Math 213: Foundations of Elementary Mathematics III
Spring 2010
Western Oregon University

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Spring Schedule and Office Hours

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8-8:50					
9-9:50					
10-10:50	Office Hour	213 (MNB 104)		Office Hour	Usually not
11-11:50	213 (MNB 104)		213 (MNB 104)	213 (MNB 110)	on campus
12-12:50	Lunch	Office Hour	Lunch	Lunch	
1-1:50	Office Hour		Office Hour		
2:00-3:50	394 (MNB 103)		394 (MNB 103)		

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

· Textbook, *Mathematics for Elementary Teachers: A Conceptual Approach*, 8th edition, Bennett and Nelson
· Activity Book, *Mathematics for Elementary Teachers: An Activity Approach,* 8th edition, Bennett, Burton and Nelson
· Manipulative Kit, *Mathematics for Elementary Teachers*, 8th edition
· A scientific calculator with at least the capabilities of a T. I. – 83 is required for the 211-213-213 course series. A T. I. – 83 is highly recommended.
· Protractor · Compass

Other Materials

· 3 ring binder · Dividers that can be labeled
· (Optional) *Math Education Software Bundle,* Key College Publishing, ISBN: 193019045X

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/~beisiegm

In particular, the class webpage: "Math 213: Assignments & Activities" will be linked to your Math 213 webpage and 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 the specific class days that we will be using those materials. Please see the class schedule & assignments webpage for those details.

· Please bring your activity book to class as noted on the class schedule & assignments webpage.

COURSE CONTENT

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 problem solving and the use of the Oregon Scoring Guide
· 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 particular we will look at the following mathematical concepts: 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 / MISSED CLASS / H1N1 ISSUES

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.

Exams can only be made up or taken in advance with a documented university sanctioned absence from class (choir, sports, etc.) or possibly for a serious documented emergency. Ordinary illness (such as a cold) or any non-university sanctioned absence from class does not count as a documented emergency, even if you have a note from a doctor.

H1N1 Exceptions: If you have mild flu symptoms, the CDC and campus health officials urge you to stay home (or in your residence hall room) to avoid making others sick. You should remain at home or in your residence hall room, except to get medical care or for other necessities, until your fever has been gone for at least 24 hours. Please see the WOU home page for links to more information. Please email your instructors as soon as you can to obtain assignments and missed class work. In the case of any (H1N1) campus closures, the class web pages and email lists will be used to continue to communicate with all students. If campus closes, be sure to check your email account and the Math 212 webpage for posted class assignments.

YOUR STUDENT WOU EMAIL ACCOUNT

All official university and class business and announcements will be directed to your WOU student email account. If you do not regularly check this account, please log in to this account and FORWARD your WOU email to an account that you do regularly access. Use the Options > Mail > Local Account > Forwarding path.

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 assignments webpage. These assignments will include but not be limited to the following.

Assignment Source	**Assessment Method**
BBN Online Learning Center Applets	Direct grading
Scavenger Hunt	Direct grading
Conceptual Approach textbook questions	Spot check direct grading
Activity Approach Follow Up questions	Direct grading with Follow-Up Rubric
Vocabulary assignments	Direct grading
Lab work assignments	Direct grading or check-off
Geometer's Sketchpad assignments	Direct grading
213 Skills Test	Direct grading

MATH 213 HOMEWORK

Online Homework Questions

The Bennett/Burton/Nelson Online Learning Centers will be linked to your Math 212 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 for Chapters 9, 10 and 11 and write a brief summary of your experience. Due dates will be posted on your 213 schedule and assignments webpage.

Scavenger Hunt

Each student will be responsible for one Scavenger Hunt topic; see the handout "Scavenger Hunt Directions."

Text Homework Questions

These are assigned from your *Conceptual Approach* hard cover text. See your course schedule for due dates. Although you are required to turn in all of the questions, only a few will be directly graded. The graded question numbers will not be announced in advance.

Activity—Follow Up Homework Questions
These are assigned from your *Activity Approach Follow-Up* questions and will be directly graded using the following rubric. Each *Activity-Follow Up* question is worth 10 points. The points will be allocated based on the following rubric.

Category Description	**Points**
Understanding: Understanding of the problem is demonstrated. A reasonable strategy for solving the problem is applied.	**2**
Completeness: Each part of the question is answered. All sketches or diagrams asked for in the problem are present. All steps taken to solve the problem are given with rationale for them and enough detail for another student to understand. All key calculations are shown.	**3**
Clarity: The solution is easy to read and follow. The answer is clearly identifiable. Good formatting, spelling, grammar, and typing or handwriting is used. Sketches or diagrams are neat, clear and well labeled.	**3**
Correctness The answer is correct / all calculations are accurate.	**2**

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. 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.

Vocabulary Assignments
For Chapters 9, 10 and 11 you will be asked to write out terms and sketch simple pictures for the main vocabulary terms and formulas in our text. Assignment links will be posted on your 213 Assignments and Activities and Vocabulary web pages.

Lab Work Assignments
We will meet in the computer lab once per week and will work using either the Virtual Manipulatives (VMK) or Geometer's Sketchpad ®; some VMK work will need to printed in the lab and turned in for grading or check-off. See your Math 213 Lab Assignments & Links web page for details.

Geometer's Sketchpad ® (GSP) Assignments
GSP Is a dynamic software system you can use to explore geometric ideas. This term you will be assigned six GSP labs corresponding to sections 9.1, 9.2, 10.1, 10.2, 11.1 and 11.2. We will have some time to work on these assignments in the computer lab and they must all be completed and turned in for homework. Every GSP assignment will be done by a pair of students and submitted electronically (unless otherwise arranged for). You may drop your lowest GSP score or you may complete all of the GSP assignments for extra credit. See your course web pages for dates and instructions. Each GSP lab has detailed instructions within the lab.

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)
4. Vocabulary
5. 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 final exam will be offered at a **group final time** on Monday of finals week (at 8 a.m.!). See your course webpage and the official final exam schedule (scroll down to the group final times).

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

There will be a 25% deduction per class day (MTWR). All hardcopy work is due by 4:30 p.m. Work turned in after 4:30 p.m. = the next calendar day. All GSP electronic submissions are due by 12 midnight, work submitted after midnight = the next calendar day. 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. Ordinary illness of one or two class days does not count as a documented emergency, even if you have a note from a doctor.

COURSE GRADING

Class Item	Course Percent
Graded HW, Lab Activities, Vocabulary, GSPs, Scavenger	50%
Three 10% Midterm Exams	30%
Final Exam	20%
Pass Math 213 Skills Test (see skills test handout) Required	
TOTAL PERCENT	**100%**

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)

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.1 Electronic items should remain ***turned 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.