Math 351: Topics in Mathematics for Elementary Teachers II
Spring 2013

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Office Hours: Monday/Wednesday 9:30-10:30 AM, 2:30-4:30 PM and/or by appointment

Course Description:
Topics in Mathematics for Elementary Teachers II. The topics of this course include fractions, decimals, ratio and proportion, percents, statistics, probability, measurement, and geometry. Students should already have substantial skills in these areas. Problem solving is integral to all of these topics. The course focuses on underlying concepts and multiple techniques of explaining the concepts. Prerequisite: Successful completion of Math 350

Course Objectives:
1) Developing an understanding of mathematics
2) Connecting ideas within and between mathematical concepts
3) Developing mathematical thinking
4) Reviewing manipulation of numbers in fraction and decimal form
5) Increasing proficiency in solving problems

Student Learning Outcomes: Upon completion of this course, students will be able to:
- Review, demonstrate, illustrate, and communicate concepts of fractions and decimals using manipulative and various models
- Demonstrate and illustrate ways to solve ratio, proportion, and percentage problems
- Interpret and construct statistical graphs
- Utilize proper terminology and strategies to solve problems involving statistics and probabilities
- Identify basic geometric figures, including types of geometric transformations
- Perform measurement tasks accurately
- Apply correct geometric formulae to compute two- and three-dimensional measurements of various figures and solids
- Develop a deeper understanding of mathematical thinking and connect ideas between mathematical concepts of the topics addressed
- Apply various strategies to increase proficiency in problem solution

Class Format: Class time will be spent in lecture, demonstrations, models, quizzes, hands-on activities in small and/or large group settings, and tests. Several types of manipulatives will be demonstrated and used in problem solving activities. Cooperative learning, inquiry learning, and technology-based learning will be incorporated into this course.
Materials: Learning Mathematics in Elementary and Middle Schools (4th or 5th edition) by W.G. Cathcart, et al (ISBN # 0132420996 or 0131700596) is the textbook for the course.

You will need a basic calculator and a three-ring binder for taking notes and storing handouts, exams, etc. You may also want a ruler (standard and metric), a protractor, scissors, glue stick, stapler, and colored pencils. All turned-in work must be done in pencil.

Students need to check their e-mail regularly with the address that they have provided to the instructor for class announcements. Access to a computer and the Internet will be needed for some class assignments.

Grading Policy:
- Exams: 50%
- Final: 25%
- Supplemental Assignments, Projects: 15%
- Homework, Attendance, and Quizzes: 10%

Grading Scale: A = 90-100, B = 80-89, C = 70-79, D = 60-69, F = 59 or below

Homework: Homework will be assigned most class periods. It is important for you to work all homework assignments in order to be prepared for the exams. You can work together with your classmates when trying to figure out how to do the problems. However, it is not okay to copy each other’s homework. Late work will not be accepted, no matter what the cause.

Quizzes: Both individual and group quizzes may be given. Since regular attendance is expected, NO make-up quizzes will be given. This class covers enough material that there is no time to be missed that is a “good time”, and each quiz will be over material to be emphasized on exams.

Supplemental Assignments, Projects: We will also be working on assignments from the Activities book and Supplemental Assignments that will often have to be completed as homework. Selected papers will be turned in for a grade. If you work on these assignments in a group, one paper should be handed in for the entire group, with all names clearly marked. A grade will be taken on select problems from each assignment. Late work will not be accepted, no matter what the cause.

Exams: Tests will be given after a complete chapter or subject area. There will be two or more “chapter” exams that may consist of a variety of problems and short answer questions. However, students should expect the bulk of the questions on each test to be problem solving. Partial credit may be given on exams IF all work is neatly shown so that I can easily determine the student’s mistakes. When pictures are drawn, students should be careful that figures are clearly marked and easily understood. Explanations should be explicit and understandable to the audience given. Items should NOT need interpretation if full credit is to be given.
Replacing a Low Test Grade: I realize that at times throughout the semester, emergency situations may arise that affect a student’s performance on an exam or even prevent a student from attending on a test day. However, make-up exams will NOT be given. Therefore, I am willing to replace the student’s ONE lowest exam grade with the student’s grade on the corresponding portion of the final exam, provided the grade on that section of the final exam is higher. This provision will only be applied to ONE exam, so students should make every effort to be present and well-prepared for all exams.

Final Exam: The final exam is a comprehensive exam scheduled for **Monday, May 6, from 10:30 AM – 12:30 PM.** Make-up final exams will not be allowed.

Attendance: Due to the nature of this course, **attendance is a must to be successful in this class.** I will take roll every class period and it is expected that you follow the guidelines set forth by the Class Attendance Policy in the current Undergraduate Catalogue. Your attendance will be a part of your grade for this course. **Students who are absent more than 6 times, for whatever reason, are subject to the instructor dropping them from the course.** Any student who is close to this number of absences should come to the instructor before they accumulate four absences in the course. I will NOT automatically drop you from the course. Therefore, if you intend to drop the course, you will need to follow the drop procedures of the school. If I intend to drop you from the course, you will receive an email from me at the address you have given me on my student information sheet.

My Commitment: I will do my best to make quality presentations each class and, in return, I expect that you will do your best to learn the material presented in and outside classes. It is important that you be actively engaged in class activities. Questions are welcome in the classroom, and I will gladly schedule outside help for you if necessary. I know that together, these efforts can contribute significantly to your education in this class.

Getting Help Outside of Office Hours: The Mathematics Department has a Math Skills Center (Binnion 328) that is available to all students. **Hours: M/W 8am – 8pm, T/R 8am – 6pm, and F 8am – 3pm.** Computer tutorials, video libraries and live tutors are there to help you with the subject matter in this course.

Classroom Behavior: Appropriate classroom behavior is required to attend this class. **All cell phones and other such devices must be put on silent or turned off during class.** Phones are a distraction for me and the other students in the class. **NOTE: THIS INCLUDES BLUETOOTH AND OTHER DEVICES THAT ARE PLACED IN THE EAR.** All people will be treated with respect and I will not allow talking that will disrupt my lectures. If disruptions occur during class lectures, you will be asked to leave class and will earn a zero on any applicable grades for that class period. Serial disrupters will be asked to withdraw from my class. This will mean that you are withdrawn from school, entirely.

“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.)
Academic Integrity:
I find that a majority of students are honest in doing their schoolwork. However, we must take measures to protect the academic integrity of the classroom. **I have a NO TOLERANCE policy for cheating and if you are caught cheating, you will fail that portion of the course, and possibly the entire course.** Cheating in this course is defined as the following:

- Giving or receiving answers during an exam or quiz.
- Viewing the exam or quiz answers of nearby classmates.
- Having notes/practice work/etc. 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.
- Use of cell phones or text messaging technology during exams or quizzes. **You may NOT use the calculator on your cell phones or any other similar electronic devices (such as I-Pods, I-Touch, etc.).** **IF ONE OF THESE DEVICES IS AVAILABLE, IN ANY WAY, DURING AN EXAM OR QUIZ, THE STUDENT WILL BE GIVEN AN AUTOMATIC “0” ON THE ASSIGNMENT.**
- Improper citations in written works, or using another person’s ideas and words as your own without giving proper credit.
- **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.

**Students found guilty of an act of academic dishonesty in this course will be subject to receiving an “F” in this course.**

Grade Reporting for First Year Students: Early intervention for freshmen is designed to communicate the University’s interest in their success and a willingness to participate fully to help students accomplish their academic objectives. Grades for students in freshmen level classes will be reported to the Registrar's Office at the end of the fifth week of class during the fall and spring semesters. The Registrar's Office will report grades to students, Advising Services, Academic Departments (faculty advisors) and mentors. This procedure will allow students to be knowledgeable about their academic progress early in the semester. The university, through Advising Services, faculty advisors and mentors, will take steps to assist students who may be experiencing difficulty to focus on improvement and course completion. Grade reports will be mailed by the end of the sixth week of the semester.
**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, Room 132, Gee Library  
Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148  
StudentDisabilityServices@tamu-commerce.edu

**BY REMAINING ENROLLED IN THIS COURSE, ALL STUDENTS AGREE TO ABIDE BY THE POLICIES OF THIS CLASS, AS STATED IN THE SYLLABUS.**

Looking forward to a great semester together!