## Math 13800 MATHEMATICS FOR ELEMENTARY EDUCATION II

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Welcome to Math 13800. The goal of this class is to prepare you to be a knowledgeable and confident math teacher in the elementary classroom. We will strive for a deep understanding of the reasoning behind math processes. We will also strive to be able to clearly articulate math ideas using correct vocabulary. You will often be asked to explain your thinking or describe the process you use to solve a problem. Your future students will also need to know more than just how to come up with a number answer. Be prepared to show step-by-step math work and to explain your thinking clearly. Homework papers, quizzes and exams will be graded accordingly.

**Textbook:** We will be using <u>Reconceptualizing Mathematics Parts II and IV</u> Preliminary Edition (Custom) by Sowder, Sowder, and Nickerson, W.H. Freeman, 2007 because it provides activities, discussion ideas and questions that stimulate a deep level of thinking. It is a workbook that we will follow on a daily basis in class. Reading the section in the text before class is recommended to achieve a high grade in the course.

Other materials for class are mentioned on the assignment sheet and will be needed for class activities. We will sometimes use manipulatives to help us understand or demonstrate concepts. People have different learning styles and you may find the manipulatives useful in clarifying ideas. Because it will be important to use them in your teaching for the benefit of your students, you will gain valuable experience using manipulatives in this course.

**Calculators:** Another goal of the Math 13X00 courses is to be competent doing arithmetic of whole numbers, decimals, fractions and percents by hand. To that end, NO CALCULATORS ARE ALLOWED ON QUIZZES AND EXAMS during the first half of the semester. After exam 2 when we study topics such as standard deviation, NON-GRAPHING calculators are allowed. The calculator on a cell phone may never be used for a quiz or exam. There will also be three quizzes given during the semester called "Arithmetic Skills Quizzes." To be prepared for those, a study guide is available on the web page for the course.

**Homework:** Homework is collected every day. You need to be in class for the entire hour to have your assignment graded. If an occasion arises that prevents you from attending class, your homework will be excused up to a total of 4 occurrences. Therefore, <u>neither early nor late homework will be accepted</u>. Homework should be done neatly and with care, all steps must be shown, and <u>multiple pages should be stapled</u>. Correct answers without work or with incorrect work may not receive credit. The instructor will decide which problems or parts of problems will be graded by the grader. Only a few problems on each assignment will be graded. This means that sometimes the problems selected are the ones you have incorrect or they might be ones that you have correct. Homework papers may be collected <u>before</u> or after an opportunity to ask questions on the day it is due. This prevents students from relying too heavily on the question and answer time. Students are encouraged to attend office hours as a way of getting help with assignments.

**Exams:** Exams are intended to cover the ideas from the text but not to mimic the homework questions. Questions may require thinking or problem solving not represented by the homework questions. The three exams take place at 6:30 PM in BCHM 105 and the dates are: Monday, Sept 19<sup>th</sup>; Tuesday, Oct 18<sup>th</sup>; and Monday Nov 14<sup>th</sup>. Put these dates on your calendar. Make-up exams will be given only if you have a valid excuse *with documentation* and the course coordinator has been notified prior to the exam. If you are unable to notify the coordinator prior to the exam, *a valid explanation with documentation for the missed exam must be provided*. Unexcused absence from an exam will result in a grade penalty.

**Quizzes:** A quiz will be given frequently. It is wise to review recent lessons as a way of studying for quizzes. If an occasion arises that prevents you from attending class, your quiz will be excused up to a total of 2 occurrences. Therefore, <u>no make-up quizzes will be given, and quizzes will not be given early</u>. Class participation will count towards one quiz grade. Be prepared to volunteer your ideas during class discussions.

**Attendance:** Illnesses or circumstances that lead to excessive absences should be discussed privately with the instructor so that appropriate accommodations can be made.

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**Grading:** Grades will be based on three evening exams (100 points each), quizzes (100 points), homework (50 points), and a comprehensive final exam (150 points). An instruction sheet for determining your grade is available on the web page. Note that a point on a homework or quiz paper is not equivalent to a point for the course. 360 of the 600 points (60%) is the lowest passing (D) grade.

Last day to drop a course: Wednesday, October 26, 2011

**Cell phones:** Checking for messages and sending text messages is not appropriate during class time. Be polite and leave your cell phone alone during that 50 minutes. MP3 players and computers are also not appropriate to use during class.

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Information will be available at www.math.purdue.edu/MA13800

During the last two weeks of the semester, you will be provided an opportunity to evaluate this course and your instructor. At that time, you will receive an official email from evaluation administrators with a link to the online evaluation site. Your feedback is vital to improving education at Purdue. I strongly urge you to participate in the evaluation system.

## FOR STUDENTS CERTIFIED BY ODOS ADAPTIVE PROGRAMS:

Students who have been certified by the Office of the Dean of Students-Disability Resource Center as eligible for academic adjustments should go to MATH 242 with a copy of their certification letter and request a copy of the Information Sheet for their course. Certification letters should be filed during the first week of classes or as soon as students receive their letters. The course Information Sheet explains how to proceed this semester to get adjustments made in your mathematics course. It may not be the same as last semester. Only students who have been certified by the ODOS-Disability Resource Center and who have requested the DRC to send their certification letters to their instructors are eligible for academic adjustments. Students who are currently undergoing an evaluation process to determine whether they are eligible for academic adjustments, are encouraged to find out now what procedures they will have to follow when they are certified, by requesting an Information Sheet from MATH 242.

Large print copies of the Information Sheet are available from MATH 242 upon request.