MATH 130: Mathematics for Teaching: Numbers and Operations Spring Semester 2011 Lecture 2

Lecture Information:

Instructor: Christelle Vincent Office: 516 Van Vleck Email: vincent@math.wisc.edu http://www.math.wisc.edu/~vincent/130.html Office Hours: Monday: 11am to noon Tuesday: 3:30pm to 4:30pm Thursday: 10am to 11am All office hours are held in Van Vleck 516.

Textbooks:

- 1. Thomas Parker and Scott Baldridge: Elementary Mathematics for Teachers (and Primary Mathematics Textbooks 3A, 4A, 5A, 6A along with Workbook 5A)
- 2. Sybilla Beckmann: Activities Manual for Mathematics for Elementary Teachers (3rd edition)

Course overview: The purpose of this course is two-fold: (1) to provide you with a context (i.e. arithmetic) to explore and develop inductive and deductive reasoning strategies and (2) help you to develop an effective style of communicating mathematical reasoning through the use of group-work and written reports.

Most of our class time will be spent working in small groups on problems from the Primary Math textbooks and the activity manual and then discussing this work as a whole class. Making sure you understand the problems and solutions that are discussed in class will be key to your success. As such, your grade will depend as much on your ability to give good explanations as on your ability to give correct answers.

Grading:

- 1. 25% Homework Assignments Assignments will be posted on my website and will be due weekly. Half of the homework grade will be based on the completion of a problem set and the other half will be based on quality of writeup for a subset of the assignment (the "quiz" part of the homework).
- 2. 5% Midterm Corrections You are expected to discover correct solutions for every midterm question and write up nice solutions. I will explain the exact instructions for this assignment after the first midterm.

- 3. 10% Participation Every student is expected to participate in both group work and large classroom discussions. Chronic failure to do either one will result in loss of points. Seeing as you cannot participate in class if you do not attend class, attendance is mandatory. You are allowed two absences but after that, each time you are absent, one percentage point will be deducted from your final grade.
- 4. **30% Two Midterms** These will be in class on Tuesday February 22nd and Tuesday April 12th, there will be no alternate exam times except in extraordinary circumstances that are communicated to me in advance. If time permits, the previous class periods will be review.
- 5. **30% Final Exam** This will be cumulative and will be on May 8th 10:05am-12:05pm. Course policy requires that I not give any early exams so plan your travel accordingly. You must notify me in writing within three weeks of the beginning of the course if you have a conflict with our scheduled final exam time.

Minimum cutoffs for whole letter grades are as follows: A-93 B-82 C-70

Late work: No late work will be accepted. However, your lowest two homework and quiz scores will be dropped.

Calculator Use: Calculators will not be allowed on exams. Please do not get in the habit of using them on the homework, since they will not be available on the exams.

Classroom courtesy: Please support your fellow students by doing your part to provide a classroom free of external distractions. Do not use cell phones, work on laptops (for anything other than taking notes), read newspapers, etc. If you violate this policy you will be asked to leave the classroom.

Academic Misconduct: Don't cheat. Homework and in class work can be completed in small, collaborative groups although direct copying is prohibited. If you have any questions about what constitutes academic misconduct, please ask me beforehand; "I didn't know" is not a valid excuse.

McBurney Visas: If you have a McBurney Visa please talk to me as soon as possible even if you don't require special accomodations.

Caveat: I reserve the right to modify any part of the syllabus in exceptional circumstances on an individual basis. If you have major life events that interfere with this course, please contact me in advance to discuss your ability to complete required course work.