

Math 112-001 Fall 2005 Semester
Math for Elementary and Middle School Teachers II
Tuesday/Thursday 3:00-4:15 PM
Vocational Building V119
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1. **Course Description:** Math for Elementary and Middle School Teachers II (3).
The extension of the number system from the integers to the rationals, extension of the number system from the rationals to the reals, operations and properties within these systems, and geometry. Prerequisite: adequate score on Math Placement test, or grade of “C” or higher in Math 111.
2. **Textbook:** Mathematics for Teachers, An Interactive Approach for Grades K-8, Third Edition, Thomas Sonnabend, 2004, Brooks Cole Publishers.
3. **Support Services: The Learning Center and UNM VC Library-**You can obtain tutoring at no expense from the Learning Center (505.925.8900). In addition, both the Learning Center and the Library have graphing calculators that you may check out and use in the centers while you study. Computers Labs are available in the Learning Center and V-123 for additional practice. Both the Learning Center and the Library have lecture DVD’s that can be used for to view lectures on all the various sections in the textbook.
4. **Attendance Policy:** **Attendance** is mandatory, and if you have two or more unexcused absences, you MAY be dropped from the course (which will result in a W/NC for the course). However, it is YOUR responsibility to drop the course if you decide to stop attending classes. If you simply stop attending class and a drop is not initiated by someone, you will receive an F.
5. **Exams:** If you will not be able to take an exam on the day it is scheduled, it is your responsibility to contact your instructor before the exam is missed. Make up tests will only be given in special circumstances. If you miss an exam and do not contact your instructor within 48 hours, you may be dropped from the course.
6. **Homework:** Your homework is one of your most important efforts in this class; completion of all homework is crucial to you actually learning the material that will be on the quizzes and exams. Expect to do 2-3 hours of homework for every hour of class meeting time (that calculates to a minimum of 6-9 hours per week). Homework must be turned in on the day of the related exam in a folder similar to the one with which you have been provided.
7. **Classwork:** We will be doing a variety of hands-on in-class activities. Credit for these activities will be given only if you are present on the day we do the activity.
8. **Student Behavior:** Students are expected to behave in a courteous and respectful manner towards the instructor and their fellow students; this helps create a positive and supportive learning atmosphere in the classroom. Please be on time for all classes, turn off your cell-phone and refrain from chatting (unless you are working in groups), leaving the classroom in the middle of class or doing any other activity that could be disruptive to the class.
9. **Disability Statement:** We will accommodate students with documented disabilities in this class. During the first two weeks of the semester, those students should take the initiative to inform the instructor of their particular needs.
10. **Grade Related Topics:**
 - a. Complete assignments on time.
 - b. Notify the instructor when you will be absent.
 - c. Use the support services provided by the Learning Center.
 - d. Students with special needs should notify the instructor as soon as possible to ensure that needs are met in a timely manner.

11. **Grading Policy:** Grades will be assigned as follows:

Grades:	A=90-100%	
	B=80-89%	
	C=70-79%	
	D=60-69%	
	F=<60%	
Weight:	3 Exams	35% of Grade
	Homework/Classwork/Assignments	35% of Grade
	Final Exam	30% of Grade

A minimum grade of 60% must be earned on the final exam in order to receive a grade of C or better for this course, regardless of what the ending course average is.

12. **Major Course Objectives:**

- The student will extend his/her knowledge of the four basic operations (addition, subtractions, multiplication and division) from the integers to the rationals to real numbers.
- The student will review the closure property, identities, and inverses and learn new properties.
- The student will consider intuitively those parts of geometry which do not relate to measurement.

13. **Study Suggestions:**

- Before coming to class, read the section to be covered.
- Read each section before doing the homework; work the example problems and practice problems in the chapter.
- Have all assignments completed and ready for review the following class after the assignment is made. This will ensure that you are well prepared for exams and quizzes and be able to ask for assistance on troublesome material.
- Keep an organized notebook (3-ring binder recommended) separated by chapter to include all notes, journal entries, handouts, and returned/graded papers, etc.
- Present one project in written and oral form.
- Attend class regularly.
- Explain how you do problems to other members in the class.
- Get a tutor at the Learning Center or see the instructor when you need help.
- Form a study group with your classmates; trade telephone numbers.
- Stay current on the assignments and take exams on the date scheduled.
- Make arrangements with the instructor to make up any exam that you miss due to an emergency.

Other: If you have problems with your work, please make arrangements to see your instructor first if at all possible. If your schedule and the instructor's schedule do not mesh, please be sure to see a tutor if you need help. Do not get behind. Getting behind in a math class, especially in a summer semester, is the most detrimental thing you can do with regard to succeeding in the course. **When you do your homework, make sure you attempt each problem without looking at a solutions manual or an example in the book when you work the problem. If you have problems, look back at the examples, but NEVER look at the examples as you are doing the problems. You will not have these examples to rely on during exams and getting used to using them while doing your homework is not conducive to learning the material. After putting in an appropriate amount of study (as listed above) if you still have problems with any part of the work, please contact your instructor for help.**

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<u>Week</u>	<u>Date</u>	<u>Sections covered</u>
1	8/23	Chapter 6 – Rational Numbers as Fractions
	8/25	Chapter 6 (continued)
2	8/30	Chapter 6 (continued)
	9/1	Chapter 6 (continued)
3	9/6	Chapter 6 (continued)
	9/8	Chapter 6 (continued)
4	9/13	Exam Chapter 6
	9/15	Chapter 7-Decimals, Percents and Real Numbers
5	9/20	Chapter 7 (continued)
	9/22	Chapter 7 (continued)
6	9/27	Chapter 7 (continued)
	9/29	Chapter 7 (continued)
7	10/4	Chapter 7 (continued)
	10/6	Exam Chapter 7
8	10/11	Chapter 8 – Introductory Geometry
	10/13	Fall Break
9	10/18	Chapter 8 (continued)
	10/20	Chapter 8 (continued)
10	10/25	Chapter 8 (continued)
	10/27	Chapter 8 (continued)
11	11/1	Chapter 8 (continued)
	11/3	Exam Chapter 8
12	11/8	Chapter 9 – Congruence, Symmetry, and Similarity
	11/10	Chapter 9 (continued)
13	11/15	Chapter 9 (continued)
	11/17	Chapter 9 (continued)
14	11/22	Chapter 9 (continued)
	11/24	Thanksgiving Break
15	11/29	Chapter 9 (continued)
	12/1	Chapter 9 (continued)
16	12/6	Exam Chapter 9
	12/8	Review for Final
Finals Week	12/15	3:00-5:00 In our regular classroom