

MATH 213 SYLLABUS: SPRING 2009  
 FOUNDATIONS OF ELEMENTARY MATHEMATICS III  
 Dr. Cheryl Beaver

**FINAL EXAM MONDAY JUNE 8, 2009 8 – 9:50 AM**

CLASS MEETS

MWF\*: 9:00 – 9:50 a.m. & T: 8:00 - 9:50 a.m. / MNB 104 & \*MNB 110

Office: MNB 123

Phone: 503-838-8404

Email: [beaverc@wou.edu](mailto:beaverc@wou.edu)

Web Page: [www.wou.edu/~beaverc](http://www.wou.edu/~beaverc)

Time	Mon	Tue	Wed	Thu	Fri
8:00		213 Lab			
9:00	213		213		213
10:00					Office Hour
11:00	366	366	366		366
12:00	396		396		
1:00		Office Hours			
2:00					
3:00	Office Hour		Office Hour		

Please feel free to drop by my office during my office hours for help. You do not need to make an appointment to come to office hours. At times other than my listed office hours you are welcome and encouraged to call or email me with questions about the course. If you have direct scheduling conflicts with my office hours and would like further help, please let me know.

**COURSE PREREQUISITE**

- Math 211 and 212 each with a grade of C- or better.

**REQUIRED COURSE MATERIALS (for the 211-212-213 series)**

- Textbook, *Mathematics for Elementary Teachers: A Conceptual Approach*, 7th Edition, Bennett and Nelson
- Activity book, *Mathematics for Elementary Teachers: An Activity Approach*, 7th Edition, Bennett, Burton and Nelson
- Manipulative Kit, *Mathematics for Elementary Teachers*, 7th Edition, Bennett and Nelson
- A TI-84 scientific calculator is highly recommended for the 211-212-213 course series. Please see me if you are purchasing a new calculator. Cell phones MAY NOT be used for calculators during exams.

Other Course Materials

- A large 3 ring binder
- Protractor
- At least six dividers that can be labeled
- Compass

## **CLASS WEB PAGE**

There will be a link for the Math 213 webpage (where many course items will be posted) on my home page: <http://www.wou.edu/~beaverc>

In particular, the class webpage will include the class schedule, homework assignments and due dates.

## **COURSE STRUCTURE**

All classes will be a mix of an interactive lecture, hands-on activities and problem solving sessions.

- Please bring your text and your manipulative kit to class every day.
- Please bring your activity book to class as noted on the class schedule & assignments webpage.

## **COURSE GOALS, CONTENT & OUTCOMES**

This course is designed for students planning to be elementary or middle school teachers. The work in this course will include learning and reviewing the mathematics you learned before and learning how students, particularly children, learn mathematics. For many activities and topics you will be exploring the material from the perspective of the students you will be later teaching. It is expected that you can do basic operations with numbers. Our goals for this class are that you should:

- Gain deeper and clearer understanding of basic mathematical concepts
- Gain deeper and clearer understanding of how children learn mathematics
- Experience hands-on activities to facilitate the above goals
- Be expected to write about mathematics
- Be exposed to resources that help connect the concepts you are learning now to your future as teachers.

In specific we will look at: Plane Figures, Polygons and Tessellations, Space Figures, Symmetric Figures, Systems of Measurement, Area and Perimeter, Volume and Surface Area, Congruence and Constructions, Congruence Mappings and Similarity Mappings.

## **ATTENDANCE & VOLUNTEERING**

Daily attendance is required for your success in this course. If you miss class it is your responsibility to ask a classmate for notes on the material that you have missed. Volunteers will be asked to share with the class; your willing participation is essential to the class.

## **READING THE TEXT**

You will be expected to carefully and completely read each (assigned) section in your textbook. It is a good idea to briefly read the assigned section before class and then to carefully read the section before you start your homework. Most students find it very helpful to write out the examples in the text as well as to just read the examples. If you carefully write out the examples and work out all of the steps you will find that you have a deeper understanding of the material. Writing out the examples is also a successful technique for pinpointing exactly where you become confused on a problem that you do not understand. I encourage you to ask questions about the examples presented in the book. You may ask questions about the text both in class and during office hours.

## **HOMEWORK**

There will be a variety of homework assignments given in this course. Assignments will be posted on your class webpage. Assignments that will be turned in for direct grading will be denoted by (TI) for "Turn In" on the web page. Your assignments for this class will include but not be limited to the following types.

### **Assignments**

Textbook questions  
Activity book questions  
Vocabulary Homework  
B/N Online Learning Center Applets  
Geometer's Sketchpad Activities  
213 Skills Test

## **MATH 213 HOMEWORK & HOMEWORK QUIZZES**

### **Recommended Homework Questions**

These will generally be odd-numbered textbook questions with short answers available in the back of the book and possibly activity book questions. You are expected to work through these questions in an informal fashion and check that you are obtaining the correct answers. You are not required to neatly write up the solutions to these questions.

### **Required Homework Questions**

These will generally be even-numbered textbook and activity book questions. You are expected to carefully write up the solutions to these questions. These questions will be the basis for your quiz and you will want to refer back to them during quiz time.

### **Vocabulary Homework**

Throughout the term you will be asked to write out terms and sketch simple pictures for the main vocabulary terms and formulas in Chapters 9, 10 and 11 of our text. Vocabulary questions will be included in the quizzes.

### **Required Homework Quiz**

Every Tuesday, weeks 2, 3, 6, 8 ; Monday of weeks 4, 7, 9, 10; and Wednesday of week 5, during ten minutes of class there will be a short homework quiz. These quizzes will proceed as follows:

- Each quiz will list 2-4 questions from your recently assigned **REQUIRED** homework and 2-4 vocabulary definitions.
- You will be asked to write down what you have written in your homework in your COURSE NOTEBOOK for those questions.
- Work must be shown for credit. If you don't have something written out in your notebook, you will not have something to write on the quiz.
- You **MAY NOT** use any of the following during your homework quizzes:
  - Your textbook or your activity book
  - Your calculator or your manipulative kit
- Missed quizzes may **NOT** be made up. Your lowest quiz grade will be dropped.

Completing your homework in a timely fashion will be integral to your success in this course. I suggest you set up a homework and reading schedule for yourself and follow it carefully. Do NOT wait until the day before an assignment is due to begin working on it or you will get behind. You will find that if you do not do all of your homework you will not succeed in learning the material covered in this course.

### **Online Homework Questions**

The Bennett/Nelson Online Learning Center will be linked to your Math 213 webpage. Each chapter in the book has a corresponding interactive mathematics applet in the Online Learning Center. At appropriate times during the term, you will be asked to explore the applets and write a brief summary of your experience.

### **Geometer's Sketchpad**

GSP is a fun and useful software application that is especially effective for working with geometric concepts. You will do several GSP labs this term – generally on Fridays when we are in the computer lab. Detailed instructions will be provided.

### **TIME SPENT ON MATH 213 OUTSIDE OF CLASS**

It is a standard academic rule of thumb to spend two to three hours out of class for every hour in class while studying mathematics or science. This is a 200 level mathematics course and the expectation is that you will spend 8 to 12 hours per week outside of class studying and working on the content of Math 213. Set up a regular schedule for yourself and stick with it. Success in mathematics is often directly linked to effort and regular practice.

### **COURSE NOTEBOOK**

File all of your course materials in your course notebook. For your notebook please use a large 3 ring binder divided into at least the following, clearly labeled, sections. You will need a well-organized notebook for your weekly homework quizzes and while studying for class exams.

1. Course Paperwork (syllabus, schedule notes, etc.)
2. Class Notes and Activities
3. Homework (you may wish to divide this in several sections including On-line and GSP)
4. Vocabulary
5. Homework Quizzes and Exams

### **EXAMS AND THE FINAL EXAM**

There will be three “midterm” exams and final exam in this course. The midterm exams will be cumulative but will emphasize the recently covered material. The final exam will be cumulative. The midterm exams will be given on Tuesday during weeks 4, 7, and 10 of the term.

**The final exam will be offered at a group time on Monday of finals week: Monday June 8<sup>th</sup>, 2009: 8 – 9:50 am.**

#### **Math 213: Special Offer**

If your overall percent in the course after Exam 3 is 95% or higher, you do not need to take the final exam. Your Math 213 course grade will be an A.

Makeup exams will only be available in the case of documented emergency or a documented university sanctioned absence from class (examples: student teaching in the education program, university representation in a music presentation, etc.). Prior notification and my agreement are required. My voice mail and email are always on; there is no excuse for not contacting me prior to missing an exam.

### LATE POLICY

Homework is due by 4:30 pm on the due date. There will be a 25% deduction per class day (MWRf) for homework received after this time. No notification is required to turn work in late. It is reasonable to expect that each of us may turn in one or two items a term one or two class days late. This should not have a large impact on your overall course grade. Excessively turning in work late will have a very strong impact on your overall course grade.

### EXCUSED LATE WORK

Excused late work will only be accepted in the case of documented emergency or a documented university sanctioned absence from class (examples: student teaching in the education program, university representation in a music presentation, etc.). Prior notification and my agreement are required.

### COURSE GRADING

<u>CLASS ITEM</u>	<u>COURSE PERCENT</u>
Homework Quizzes with Vocabulary	15%
Graded HW, GSP's, Daily attendance and Volunteering	35%
Three 10% Midterm Exams	30%
Final Exam	20%
Pass Math 213 Skills Test	Required
<b>TOTAL PERCENT</b>	<b>100%</b>

### STANDARD GRADING SCALE FOR THIS COURSE

% Range	Grade	% Range	Grade	% Range	Grade
93 – 100	A	80 – 82	B-	60 – 69	D
90 – 92	A-	77 – 79	C+	Below 60	F
87 – 89	B+	73 – 76	C		
83 – 86	B	70 – 72	C-		

### NON ACADEMIC ELECTRONIC ITEMS (INCLUDING CELL PHONES)

*Cell phones and non-academic electronic items will be referred to as “electronic items.”*

The university classroom is an electronic item free area. Using any electronic device for text messaging, receiving or sending a message or listening to any recording during a university class is completely inappropriate classroom behavior.<sup>1</sup> Electronic items should remain **turned**

<sup>1</sup> If you are in an emergency situation in which you need to have your cell phone on quiet; please speak to me about it before class.

***completely off*** and should remain ***completely out of sight at all times*** throughout all of your classes. “Quiet” or “vibrate” settings are not turned completely off. Electronic items ***may not*** be used for any reason during class or during exams and quizzes. Electronic item use during exams or quizzes will be treated as cheating and you will receive a zero score on that exam or quiz.

### **APPROPRIATE CLASSROOM BEHAVIOR**

You are ultimately responsible for your own attendance and performance. Disruptive classroom behavior of any kind, such as talking during lecture or consistently coming to class late etc., is not appropriate. Proscribed Conduct for all students is described in the University Catalog. In particular for this course any student found cheating on an exam or copying from another student's exam paper will receive a zero score on that exam.

### **LEARNING DISABILITIES**

If you have a documented learning disability, please talk to me during the first few days of class, I will be more than happy to accommodate you in any way that I can. If you have a documented disability which requires any academic accommodations, you must go to the Office of Disability Services (ODS) for appropriate coordination of your accommodations. You can drop by APSC 405 or contact ODS at (503) 838-8250 (V,TTY) to schedule an appointment.

### **INCOMPLETE POLICY**

An Incomplete can only be granted for a student who is passing a class and has a documented emergency that prevents them from completing the course.