

Prepared by Hayden Harker

**Text Information:** There are two texts used for math 211, 212, and 213. *Mathematics for Elementary Teachers, 8th Ed.* by Musser, Burger, Peterson, and *Knowing and Teaching Elementary Mathematics* by Liping Ma.

**Calculator:** A scientific calculator is highly recommended, and is the only type of calculator allowed on tests. I often have worksheets or portions of tests which prohibit a use of the calculator. The TI-30X IIS is recommended, but many other types are just as good.

**Basic course structure:** There are a few primary tools instructors use to evaluate their students:

- Homework problems from the text or ones written by the instructor.
- Written assignments based on readings in Liping Ma's book. The introduction and chapter 1 should be covered in one assignment and chapter 2 should be covered in a second assignment.
- Two midterm exams and a final exam.

Outside of these assignments, instructors have chosen to give worksheets (Dev has used a weekly schedule of these) as well as in-class presentations (I have had students present problems or topics from the text, 5-10 minutes for each student).

Additionally, I have taken attendance and deducted half a point from the student's final grade for each unexcused absence. It helped to convince my students that mandatory attendance is being enforced.

**Curriculum:** In the past, this course covered Chapters 1 through 5 of the textbook and Topics 1 and 2 at the end of the book. Here is a rough breakdown of the importance of the different sections:

- Sections that should be covered thoroughly: 1.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.2, 4.3, and 5.1. In particular, be sure to leave plenty of time for sections 4.2 and 4.3, algorithms for whole-number operations in base 10 and other bases.
- Sections that should be covered but it's up to the instructor to determine how much time to devote to it and/or whether to integrate the material throughout the course: 1.2, 2.1, 4.1, and Topic 1 (Logic).
- Sections that can be covered at the instructor's discretion if the time is available: 2.4, 5.2, and Topic 2 (Clock Arithmetic).

**Grade:** The last time I taught this course I used the following weights for each component of the course. The "Other work" category included worksheets, oral presentations, and the written assignments.

Homework	20%
Other work	10%
Midterms	40%
Final Exam	30%

**Outside help:** The last thing to note is that many students choose to use the free tutoring and help available through the College of Education tutoring services. You students will NOT be able to get decent help in the Teaching and Learning Center as their tutors have not taken math 211.