and Written.
- Number Theory.
- Fractions.
- Decimal, Ratio, Proportion, and Percent.
- Integers.
- Rational Numbers and Real Numbers with an Introduction to Algebra.

Final Note

This syllabus is subject to further change as the semester progresses.