Course Placement: To be placed in this course, you should have completed Math 351 Topics in Mathematics for Elementary Teachers Part 2 with a C or better.

Course Description: This course focuses on number theory, algebraic thinking and proportional reasoning through problem solving. A problem will be presented. The students will first work individually, then in groups, to solve the problem. Whole class discussions will bring out details of the concept. Finally, the students will write up their solution in order to solidify their thinking and understanding of the concept.

Student Learning Outcomes: Students completing this course should be able to demonstrate a developed understanding of mathematics, connections of ideas within and between mathematical concepts, the ability to think mathematically and explain such thinking, the manipulation of numbers and the development of formulas, proficiency in solving problems using algebraic thinking, and the proper use of manipulatives to teach algebraic concepts.


Supplies: TI-83 or TI-84 calculator, notebook paper (8½ X 11 in., wide- or college-ruled, no spiral), pencils. (All work must be completed in pencil). You may also want a ruler with USCS and metric measurements, colored pencils, scissors, tape, stapler, and a 2” or 3” 3-ring notebook for handouts.

Instruction / Class time: Time will be spent in individual and small group problem-solving activities, class discussions, demonstrations and modeling.

Attendance: There are no “excused” or “unexcused” absences in this class, although I do appreciate knowing why you missed if you feel you can share that with me. Please put it in writing.

If you represent TAMU-Commerce on an athletic team, ag team, band, cheerleading, choir, debate, or other group and must miss class, notify the instructor in writing with the coach’s / sponsor’s signature one week before the anticipated absence in order to not be counted absent. Arrangements for make-up work will be made at that time.

If a student has no absences and less than three tardies per test unit, the student will receive 5 points extra credit on that major exam. If a student has no absences during the entire semester and fewer than 3 tardies total, he / she will receive 5 points on the final exam.

*****As future teachers, each student in this class should understand and appreciate that attendance has a great effect on performance. The state of Texas has a truancy policy for this reason. If a student misses 20% or more of this class, he / she will be considered “truant” and may not receive credit for this course. This is 6 absences MW / TR. The highest grade assigned to any student who has been truant without documenting extenuating circumstances will be a D. *****

Grading Policy:

NON-TEST GRADES: 20%, grade to be determined by points accumulated. Each problem set will have a series of questions to be answered, with each student / small group writing a report on the processes used, patterns noticed, and concepts demonstrated / learned. The point values will vary, depending on the problem.
ALGEBLOCK TEST: 10%
Each student will meet individually with the instructor outside of the regular class time for 30 minutes the fifteenth week of the semester (week of April 29) to demonstrate their understanding of the use of Algeblocks in the teaching of algebra-related topics. The test will be approximately 15 questions covering integer concepts, algebraic expressions and equation solving.

2 MAJOR TESTS @ 25% each:
Test # 1 covering number theory and problem solving will be the week of February 26.
Test # 2 covering proportional reasoning, graphing, and algebraic reasoning will be the week of April 9.

Tests will be taken in the Academic Testing Center, in Ferguson Social Sciences building, 3rd floor. Students will schedule their own testing time based on their schedule. Each test will be allowed 2 hours (but will be the length for 1.25 hour class time). Additional instructions will be given at the appropriate time.

FINAL EXAM: 20%: The Final Exam will be a comprehensive exam. Thursday, May 9, 8 - 10 am, in Binnion 329.

Grading Scale: A: [90, 100+), B: [80, 90), C: [70, 80), D: [60, 70), F: [0, 60) NOTE: A “C” is necessary to satisfy the degree requirements for education majors.

Classroom Environment: RESPECT “All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.” (Student’s Guide Handbook, Policies and Procedures, Conduct)

Getting Help: If you have a disability requiring an accommodation, please contact: Office of Student Disability Resources and Services, Texas A&M University-Commerce, Halladay Student Services Building, Room 303 A/D, Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148, StudentDisabilityServices@tamu-commerce.edu

For help with assignments, classroom activities, or any thing else, please feel free to drop in during my posted office hours, or call me. Outside these hours, please email me. I will check my email several times a day in order to reply as promptly as possible.

The MATH LAB was created to provide tutors to students who need extra help in a math course. Tutors are available according to the following schedule: Monday, Wednesday: 8 a.m. – 8 p.m. Tuesday, Thursday: 8 a.m. – 6 p.m. Friday: 8 a.m. – 3 p.m.

Academic Integrity Academic dishonesty takes many forms:
• Giving or receiving answers during an exam or quiz.
• Viewing the exam or quiz answers of a nearby classmate.
• Having notes/practice work available during quizzes or tests.
• Possession or access to test items before the test is given.
• Deception in getting an excused absence to obtain the undeserved opportunity to make-up work.
• Any method, no matter how well rationalized or accepted, which improves a person’s grade by any means other than study and skillful performances on exams and/or other assignments.
• PRESENCE of ELECTRONIC DEVICES during a quiz or test. If cell phones, texting devices, or music players are IN SIGHT during a quiz or test, the owner will receive a ZERO on the quiz or test.

Students found guilty of an act of academic dishonesty in this course will be subject to the following actions in this course: A first violation in a class will result in a zero on the task/assignment/quiz/test. No make-up will be allowed nor will you be allowed a final exam substitution in the case of an exam. A second violation in a class will result in an “F” in the course, regardless of current average. Appropriate offices will be notified in all incidents.

Remaining enrolled in this class indicates that you are agreeing to abide by these policies.