

## MATH 210: Basic Number Concepts, Fall 2012

Fall 2012    Class number 15673    MWF 10:00am–10:50pm    Room CR5208

**Prof. Vladislav Panferov**

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Office hours: (tentative: check webpage for updates) MTWTh 11-12noon, or by appointment.

**Course description:** This course is a *mathematics* course devoted to elementary school mathematics. The main goal is to enable you to gain a solid knowledge of arithmetic and number systems. Additional goals of the course are to teach you: (i) how to present the material in the simplest, clearest way, (ii) the appropriate sequential order for developing mathematical skills (iii) what elementary school students will find difficult and what errors they are likely to make, and (iv) how each topic helps advance the mathematical level of the students.

**MATH 210 WEBPAGE**    [www.csun.edu/~panferov/math210/](http://www.csun.edu/~panferov/math210/)

### Texts:

- Elementary Mathematics for Teachers, by Thomas Parker and Scott Baldridge
- Primary Mathematics textbooks (U.S. Edition) – Primary Mathematics 3A, 4A, 5A, 6A and Workbook 5A – available from the bookstore.

Publisher website:    [www.singaporemath.com](http://www.singaporemath.com).

These books will be useful when you begin your teaching career.

**List of Chapters Covered:** All sections except 1.7, part of 6.6, and part of 9.4.

- Chapter 1    Place Value and Models for Arithmetic
- Chapter 2    Mental Math and Word Problems
- Chapter 3    Algorithms
- Chapter 4    Prealgebra
- Chapter 5    Factors, Primes and Proofs
- Chapter 6    Fractions
- Chapter 7    Ratios, Percentages, and Rates
- Chapter 8    Negative Numbers and Integers
- Chapter 9    Decimals, Rationals, and Real Numbers

**Homework/Quizzes:** There is a Homework Set for each section in the text, and homework exercises will be assigned in class and/or announced on the webpage. Homework assignments will not be collected or graded, however selected problems from the homework will be included in quizzes (15 minutes, held in the beginning of class and announced in advance). Answers/solutions to selected problems will be made available on the webpage.

**Exams:** There will be two in-class midterms, tentatively scheduled for **Wednesday, October 3**, and **Monday, November 19** (possible changes in schedule to be announced). There will be a comprehensive final on **Tuesday, December 18, 11:30-1:30pm** (room to be announced). Please arrange your work schedule and exam dates for CSET or other exams so there is not a conflict.

**Calculators:** Calculators will *not* be used for this class, and will not be allowed for exams. A successful elementary school teacher should be confident and comfortable solving problems mentally and on paper. One of the goals of this course is to increase those facilities.

**Tutoring:** In addition to my office hours, free tutoring will be available for Math 210/310 students in the Math Tutoring Center LO 1319 (Live Oak, 3rd floor) The tutoring center opens the second week of classes. Days/times are Monday through Thursday 10-5:30pm and Friday 10-3pm (check with the tutoring center for the times of availability of Math 210 tutors!).

**Grading:** I will use +/- grading system, and will compute the grades as follows:

2 in-class exams	20% each
quizzes	20%
class attendance/participation	5%
final exam	35%

The percentages are to be translated into letter grades using the following scale: 90-100% A; 80-89% B, 70-79% C, 60-69% D, 0-59% F. The cutoff numbers for the grades may be modified (in the direction of decreasing only!) at the end of the term, based on the overall performance of the class.