Instructor: Dr. Elizabeth Arnold e-mail: arnoldea@math.jmu.edu Phone: 568-6532 URL: www.math.jmu.edu/~arnoldea Office: Roop 111 Office Hours: TWTh 12:30-1:30pm, and by appointment.

COURSE DESCRIPTION: This course is the second in a series of three that are required for the IDLS major. Topics covered include number theory, measurement and geometry. This course partially fulfills the requirements for licensure of prospective early childhood, elementary, and middle school teachers. This course is a continuation of the 107 course first taught in Fall 2010.

TEXT: Reconceptualizing Mathematics for Elementary School Teachers, by Sowder, Sowder and Nickerson. We will cover Chapters 11, and 16-26 in Math 108.

MathPortal: If you have not already, you should purchase this subscription from the bookstore. For \$10, you will have access to the MathPortal for 2 years. After you purchase the registration, go to http://courses.bfwpub.com/reconceptmath.php and click on "register". This is where you will see your grades, assignments and supplementary materials. Please register before coming to class the first day.

SUPPLIES: Clear plastic ruler with both metric and American units, pencil, Calculator, 3 ring notebook.

SPECIAL COURSE REQUIREMENTS:

Basic Skills Test: -NO Calculators! (50 pts) The Basic math skills test (20 problems) will be used as a tool to determine required proficiency with basic arithmetic and elementary algebra. Before taking the skills test you should review by taking the Practice Basic Skills Quiz and go over the Review of Basic Skills on MathPortal/Blackboard. The test will consist of 20 problems and passing requires at least 18 correct. The test will be given in class on Thursday, January 20. If you miss 2 or fewer, you have passed and earn 50 points. If you miss more than 2, you must come to see the GA to go over the ones you missed prior to retaking the test. You will have two opportunities to retake the test to reach the required proficiency.

First retake: Thursday, February 3, Roop 129 5-8pm.

(You earn 30 points if you miss no more than 2.)

Second retake: Thursday, February 17, Roop 129 5-8pm.

(You earn 10 points if you miss no more than 2.)

If you have not passed the skills test after the second retake, you will *lose* 10 points from your point total. To earn 0 points (instead of -10), one final opportunity to pass will be available by scheduling an appointment with me between February 21-25.

Please note that this test is very important to your grade. If you get -10, your final grade will most likely be lower by a full letter grade. If you pass on the first try, you could significantly improve your final grade.

VOCABULARY: Pay careful attention to the vocabulary. To succeed as a math student and teacher, it is essential to know math vocabulary. As you read each section, write each math-related word on a 3x5 note card, along with its definition, symbol (if any) and examples. Not only will this make studying for tests and quizzes much easier, it will also be a useful resource in your future teaching career. There are vocabulary notecards on MathPortal in the Resources Tab, but they may not be worded exactly as you would like. You do not need to know the definition exactly word for word, but it must be **correct** and **complete**.

GRADING: The grading will be assigned on a standard percentage scale: A: 90-100%, B: 80-89%, C: 70-79%, D: 60-69%, F below 60%

There will be no curves and no extra credit. I will assign +/- on an individual basis. WF's will not be assigned. Points are assigned as follows:

Quizzes (10) - 100 points, Midterm exams (2) - 100 points each Homework/Projects - 20-100 points, Basic Skills Test - 50 points Final exam - 150 points

QUIZZES: There will be a 10 point quiz at the beginning of class each Thursday. This quiz will cover material through the previous class. Quiz questions will be similar (but not identical) to homework and quiz problems on MathPortal. The 10 best quiz scores will be kept, and the rest will be dropped. There will be no make up quizzes given.

MIDTERMS and FINAL: There will be two midterms during the semester worth 100 points each and a final exam worth 150 points. The questions on the exams will be similar to homework questions. If you cannot make it to a scheduled exam, you MUST contact the instructor BEFORE the exam if at all possible, or if an emergency, WITHIN 24 HOURS after the exam if you need to schedule a make up exam. Make up exams will only be given for extreme excuses. A doctor's note or some other physical excuse is required. Dates for exams (subject to change):

Midterm I - Thursday February 10 Midterm II - Thursday March 31 Final Exam - Section 005 Tuesday, May 3, 8:00am-10:00am Section 008 Thursday May 5, 1-3pm

HOMEWORK/PROJECTS: Homework will be assigned after each chapter in the book. Some assignments may be given on MathPortal. There may be group projects that will be assigned. These will also be turned in for credit. If, at the end of the semester, these assignments total to more than 100 points, they will be averaged for a homework score out of 100 points. You are encouraged to work together on homework and projects. However, when you write up your papers to turn in, you must do it by yourself. Direct copying or group work is not acceptable to turn in with only your name on it and will be considered a violation of the honor code.

CLASS STRUCTURE: BEFORE class, you should read the section assigned, and answer the discussion questions in the text. Be prepared to discuss these answers. There will be a quiz at the beginning of each Thursdays class.

ADDITIONAL HELP: You are encouraged to work together in this class and form study groups. You may come see me in office hours, and if you need even more help, you can go to the Math Tutoring Center (www.math.jmu.edu/tutoring-center/) x83379. You are welcome to e-mail questions to me. We also have a Graduate Assistant for Math 107-207, Alyssa Taylor. She will hold office hours in Roop 329 at the following times: Sun. 4-7:30pm, Mon. 10-11am, Tues. 10-11am, Wed. 9:30am-1pm and 5-8pm, Thur. 9am-11am and 5:30-8:30pm.

HONOR CODE You are to abide by the JMU honor code at all times. Ignorance of the law is no excuse. Cheating will not be tolerated and will be prosecuted to the fullest extent.