

MATH 1351.01E, Topics in Mathematics for Elementary Teachers II

COURSE SYLLABUS: Fall 2024

INSTRUCTOR INFORMATION

Instructor: Laura Beene Office Location: Binnion 311 Office Hours: MTWRF 10-11 am Office Phone: 903-886-5946 University Email Address: laura.beene@tamuc.edu Preferred Form of Communication: email Communication Response Time: 24 hours

COURSE INFORMATION

Materials - Textbooks, Readings, Supplementary Readings

Textbook: Students are required to have access to *Mathematics for Elementary School Teachers (7th Edition)* by Bassarear and Moss (ISBN 978-1-337-62996-6). We will discuss chapters 5-10 from the textbook. Homework assignments will be from the textbook.

<u>Supplies Needed:</u> Students will need a three-ring binder or folder for notes and handouts. You may also want a ruler, protractor, scissors, glue stick, stapler, and colored pencils. Please use ONLY pencil on all work that is turned in.

Course Description

This course will include content and pedagogy for teaching ratio and proportion, percent, probability, statistics, geometry, and measurement. This course will also address applications of the algebraic properties of real numbers with an emphasis on problem solving and critical thinking. Students should already have substantial skills in these areas. Problem solving is interwoven in all of these topics. The course focuses on underlying concepts and multiple techniques of explaining the concepts. Prerequisite: a "C" or better in Math 1350.

The last chapters in the textbook will be discussed (Chapters 10-17). You should already know how to do the computations for most of the material. Therefore the goal of this course is NOT to teach simple mathematical computations but to assist you in developing an understanding of mathematics. As a future teacher you must be able to explain mathematics to your students, not just teach rote manipulations of numbers and symbols. You should know and understand more mathematics than what you teach.

Student Learning Outcomes

Upon completion of Math 1351, students will be able to:

- Demonstrate their ability to solve problems, particularly those dealing with fractions, decimals, percent, ratio, proportion, probability, statistics, geometry, and measurement;
- Demonstrate a judicious use of technology and manipulatives in the classroom; and
- Explain material to a child through the appropriate use of words, reasoning, drawings, and manipulatives.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

A basic scientific calculator is recommended for this class. Students need to check their e-mail regularly with the address that they have provided to the instructor for class announcement. Access of computer with internet and D2L access, along with MS office software and a printer will be needed for some of the class projects.

Instructional Methods

Class time will be spent in lecture, demonstration and models, and hands-on activities in small and/or large group settings. Several types of manipulative will be demonstrated and used to solve problems. Cooperative learning, inquiry learning, and the use of technology will be incorporated into this class. <u>All work should be completed in pencil.</u>

Student Responsibilities or Tips for Success in the Course

Students are encouraged to study and work in groups. In addition, the free tutoring on campus and from online is also highly recommended. **Math Skills Center** is located in Binnion 328, is open **Mon & Wed: 10am – 8pm; Tues & Thurs 10am – 6pm; & Fri 10am – 2pm.** The **Mach III/TRIO Program** is available for students who qualify for additional resources, such as private tutoring. In order to qualify, students must meet certain conditions, such as being a first-generation college student. For more information, contact Ronnie Brooks at 903-886-5833 or in the Halladay Student Services building, Room 301.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100% B = 80%-89% C = 70%-79% D = 60%-69% F = 59% or Below

Assessments

Teaching Assignments and Projects	10%
Homework	15%
Exams	50%
Comprehensive Final Exam	25%

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements LMS Requirements: <u>https://community.brightspace.com/s/article/Brightspace-Platform-Requirements</u> LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu. Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

Students will be expected to interact with the instructor(s) in class, during office hours or via electronic means in an appropriate manner. All instructor contact information is listed on this syllabus and should be used. Please use email to facilitate a quick response.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Attendance:

Attendance will be taken promptly at the start time of each class. Furthermore, students must be actively participating in class to receive credit for attendance that day. If you are part of an athletic or scholastic team or other group and must miss class, you may be excused only if the absence is listed as an excused absence by the university. You will be expected to communicate this absence to me at least one week beforehand. If a student misses class, please get the notes from another students and see me during office hours with any questions.

Excessive Absences: *** Students who are absent more than 6 times, for whatever reason, are subject to the instructor dropping them from the course or receiving a failing grade from this class.*** Six absences in this course constitutes missing 20% of the course, which is a very large fraction of material for a student to miss. Any student who is close to this number of absences should come to the instructor before they accumulate six absences in the course. I will NOT automatically drop students from the course. Therefore, if students intend to drop the course, students will need to follow the drop procedures of the school. If I intend to drop students from the course, students will receive an email from me at the address students have given me on my student information sheet.

Homework:

Homework will be assigned most class periods. It is extremely important for students to work all assignments in order to be prepared for the exams. Students can work together with classmates when trying to figure out how to do the problems. Please include classmate(s)' name(s) on the top of students' paper if students have worked with another students for an assignment. Homework assignments will be turned in through D2L. Late work is not typically accepted and will be graded with reduced credits. Assignments that are turned in a week passed the due date will receive a zero for the grade.

Quizzes:

Both individual and group quizzes will be given in class and the grade will be counted toward students' daily grade. Since regular attendance is expected, NO make-up quizzes will be given. This class covers a variety of important topics that there is not a "good" time to miss a class. Each quiz will be over material to be emphasized on exams. Quizzes will average into students' daily grade.

Activities and Projects:

Activities or projects will be assigned for students to work on outside of class periodically. These activities or projects will vary in their scope and should be completed neatly and punctually. An Activity or project is typically counted as twice a homework grade. Please follow the instructions for each activity or project closely and turn in quality work that reflects students' future profession as a teacher.

Minimum Competency Requirement:

There is not a "competency exam" for this course. Instead, due to the important role fractions and decimals play in a child's mathematical career, this course includes a minimum competency requirement over the material on the first exam. All students in this course **must achieve a grade of 75 or higher on the first exam in order to receive a grade of "C" or better in the course.** If the mastery level of 75% is not achieved on this exam, a retest will be administered outside of class. If the 75% competency is still not achieved, I will look at the section on the final exam that covers fractions and decimals. If the student achieves a 75% of mastery on the section of the final exam that covers the first exam, the student will be considered to have mastered the material. However, each student should think carefully about the pressure that will be added by depending on the final exam.

Exams:

There will be three scheduled exams before a comprehensive final exam and will consist of a variety of problems and short answer questions. Partial credit may be given on exams IF all work is neatly shown with clear steps. When pictures are drawn to answer a question, figures need to be clearly labeled and easily understood. **CELL PHONES AND OTHER SUCH DEVICES MUST BE TURNED OFF AND STORED OUT OF THE STUDENT'S REACH DURING AN EXAM.** All exams must be completed in pencil.

*I do not give any make-up exams unless pre-arranged and accompanied by a documented University-excused absence. Students can replace the lowest exam grade with their grade on the corresponding portion of the final exam, provided the grade on that section of the final exam is higher.

* University Authorized Excuses: 1) Participation in a required/authorized university activity; 2) Verified illness; 3) Death in a student's immediate family; 4) Obligation of a student at legal proceedings in fulfilling responsibility as a citizen; and others determined by individual faculty to be excusable (e.g., elective University activities, etc.)

Tentative Testing Schedule: Exam #1: Week of 9/16, Exam #2: Week of 10/14, Exam #3: Week of 11/25

Final Exam:

The final exam will be a comprehensive exam. The final exam will be given as per the university schedule **Tuesday December 10th, 10:30 am – 12:30 pm**

* There are no make-up exams for the final exam! *

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the <u>Student</u> <u>Guidebook</u>.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <u>https://www.britannica.com/topic/netiquette</u>

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>. <u>http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx</u> <u>http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01</u>. <u>pdf</u>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures: <u>Undergraduate Academic Dishonesty 13.99.99.R0.03</u>

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99. R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10 GraduateStudentAcademicDishonesty.pdf

Students with Disabilities-- ADA Statement

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 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 Email: <u>studentdisabilityservices@tamuc.edu</u> Website: <u>Office of Student Disability Resources and Services</u> <u>http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/</u>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus

document and/or consult your event organizer. Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/3 4.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit <u>www.tamuc.edu/counsel</u>

Mental Health and Well-Being

The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.



http://telusproduction.com/app/5108.html

Al use policy [Draft 2, May 25, 2023]

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors 'guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty 13.99.99.R0.10 Graduate Student Academic Dishonesty

Week	Date	Торіс
1	8/26	Syllabus, Introduction to Fractions/Fraction Sense
2	9/2	Introduction to Decimals/Terminating and Non-Terminating
3	9/9	Introduction to Decimals/Terminating and Non-Terminating, Ratio/Proportion
4	9/16	Review, EXAM #1
5	9/23	Percents, Visual Data
6	9/30	Probability
7	10/7	Statistics
8	10/14	Review and EXAM #2
9	10/21	Measurement
10	10/28	Measurement, Applications with Geometry
11	11/4	Applications with Geometry
12	11/11	Area and Perimeter
13	11/18	Transformations, Review
14	11/25	Exam #3, Thanksgiving Break
15	12/2	Final Exam Review
16	12/10	Final Exam 10:30am -12:30 pm

COURSE OUTLINE / CALENDAR