MATH 212 SYLLABUS: SPRING 2010
FOUNDATIONS OF ELEMENTARY MATHEMATICS II

Professor: Dr. Cheryl Beaver Phone: 503-838-8404
Office: MNB 123 Email: beaverc@wou.edu
Web Page: www.wou.edu/~beaverc

CLASS MEETS
MWF: 9:00 – 9:50 a.m. & T: 8:00 – 9:50 a.m. MNB 103
FINAL EXAM: MONDAY June 7, 2010 8-9:50 AM

C. Beaver’s OFFICE HOURS & SCHEDULE

<table>
<thead>
<tr>
<th>Time</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
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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 with a grade of C- or better.

REQUIRED COURSE MATERIALS (for the 211-212-213 series)
- 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 Materials
- A large 3 ring binder
- At least six dividers that can be labeled
- Protractor (for Math 212 – Section 7.1 and for all of Math 213)

CLASS WEB PAGE
There will be a link for the Math 212 webpage (where many course items will be posted) on my home page. The Math 212 page will have a link to a schedule and assignments webpage which will include the class schedule, homework assignments and due dates.
COURSE STRUCTURE
All classes will be a mix of 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.

MATH 212 / COURSE CONTENT / LEARNING 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 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 specific we will look at: Fraction and decimal models, operations and number properties, data analysis, probability and statistics

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 expected.

H1N1 Note: 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 211 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 Options > Settings and scroll down to Mail Forwarding.

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 in addition to reading 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.
FACTORS & MULTIPLES SKILLS TEST
In order to pass Math 212, you are required to pass the Factors & Multiples Skills Test. You will be given the opportunity to take this on during the second week of class. Detailed information will be provided in class and in a handout.

HOMEWORK
There will be a variety of homework assignments given in this course. Assignments will be posted on the class assignments webpage. These assignments will include but not be limited to the following:

<table>
<thead>
<tr>
<th>Assignment Source</th>
<th>Assessment Method</th>
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<tbody>
<tr>
<td>BN Online Learning Center Applets</td>
<td>Direct grading</td>
</tr>
<tr>
<td>Conceptual Approach Textbook questions</td>
<td>Spot check direct grading</td>
</tr>
<tr>
<td>Activity Approach Follow Up questions</td>
<td>Direct grading</td>
</tr>
<tr>
<td>Problems of the Week</td>
<td>Direct grading</td>
</tr>
<tr>
<td>Scavenger Hunt</td>
<td>Direct grading</td>
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Online Homework Questions
The Bennett/Nelson Online Learning Center will be linked to the 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 5, 6, 7, and 8, and write a brief summary of your experience. Due dates will be posted on the Math 212 schedule and assignments webpage.

Conceptual Approach Textbook Homework Questions
These are assigned from your Conceptual Approach hard cover text (see your course schedule for assignments and due dates). Although you are required to turn in all of the questions, only a few will be directly graded. Which questions to be graded will not be announced in advance.

Activity Approach Follow Up Homework Questions
These are assigned from your Activity Approach Follow-Up questions and will be directly graded using the following rubric (see your course schedule for assignments and due dates).

Scoring for Follow-Up Questions
Each Activity-Follow Up question is worth 10 points. The points will be allocated based on the following rubric.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Understanding</td>
<td>Understanding of the problem is demonstrated. A reasonable strategy for solving the problem is applied.</td>
<td>2</td>
</tr>
<tr>
<td>Completeness</td>
<td>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.</td>
<td>3</td>
</tr>
<tr>
<td>Clarity</td>
<td>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.</td>
<td>3</td>
</tr>
<tr>
<td>Correctness</td>
<td>The answer is correct / all calculations are accurate.</td>
<td>2</td>
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Problems of the Week
Problems of the week are in-depth problems assigned to help you focus on your problem solving skills. You will be given approximately four such problems during the term. Detailed instructions will be provided.

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

TIME SPENT ON MATH 212 OUTSIDE OF CLASS
Success in mathematics is directly linked to effort and regular practice. 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 you should expect to spend 8 to 12 hours per week outside of class studying and working on the content of Math 212.

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. NOTE THAT YOUR HOMEWORK GRADE IS WORTH 50% OF YOUR COURSE GRADE.

COURSE NOTEBOOK
It is recommended that you file all of your course materials in your course notebook. I suggest you divide your binder into at least the following, clearly labeled, 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. Problems of the Week
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 midterm exams will be given on Tuesday during week 4, 7, and 10 of the term. The final exam will be cumulative. The final exam will be offered on Monday of finals week. See the course webpage and the official final exam schedule for the exact date and time. CELL PHONES MUST BE TURNED OFF DURING EXAMS.

In general, makeup exams will not be given. An exception may be made in the case of a 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
All work is due by 4:30 p.m. on its due date. Work turned in after 4:30 p.m. = the next calendar day. Work may be turned in one class day late for up to 75% credit. HOMEWORK WILL NOT BE ACCEPTED MORE THAN ONE DAY LATE. Repeatedly turning in work late will have a very strong impact on your overall course grade since homework is 50% of your grade. Your lowest 2 homework scores will be dropped (up to 40 points worth total).

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

<table>
<thead>
<tr>
<th>CLASS ITEM</th>
<th>COURSE PERCENT</th>
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<tbody>
<tr>
<td>Graded HW &amp; POWs</td>
<td>50%</td>
</tr>
<tr>
<td>Three 10% Midterm Exams</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
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<tr>
<td>Pass Skills Test</td>
<td>Required</td>
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<tr>
<td><strong>TOTAL PERCENT</strong></td>
<td><strong>100%</strong></td>
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STANDARD GRADING SCALE FOR THIS COURSE

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<thead>
<tr>
<th>% Range</th>
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<tbody>
<tr>
<td>93 –100</td>
<td>A</td>
<td>80 – 82</td>
<td>B-</td>
<td>60 – 69</td>
<td>D</td>
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<tr>
<td>90 – 92</td>
<td>A-</td>
<td>77 – 79</td>
<td>C+</td>
<td>Below 60</td>
<td>F</td>
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<tr>
<td>87 – 89</td>
<td>B+</td>
<td>73 – 76</td>
<td>C</td>
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<tr>
<td>83 – 86</td>
<td>B</td>
<td>70 – 72</td>
<td>C-</td>
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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.

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. 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. Electronic item use during exams will be treated as cheating and you 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 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 him/her from completing the course.

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1 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.