### **Instructor Information**

Name: Salvador Guerrero E-mail: guerrerosalvador@fhda.edu

Office Hours: Tuesday and Thursday 12:25 – 1:25pm in E37

### **Course Information**

Title: Mathematics for Elementary Education

Location and Time: MLC108 on Tuesday/Thursday 1:30 - 3:45pm

Website: deanza.instructure.com

#### **Materials:**

Text (required): Mathematical Reasoning for Elementary Teachers (6<sup>th</sup> edition) by Long and DeTemple. You will need it on the first day of class.

#### Requisites:

Prerequisite: Mathematics 114 or equivalent (with a grade of C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

**Description:** Designed for prospective elementary and middle school teachers. An introduction to the discipline of mathematics as the use of logical, quantitative, and spatial reasoning in the abstraction, modeling, and problem solving of real-world situations. The main topics in the course include the origins of mathematics, mathematical reasoning and problem solving strategies, theory of sets, integers and integral number theory, rational numbers and proportion, real numbers and decimal notation, and measurement. Throughout the course students will experience the learning of mathematics in a way that models how they can create an active learning environment for their future students.

**Evaluation**: Your course grade will be determined as follows:

Mathematical Autobiography 5%

Essay 10%

Journal 5%

Group Project 10%

Classwork 5%

Homework 15%

2 Midterm Exams 15% each

Final exam 20%

Mathematical Autobiography: a detailed description will be provided on the course website.

**Essay:** you will be asked to write an essay, details will be on the course website.

**Journal:** you will asked to keep a journal of each class meeting, details will be on the course website.

**Group Project:** you will be asked to work on a project in a group and to give a short presentation, details will be provided on the course website.

**Classwork:** Classwork may consist of quizzes, writing assignments, or group work. You cannot make up any classwork missed, but your lowest score will be dropped.

**Homework:** Homework will be assigned at the end of each meeting and will be due the following Tuesday. Homework will be graded for completion, not necessarily correctness. In order to receive full credit, the work you turn in should be neat and legible on clean paper with no frayed edges.

Exams: There will be 2 midterm exams. There will be no make-up exams given under any circumstances.

**Final Exam:** A mandatory two hour comprehensive final exam will be administered on Tuesday December 10, 2019 from 1:45-3:45pm. The final must be taken at the scheduled time. Any student not taking the final will receive a grade of F.

### Letter grades will be assigned as follows:

If your overall score is at least \_\_\_\_, then your letter grade is \_\_\_\_

98%: A+ 92%: A 90%: A- 88%: B+ 82%: B

80%: B- 78%: C+ 70%: C 60%: D

A student earning less than 60% will receive a grade of F.

#### **Policies and Resources**

**Academic Integrity:** Cheating, plagiarism and other forms of academic dishonesty will not be tolerated. Students are expected to be honest and ethical at all times in their pursuit of academic goals. A Student caught cheating, plagiarizing, or otherwise violating the rules for an assignment will receive a grade of 0 on the assignment in question; repeat offenders will receive a grade of F in the course. In either case, a student may be referred to the Dean for academic discipline. No grade of 0 due to academic dishonesty will be dropped or replaced.

Classroom Courtesy: All students are entitled to learn in an environment free from any distraction or disruptions. Your actions towards the instructor and towards your fellow classmates should be respectful at all times. Students who are disrespectful or disruptive can and will be asked to leave. If a student does not leave after being asked, they will be dropped from the course and referred to the Dean. I expect you to arrive to class on time and stay until class is dismissed. Cell phones and other electronic devices must be turned off while class is in session. Audio/Video recordings of lecture are prohibited.

**Attendance:** Attendance is required and you are responsible for all material covered in class. If you miss a class, contact a fellow student to find out what was covered. Also:

- Students who remain enrolled in a class beyond the published withdrawal deadline, as stated in the class schedule, will receive an evaluative letter grade in this class.
- It is the student's responsibility to add, drop or withdraw from classes before the deadlines stated in the college catalog. You should contact me before withdrawing.
- It is at my discretion to withdraw a student after the add/drop deadline due to excessive absences.

**Accommodation of Disability:** Students that have any disability, either permanent or temporary, which might affect their ability to perform in this class should contact me immediately. For information or questions about eligibility, support services or accommodations to disability (physical or learning disability) see the contacts below:

- Disability Support Services (DSS): Student Services Building (408)864-8753
- Educational Diagnostic Center (EDC): Learning Center West 110; (408)864-8839. Special Education Division: (408)864-8407; <a href="http://www.deanza.edu/specialed">http://www.deanza.edu/specialed</a>

**English as a Second Language:** ESL students may use a translator and/or dictionary (print only, to be approved by instructor) during exams and quizzes. Please visit the college's listening and speaking center for further resources <a href="http://www.deanza.edu/studentsuccess/lsc/">http://www.deanza.edu/studentsuccess/lsc/</a>

## **Student Learning Outcome(s):**

- \*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.