

Syllabus for Math 107, *Fundamentals of Mathematics I*, Spring 2015

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Office Hours: MWF 11:15am-12:30pm, and by appointment.

COURSE GOALS: This course is the first in a series of three that are required for the IDLS major. Topics covered include number systems, number operations, fractions, quantitative reasoning and number theory. This course partially fulfills the requirements for licensure of prospective early childhood, elementary, and middle school teachers.

TEXT: Reconceptualizing Mathematics for Elementary School Teachers, by Sowder, Sowder and Nickerson, 2nd ed. We will cover Chapters 1-10 in Math 107.

MathPortal: 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 supplementary materials for the course. Please register as soon as possible. Grades will be posted on Canvas.

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) 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 in class and go over the Review of Basic Skills on MathPortal. The test will consist of 20 problems and passing requires at least 18 correct. The test will be given in class on Wednesday Jan 28th. 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.

Retake: Wed., Feb. 18th between 5:00-8:00 pm, Burruss 126

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

If you have not passed the basic skills test after the retake, your score will be 0.

Please note that this test is very important to your grade. If you get a 0 on this test, your final grade is likely to 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 I say in the notes. You do not need to know the definition exactly word for word, but it must be **correct** and **complete** to receive credit on a quiz or exam.

GRADING: The grading will be assigned on the following scale:

A: 90-100%, B: 80-89%, C: 70-79%, D: 60-69%, F 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, Basic Skills Test - 50 points

Homework - 50 points, Final exam - 150 points

QUIZZES: There will be a 10 point quiz at the beginning of class each Friday. This quiz will cover material through the previous class. Quiz questions will be similar (but not identical) to homework problems. 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 - Friday, February 27

Midterm II - Friday April 10

Final Exam - Section 001 Monday May 4, 8-10am

Section 002 Monday May 4, 1:00pm-3:00pm

HOMEWORK/PROJECTS: Homework will be assigned after each chapter in the book. At the end of the semester, I will collect this homework. Please have it neat and well labeled to turn in. You are encouraged to work together on homework. However, if you turn in any assignments, 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. All homework grades will be averaged and your homework grade will be out of 50 points.

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 Friday's class.

ADDITIONAL HELP: You are encouraged to work together in this class and form study groups. You may come see me in office hours for help or e-mail me your questions. We also have a Graduate Assistant for Math 107-207, Lauren Proctor and two undergrad assistants - Charis and Rachel. They will hold office hours in Roon 329 at the following times (tentative): Sun. 1-4pm, Mon. 10am-2pm, 3:30-7:30pm, Tues. 10-12, 4-7:30pm, Wed. 10-7:30pm, Thur. 9-12, 1-7:30pm. See schedule posted in Roon 329 for adjustments.

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.