

Math/Education 46.27
Mathematics for Elementary Education
De Anza College
Spring 2015

Instructor: Dr. Jim Mailhot (pronounced MY-it)
Classroom: E33
Meeting Times: TTh 4:00 – 6:15pm
e-Mail: mailhotjames@fhda.edu
Office: E35b
Office Hours: MTWTh 11:00am – Noon, or by appointment

Textbook: *Mathematical Reasoning for Elementary Teachers (6th edition)* by Calvin T. Long and Duane W. DeTemple.

Student Learning Outcomes:

- Analyze mathematical problems from elementary mathematics, apply problem solving techniques using a variety of methods, solve these problems individually and in groups, and communicate results mathematically through a variety of forms.
- Utilize ideas from number theory, distinguish types and properties of numbers, and employ mathematical rules for operating on rational and irrational numbers using verbal, symbolic, geometric, and numerical methods.
- Examine and evaluate myths and realities about the contemporary discipline of mathematics and its practitioners.
- Identify and discuss developments in the history of elementary mathematics from a variety of cultures.

Grading: Your grade in this course will be based on the following:

Mathematical Autobiography:	5%
Journal:	10%
Group Project:	10%
Homework:	20%
Quizzes and In-Class Assignments:	10%
2 Midterms:	15% each
Final Exam:	15%

Approximate grade breakdowns are:

90% and above: A or A-
80 – 90%: B+, B or B-
70 – 80%: C+ or C
60 – 70%: D
under 60%: F

Mathematical Autobiography: Due Tuesday, October 1. See page 3 for a detailed description.

Journal: Due Thursday, June 18. See page 3 for a detailed description.

Group Project: Details will be given in class.

Homework: A list of homework problems for the quarter will be e-mailed to students. Homework will be collected *at the beginning* of class every Thursday, from the sections we covered in class the previous week. Late homework will not be accepted. Homework assignments should be neat and legible, stapled together, without any “fringes”. Homework will be graded for completeness, not accuracy.

Quizzes and In-Class Assignments: These will be given on a random basis. There will be no make-ups. Your lowest score will be dropped.

Exams: There will be two in-class midterms and a final exam. Calculators are *not* allowed on exams. Make-up exams will not be given. You *must* take the final exam to pass the course.

Cheating Policy: Any student caught cheating will receive 0 points on that assignment. The same holds for any student who allows another student to cheat.

Attendance Policy: You are expected to be on time and attend all classes. Roll will be taken at the beginning of every class period. If you decide that you no longer want to be enrolled in the course, it is *your* responsibility to drop the course. Failure to do so may result in an F for the course.

Getting Help: In addition to coming to office hours, you can get help at the *Math, Science & Technology Resource Center (MSTRC)* in S43. They are open M-Th 8:30am – 6:30pm and F 8:30am – 12:30pm.

Be Courteous to your fellow students. Please make sure your cell phones, iPods and other electronic devices are turned off. Anyone who repeatedly disrupts the class may be asked to leave.

College Policies:

- Students *can not* take the same class more than three times for a grade, *including W*.
- Late adds and late drops *will not* be processed.

Important Dates:

Saturday, April 18 – Last day to add

Sunday, April 19 – Last day to drop with no record of grade

Friday, May 29 – Last day to drop with a “W”

Thursday, June 18 – Last regular class day

Tuesday, June 23 – **Final Exam (4:00 – 6:00pm)**

Mathematical Autobiography

due Thursday, April 16

Write a “mathematical autobiography.” Think about experiences you have had learning and doing mathematics, both in and out of school. Include at least one successful and one not-so-successful episode. You might write about teachers, particular math problems, courses, or real-life applications of mathematics that have affected you and of which you have strong recollections. Include the good, the bad and the ugly, and be as entertaining as you like. This will give me an opportunity to get to know you a little better; it should also give you an opportunity to reflect on your own experiences with mathematics.

Many of us have had particularly negative experiences with mathematics and especially mathematics teaching. Perhaps you can remember a specific incident which has impacted your learning and study of mathematics since that time. Or your experiences might have been primarily positive and supportive: success in a difficult class, an enjoyment in doing mathematics. Write about those experiences that have been most important to you. Be specific and describe the circumstances and the people involved. Think about the impact of your experiences - how do they still affect you today?

You might also want to think about how you actually use mathematical thinking in everyday life - diverse mathematical skills are used in building or designing or in doing craft work, estimating money or amounts, planning complex activities, collecting and organizing data. These activities and others require good intuitions and understandings about geometric and quantitative knowledge. Write about activities you do which require this kind of mathematical insight.

Please also include a statement as to when you took math most recently, which class it was, where you took the class, and how well you did.

You must write at least 500 words. (You can check the number of words using the “word count” command in most word processors) For full credit write a little TOO much! (These will not be read to the class! Write about anything you feel comfortable having the teacher read.)

Do not simply list the classes you have taken and the grades received. I am much more interested in whether you were affected by the class, the teacher and the experience, and in what ways. Describe in detail!

Journal

due Thursday, June 18

Write a journal entry for each class. It should be one long or several short paragraphs detailing your reflections on that day’s class. What struck you as interesting, useful, helpful, unhelpful, puzzling, etc.? How are you feeling about the class? What are your expectations of the class and your own participation? Imagine you are writing to your future self and mention those things most memorable.

Keep your journal as a single electronic file, formatted as follows:

Student Name *(Keep your name at the top.)*

Thursday, April 9 *(Put more recent journal entries at the top.)*
One or more paragraphs here...

Tuesday, April 7 *(Older journal entries go at the bottom.)*
One or more paragraphs here...