

MTH 213 Syllabus for Fall 2010

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OFFICE HOURS & SCHEDULE					
Time	Monday	Tuesday	Wednesday	Thursday	Friday
8		MTH 213	Usually Not On Campus		
9	MTH 213			MTH 213	MTH 213
10	MTH 213	MTH 213		MTH 213	MTH 213
11	Office Hour			Office Hour	Office Hour
12	Lunch	Lunch		Lunch	Office Hour
1		Office Hour		Office Hour	
2	Office Hour	MTH 392		MTH 392	
3					

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 ed., Bennett, Burton and Nelson
- Activity Book, *Mathematics for Elementary Teachers: An Activity Approach*, 8th ed., BBN
- Manipulative Kit, *Mathematics for Elementary Teachers*, 8th edition
- Calculator: A TI-83 or TI-84 is highly recommended
- Protractor • Compass
- (Optional) *Math Education Software Bundle*, Key College Press, ISBN: 193019045X

CLASS WEB PAGE

There is a link for the Math 213 webpage on my home page: <http://www.wou.edu/~kruczekk>
In particular, the webpage entitled "Math 213: Assignments & Activities" will be linked to the course webpage and will include the class schedule, homework assignments and due dates.

COURSE STRUCTURE::

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

- Bring your text and your manipulative kit to class every day.
- 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 includes learning and reviewing mathematics you learned before and learning how 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. Our goals for this class are that you should:

- Gain clearer understanding of mathematical concepts and how children learn mathematics
- Experience problem solving and the use of a scoring rubric
- Experience hands-on activities to facilitate the above goals
- Be able to write about mathematics effectively
- Use resources that help connect the concepts you are learning to your future as teachers.

Specifically, 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.

READING THE TEXT: You are expected to carefully read each section in your textbook. It is a good idea to briefly read the assigned section before class **AND** before you start your homework. Carefully writing out the examples in the text and working through all the steps, will allow you to have a deeper understanding of the material and pinpoint 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 both in class and during office hours.

HOMEWORK: Assignments are posted on the class assignments webpage. Completing your homework in a timely fashion will be integral to your success in this course. If you do not do all your homework, you will not succeed in learning the material in this course.

Assignment Source Assessment Method

<i>Activity Approach</i> Follow Up questions	Direct grading using the Follow-Up Rubric
<i>Conceptual Approach</i> textbook questions	Open-Note Quiz
Vocabulary assignments	Open-Note Quiz
BBN Online Learning Center Applets	Direct grading
Web Site Hunt	Direct grading
The Geometer's Sketchpad assignments	Direct grading
Lab work assignments	Direct grading or check-off
213 Skills Test	REQUIRED to PASS!

Activity Follow – Up Homework Questions (assigned from your *Activity Approach* book): Each *Activity Follow-Up* question is worth 10 pts. The points are allocated using this 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 follow, and the answer clearly identified.. Good formatting, spelling, grammar, typing/handwriting used. Sketches or diagrams are neat, clear and well labeled.	3
Accuracy	The answer is correct / all calculations are accurate.	2

Text Homework Questions (assigned from your *Conceptual Approach* hard cover text): You are expected to carefully write up the solutions to these questions. Homework from your *Conceptual Approach* hard cover text will NOT be collected in class. Instead, you will have quizzes. See below about the structure of these quizzes.

Vocabulary Assignments: On your 213 Assignments web page, you will find a link to the Vocabulary web page. Here you will find links to lists of the main vocabulary terms and formulas used in Ch. 9 - 11 of the text. On quizzes, you will be asked to write out definitions for a term (or two) and sketch simple pictures (if appropriate) for each term. You will be allowed to use your course notebook for the quiz, so I encourage you to fill in these sheets (with definitions / pictures) beforehand.

Quizzes: Quizzes will be given periodically during the 1st 10 minutes of class. A sample quiz may be found at the end of this syllabus. Each quiz will consist of 4 – 6 questions.

- The sections covered on the quiz are listed on the 213 assignments & activities webpage.
- 2 – 3 questions will be from your assigned textbook homework.
- 1 – 2 questions will be from the vocabulary assignment
- 1 question will be one you have not seen before.

Quiz Procedures

- You may use your course notebook to answer the each question.
- Work must be shown for credit.
- You MAY NOT use your textbook, activity book, or cell phone.

Online Homework Questions: The BBN Online Learning Centers is linked to your Math 213 webpage. You will explore the interactive applets for Chapters 10 & 11 (found in the Online Learning Center) and write a brief summary of your experiences.

Web Site Hunt: Each student is responsible for two Web Site finds. More details to follow.

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 ®.

The Geometer's Sketchpad ® (GSP) Assignments: GSP Is a dynamic software system you can use to explore geometric ideas. You will be given GSP assignments through the term. We will have some time to work on these assignments in the computer lab, but you may have to complete these on your own and turn them in for homework. Every GSP assignment will be done by a pair of students and submitted. See your course web pages for dates and instructions. Each GSP lab has detailed instructions within the lab.

213 Skills Test: In order to pass this class, you must pass the MTH 213 Skills Test (on Fractional, Decimals, and Percentages). See your skills test handout for more information.

COURSE NOTEBOOK: You will find it easier to be organized while studying for exams. You may find it helpful to use a 3-ring binder divided into the following sections.

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: There will be 3 "midterm" exams and a final exam in this course. The midterm exams will be cumulative but will emphasize the recently covered material. The final exam is cumulative. The final exam will be offered at a **group final time** on Monday of finals week.

Math 213: Special Offer: If BOTH (i) your overall percent in the course after Exam 3 is 95% or higher AND (ii) your test average after Exam 3 is 90 or higher, you do not need to take the final exam. Your grade will be an A.

If you miss an exam, then we may be able to schedule a make-up (within one week of the original exam date). If not, then I will transfer uniformly the weight of a missed exam to the remaining exams. Prior notification and my agreement are required to schedule a make-up exam. My voice mail and email are always on; there is no excuse for not contacting me **prior** to missing an exam.

TIME SPENT ON MATH 213 OUTSIDE OF CLASS: It is a standard academic rule of thumb to spend 2 – 3 hours out of class for every hour in class while studying mathematics or science. Thus the expectation is that you will spend 8 - 12 hours per week outside of class studying and working on the content of Math 213. Set up a regular schedule for yourself.

LATE POLICY: 25% deduction per class day (MTRF). All work is due by 5:00 p.m. Work turned in after 5:00 p.m. = the next class day. No notification is required to turn work in late. Excused late work will only be accepted in the case of documented emergency or a university sanctioned absence from class. Prior notification and my agreement are required.

ATTENDANCE / MISSED CLASS: If you miss class, it is your responsibility to ask a classmate for notes on the material that you have missed. I will not have discussion notes, nor will I repeat my discussion during office hours.

WOU EMAIL ACCOUNT: All class announcements will be sent to your WOU email account. If you do not use this account, log in to this account and forward your WOU email to an account that you actually check. Use the Options > Mail > Local Account > Forwarding path.

COURSE GRADING

<u>CLASS ITEM</u>	<u>COURSE PERCENT</u>
Class Volunteering	EC
Activity Follow – Ups, Lab Activities, GSPs, Websites	26%
3 Midterm Exams (12% each)	36%
In-class quizzes (Drop Lowest One)	18%
Final Exam	20%

STANDARD GRADING SCALE FOR THIS COURSE

% Range	Grade	% Range	Grade	% Range	Grade	% Range	Grade	% Range
93 – 100	A	87 – 89	B+	77 – 79	C+	67 – 69	D+	< 60 Grade F
90 – 92	A-	83 – 86	B	73 – 76	C	63 – 66	D	
		80 – 82	B-	70 – 72	C-	60 – 62	D-	

APPROPRIATE CLASSROOM BEHAVIOR: 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 on that exam. See the course web page for the Academic Dishonesty Policy.

LEARNING DISABILITIES: If you have a documented learning disability, please talk to me during the first few days of class. I am 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.

CELL PHONE POLICY: Turn off your cell phones before class. DO NOT TEXT IN CLASS!