MATH 396 SYLLABUS: SPRING 2014 **ELEMENTARY PROBLEM SOLVING** MW 10-10:50; F 10-11:50 MNB 103

Professor: Dr. Cheryl Beaver Office: MNB 123

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Final Exam: Monday June 9, 2014 10-11:50 am								
OFFICE HOURS & SCHEDULE								
Time	Monday	Tuesday	Wednesday	Thursday	Friday			
9					Office Hour			
10	MTH 396		MTH 396	Reserved	MTH 206			
11	Office hour		Office hour	for	WIII 390			
12	404 Meetings	Meeting	404 Meetings	meetings	404 Meetings			
1	Meeting		404 Meetings	and	404 Meetings			
2			404 Meetings	research				
3	MTH 404W	Meeting	MTH 404W					

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.

PREREQUISITES

Math 211, 212 & 213; each with a grade of C- or better.

REQUIRED COURSE MATERIALS

- "Crossing the River with Dogs: Problem Solving for College Students, 2nd Edition" by Ken Johnson, Ted Herr, and Judy Kysh (ISBN: 9780470464731)
- Coursepack: The Math 396 coursepack is available for purchase at the bookstore.

COURSE CONTENT

This course is designed for students planning to be elementary or middle school teachers. Our goals for this term are to:

- Improve problem solving skills by building upon and extending knowledge acquired in the foundational sequence;
- Become proficient in using problem solving rubrics;
- Use a "Math Buddy" journal interface to experience reading, replying, and evaluating young problem solvers' solutions.

CLASS WEB PAGE

There will be a link for the Math 396 webpage on my home page http://www.wou.edu/~beaverc/ where assignments and due dates will be posted.

ATTENDANCE

Attendance is required and strictly enforced in Math 396. As described in the "Course Structure" section below, critical activities and experiences will happen during class that cannot be made up. If you miss class due to illness, please contact your professor by phone or email, the day you miss class to see if you can make up some class work. If you need to miss class for a University Sanctioned absence (sports, performances, etc.), please visit your professor during office hours well in advance of the absence to set up a plan to make up missed work and experiences.

Missed class grade deductions (% deduction from earned class total %)						
Absence type	Deduction	Requirements				
University	-0%	Arranged in advance if possible or emergency verified after; work made up to satisfaction of professor per given deadline				
Sanctioned	-1% / class day	Not arranged in advance if possible; work made up to satisfaction of professor per given deadline OR arranged in advance, but work not made up satisfactorily				
Illnag	-0%	Professor contacted day of illness and work made up to satisfaction of professor per given deadline				
mness	-1% / class day	Professor not contacted day of illness or work not made up to satisfaction of professor per given deadline				
	-1%	First day				
Unexcused	-2% / class day	After first unexcused day in term				

COURSE STRUCTURE

There are two main components in Math 396: The Math Buddies Project and Problem Solving.

MATH BUDDIES PROJECT

WOU Mathematics and Independence Elementary School (IES) are partners for the "Math Buddy" problem solving mentoring project. WOU students will be partnered with children from IES and will learn to respond to and help move forward children's problem solving and problem writing skills.

Assignments Assignments for this project will include scoring student work using the official Oregon State Mathematics Problem Scoring Guide and writing mentor letters to the students.

Participation Many of our classes will be focused on our Math Buddies Project. It is critical to attend these sessions and work is generally difficult to make up. If you must miss due to an emergency, the best thing to do is contact the professor and make the work up immediately. Because this work will directly affect actual school children, if you miss class or deadlines, your work may be reassigned to someone else and you will receive 0 points on any such assignment.

Buddy Meeting May 23rd During our Friday, May 23rd class we will visit Independence Elementary School to meet your buddies. Your will plan activities to do with your buddies. More information will be given about this later in the term. <u>Attendance is mandatory</u>. We will arrange carpools for those who do not have transportation.

PROBLEM SOLVING

Many of our classes will be focused on interactive problem solving sessions; please bring your coursepack to class every day. Your participation in class problem solving is crucial and required in this course. We will regularly explore new ideas during class and it will be difficult to make this work up on your own. Many of the items in the course pack do not stand alone; they need introductory comments and supportive questions that will be presented in class. All students will be expected to enthusiastically engage in group work and in whole class sharing discussions (including sharing work at the board or document camera). This sharing and discussion cannot be made up.

Homework Corresponding homework from the text will be assigned after class problem solving sessions. It is a good idea to carefully read the section and work out the sample problems before you start your text homework. Many of the homework problems can be tricky and require in-depth problem solving. You may find it helpful to work on a problem, set it aside for a day and then resume your work. You may ask questions about the text homework both in class and during office hours. Homework other than text homework may also be assigned.

Tutoring Students are encouraged to take advantage of the free tutoring available at the Math Center in Hamersly Library (Room 228) Monday through Thursday. Check the webpage http://www.wou.edu/las/natsci/math/math/tutor/ to find the times for tutors who are able to help with this class.

HW Cover Sheets There are cover sheets for the text homework assignments in your coursepack. Per the directions on the back of the cover sheet, fill out the cover sheet and staple the completed sheet to the front of your homework.

Late Text Homework Unless otherwise noted, all homework is due at the beginning of class. <u>NO late homework will be accepted</u>. However, your lowest homework score will be dropped.

JOURNAL ASSIGNMENTS

In addition to Math Buddy and Text Homework, students will read assigned problem solving journal articles. A short quiz related to each article will be given.

MIDTERM EXAM

This class will have a Problem-Solving Midterm Exam to be completed individually in class. Missed exams can generally not be made up; this is up to the discretion of your professor.

GROUP FINAL EXAM

This class will have a group Problem-Solving Final Exam, scheduled for MONDAY of finals week. This cannot be changed and students who miss the final exam will earn a score of 0 on the exam.

CELL PHONE POLICY

- Turn them off (not even on vibrate) during class
- Put them away
- No texting during class
- Electronic item use during exams or quizzes will be treated as cheating and you will receive a zero score on that exam or quiz.

If you are in an emergency situation in which you need to have your cell phone on quiet; please speak to your professor about it before class.

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.

COURSE ASSESSMENT COMPONENTS

Component	%
Attendance	Possible deductions only
Text & Other Homework	25
Math Buddy Project	25
Journal Article Quizzes	15
Midterm Exam	20
Group Final Exam	15
Total	100

THE STANDARD GRADING SCALE FOR THIS COURSE APPLIES

VETERANS AND ACTIVE MILITARY PERSONNEL with special circumstances are welcome and encouraged to communicate these, in advance if possible, to the instructor.

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 <u>zero score</u> on that exam and a report of this activity will be sent to the Judicial Affairs office.

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. 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.

STUDENT SUCCESS SPECIALIST

Students in this class may be referred to the WOU Student Success Specialist (SSS) if the instructor determines their performance in the class is placing them at academic risk. The SSS will offer to work with referred students to address issues and develop a student success strategy. Irrespective of whether a referral has or has not been made, you are ultimately responsible for tracking your own progress in this course.