MATH 351: Mathematics for Elementary Teachers II

Texas A&M University - Commerce | Course syllabus | Spring 2013

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1 Course Information

1.1 Course Description

This is not a traditional mathematics course. My intention is to provide you with an academic atmosphere in which you can develop your knowledge of teaching elementary mathematics. You should already know elementary mathematics; in this course, you will learn how and why the mathematics you know actually works! This course will be focused on three topics: proportional reasoning, geometry and measurement, and data analysis and probability.

In this course, you will be assigned a variety of tasks. These tasks include various readings, problems to solve, and projects. It is necessary to put an honest effort into each of these tasks, as they will form the core content of this course. It is very likely that you will be frustrated at times...fear not, however...this is evidence that you are learning.

The required course textbook is Learning Mathematics in Elementary and Middle Schools (5th ed.) by Cathcart et al. The book and CD provide you with a research-based picture of the mathematics you will be teaching from the perspective of the children you will teach. As a supplement, I will provide electronic copies of some assorted text materials with weekly exercises. These will be available on the course webpage as PDF files.

1.2 Student Learning Outcomes

Upon successful completion of the course, the student will be able to:

- Solve problems involving ratios, proportions, and percents.
- Solve problems and correctly use theorems involving
  - angles and polygons
  - properties of quadrilaterals
  - transformational geometry
- Identify correct geometric formulas and calculate two- and three-dimensional measures of various figures and solids.
- Construct and interpret statistical graphs
- Calculate measures of central tendency and variability
- Solve problems involving probability of simple events and multi-stage events

2 Course Requirements

2.1 Grading

Your final grade will be calculated as a percentage of 500 possible points. The breakdown of these 500 points is as follows:

Homework	100 points
Midterm 1	100 points
Midterm 2	100 points
Final	200 points

Grades will be assigned based on a standard 10 point grading scale; that is, 90% gets you an A, 80% gets you a B, etc.

3 Communication and Support

- Each student is encouraged to contact the professor for assistance with any class-related problem.
- Use email to facilitate speedy communication between student and professor. Please keep in mind your instructor's posted office hours.
- Students' grades and concerns are very important! To discuss grades or concerns contact the professor during office hours.
- Students are responsible for all course announcements, either in class or distributed by email.

4 Course and University Procedures and Policies

4.1 Course-specific Policies

4.1.1 Academic Honesty

Texas A&M University - Commerce has explicit rules and regulations governing academic dishonesty and academic misconduct. As the University states, *"All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment."* These policies are stated in detail in the Students Guide Handbook. Each student is expected to read the documents at the address and abide by the contained policies. These university policies will be followed in this class. The minimum penalty for an act of academic dishonesty will be the assignment of a grade of 0 on the examination or assignment.

4.1.2 Attendance Policy

Class attendance is mandatory. Every student is expected to take a seat promptly at the beginning of class and actively participate in all class discussions. Any student arriving late to (or completely missing) four or more class sessions will be penalized one letter grade.

4.1.3 Assignment Policy

All assigned work must be turned in at the beginning of class on the day it is due. No late assignments will be accepted.

4.1.4 Policy for Assignment of an Incomplete Grade

A grade of Incomplete is reserved for only those special cases where a student has completed a significant portion of the semesters work and an unavoidable circumstance prevents him or her from completing the course. If you have any questions, please contact the instructor.

4.2 University Policies

4.2.1 Accommodations for Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce Gee Library, Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

4.2.2 Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Code of Student Conduct from Students Guide Handbook)

Any changes to this syllabus will be communicated to you in class by the instructor.