

**MATH 5001/7001**  
**Arithmetic and Problem Solving**  
**Spring 2003**

**Instructor** : Cheryl Rumely

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**Office Hours**: MWF→9:05-10:05am, other times by appointment  
T,TH→By appointment only, but gladly

**Important Dates**: Jan. 9 – Jan. 14: Drop/Add

Jan. 20 – MLK, Jr. holiday

March 7 – Midpoint withdrawal date. Any withdrawal on or before this date will result in a “W”. Any withdrawal after this date will result in a “WF”, except for extreme circumstances which have been documented prior to the completion of the course.

**Text**: *Mathematics for Elementary Teachers, volume 1* and the accompanying *Class Activities* manual by Sybilla Beckman

**Course Objectives**: To strengthen and deepen knowledge and understanding of arithmetic and how it is used to solve a wide variety of problems. In particular, to strengthen the understanding of and the ability to explain why various procedures from arithmetic work. To strengthen the ability to communicate clearly about mathematics, both orally and in writing. To promote the exploration and explanation of mathematical phenomena. To show that many problems can be solved in a variety of ways.

**Materials**: Basic calculator

**Grades**: There will be 4 major tests during the course and a 3-hour comprehensive final exam. Homework will be assigned daily, some to be done just for yourself, some to be checked as being attempted and some to be graded carefully. Your course average will be determined using the weights:

Major tests → 50%

Homework → 25%

Final Exam → 25%

**Final Exam**: Friday, May 9, 12 noon – 3 pm

**Homework**: It is essential that you do all reading and attempt all assigned problems before the next class. Late homework will not be accepted. The lowest checked assignment score and the lowest graded assignment score will be dropped to compensate for illness or emergencies. You are encouraged to work on assignments with fellow classmates, but you must always write up your homework on your own, using your own words to express the ideas you have discussed with others. Do not allow anyone to copy your work. When you discuss assignments with others, all participants should contribute.

When homework is graded, your grade will be determined by the extent to which it meets the following criteria:

- ❖ The explanation is factually correct, or nearly so, with only minor flaws, such as a computational mistake in a calculation.
- ❖ The explanation addresses the question or problem posed. It is focussed, detailed and precise.
- ❖ Clear, complete sentences are used.
- ❖ The explanation is clear, convincing and logical. Key points are emphasized. If applicable, pictures and/or diagrams are used appropriately. The explanation is coherent and does not require the reader to make a “leap of faith”. It could be used to convince a skeptic, or to teach another college student, possibly one not in the class.

**Academic Honesty:** All students are expected to adhere to the highest standards of honesty. In the case of suspected violations, procedures as outlined by the Academic Honesty Policy of the University of Georgia will be followed.

**Attendance:** Attendance will be taken daily starting Wednesday, January 15. Students with more than 3 unexcused absences before midterm will be withdrawn from class. After midterm, each unexcused absence beyond 3 will result in a .5 point deduction in the final grade. Absences must be justified shortly after returning to class in order to be excused. Please make every effort to be in class on time. Tardies are disruptive, and two tardies of more than 5 minutes will count as an absence.

**Disclaimer:** The instructor reserves the right to change any of the details of this syllabus, as needed and upon notification to students.

### Expected Schedule

Week	Monday	Wednesday	Friday
1/6-1/10			1.1
1/13-1/17	1.1,1.2	1.2	2.1,2.2
1/20-1/24	MLK holiday	2.3	2.4
1/27-1/31	2.5	2.6	2.7
2/3-2/7	2.8	2.9	2.10
2/10-2/14	Review	Test 1	3.1,3.2
2/17-2/21	3.3	3.4	3.5
2/24-2/28	3.5,3.6	3.6	Review
3/3-3/7	Test 2	4.1	4.2
3/10-3/14	4.3	4.4	4.5
3/17-3/21	Spring Break -----Spring Break		
3/24-3/28	4.6	4.7	4.7,4.8
3/31-4/4	Review	Test 3	4.9
4/7-4/11	4.9,4.10	4.11	4.12
4/14-4/18	5.1	5.1,5.2	5.2,5.3
4/21-4/25	5.3	5.4	Review
4/28-5/1	Test 4	Exam Review	Exam Review
5/2	Reading Day		