

MATH 1350.71W Mathematics for Elementary Teachers

COURSE SYLLABUS: Fall 2018

INSTRUCTOR INFORMATION

Instructor: Laura Beene, Mathematics Instructor Office Location: Binnion 303A Office Hours: Tuesdays and Thursdays 9:30am-11am, Wednesdays 12pm-1pm, 2pm-3pm, and/or by appointment Office Phone: 903-468-3330 University Email Address: laura.beene@tamuc.edu Preferred Form of Communication: email or Remind 101 Communication Response Time: Monday-Friday – 24 hours

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook Required: Students are required to have access to *Mathematics for Elementary Teacher: A Conceptual Approach (9th Edition)* by Bennett, Burton, & Nelson.

Course Description

Topics include problem solving and reasoning, sets, numeration, the four fundamental operations of arithmetic, number theory, integers, fractions, decimals, mental arithmetic and estimation. Students should already have substantial skills in these areas. The course focuses on underlying concepts and multiple techniques of explaining the concepts in addition to extended problem-solving. Prerequisite: Math 1314 with grade of C or better.

As a future teacher, student must be able to explain mathematics to one's students, and not just teach rote manipulations of numbers and symbols. Students should know and understand more mathematics than what they teach! The goal of this course is beyond teaching simple mathematical computations and to assist students in developing an understanding of mathematics.

Student Learning Outcomes:

Upon completion of Math 1350, students will be able to:

- Demonstrate, illustrate, & communicate concepts of whole numbers, fractions, decimals and their operations using manipulative & various models
- Identify patterns and solve problems with the topics of sets and Venn Diagrams
- Develop deeper understanding of mathematics thinking and connect ideas between mathematical concepts of the above topics
- Equip with various strategies and become proficient in solving problems

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students will need to have internet access (on a regular basis), MS Office, and a basic scientific calculator

Instructional Methods

Instructional Methods:

Each week, students will view videos of lectures, demonstration and models, and activities. Several types of manipulative will be demonstrated and used to solve problems. <u>All work should be completed in pencil.</u>

Attendance:

Students will be expected to access the course multiple times throughout the week to watch videos and complete all assignments. The videos will contain important information concerning the subject matter and information about assignments.

Homework:

Homework will be assigned each week. 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. 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. Homework will be completed on your own paper at home and then converted to a PDF document and turned in as ONE PDF document.

Quizzes:

Quizzes will be given periodically and the grade will be counted toward students' daily grade. Since regular access to the course is expected, **NO make-up quizzes will be given**. Each quiz will be over material to be emphasized on exams. Quizzes will average into students' daily grade.

Reflections, Activities and Projects:

Reflections, activities or projects will be assigned each week for students to think about, talk about, and practice the material we are covering in class. This is the replacement for the "group work" you would normally do during class time in a face-to-face class. These activities or projects will vary in their scope and should be completed neatly and punctually. Please follow the instructions for each activity or project closely and turn in quality work that reflects students' future profession as a teacher.

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. All exams must be completed in pencil. Exams will be taken at a face – to –face testing center at your location. Arrangements will be made for each exam at least ONE WEEK before the date of the exam.

Tentative Testing Schedule: See Weekly Schedule

Final Exam:

The final exam will be a comprehensive exam at the chosen face-to-face testing facility. The final exam will be taken by **Tuesday December 11.**

Student Responsibilities or Tips for Success in the Course

It is important for you to regularly access the course for you to be successful. In a faceto-face course, you would normally spend at least 2.5 hours per week IN class, and time outside class on homework and activities. Plan to spend AT LEAST this much time in this course.

GRADING

Grading Policy:

Quizzes and Attendance	5%
Homework, Activities, Reflections, and Projects	20%
Exams	50%
Comprehensive Final Exam	25%

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

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

Desktop Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

Tablet and Mobile Support

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - 512 MB of RAM, 1 GB or more preferred
 - Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
 - Sound card, which is usually integrated into your desktop or laptop computer
 - Speakers or headphones.
 - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: <u>JAVA web site</u> <u>http://www.java.com/en/download/manual.jsp</u>
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed. JavaScript is enabled.

Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - o Adobe Reader https://get.adobe.com/reader/
 - o Adobe Flash Player (version 17 or later) https://get.adobe.com/flashplayer/
 - <u>Adobe Shockwave Player</u> <u>https://get.adobe.com/shockwave/</u>
 - Apple Quick Time <u>http://www.apple.com/quicktime/download/</u>
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

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 <u>helpdesk@tamuc.edu</u>.

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 Brightspace Support

Need Help? Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words "click here" to submit an issue via email.



System Maintenance

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

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

Academic Integrity:

I find that a majority of students are honest in doing their school work. 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 <u>NOT</u> 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 <u>IN ANY WAY</u> DURING AN EXAM OR QUIZ, THE STUDENT WILL BE GIVEN AN AUTOMATIC "0" ON THE ASSIGNMENT.
- 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.

<u>Students found guilty of an act of academic dishonesty in this course will be</u> <u>subject to receiving an "F" in this course.</u>

Early Intervention 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.

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 Guidebook</u>. <u>http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as</u>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <u>Netiquette</u> <u>http://www.albion.com/netiquette/corerules.html</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>. http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

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:

Undergraduate Academic Dishonesty 13.99.99.R0.03

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.R0.10GraduateStudentAcademicDishonesty.pdf

ADA Statement

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 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/studentDisabilityResourcesAndServ</u> <u>ices/</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 <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.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.

COURSE OUTLINE / CALENDAR

Tentatively, the following content will be covered during the following weeks. Changes to this schedule will be made during class, if needed.

Week- 1 Syllabus, Problem Solving and Strategies

Week 2 Set and Venn diagram

Week 3 Numeration, Different Bases Operations

Week 4 Models and Strategies for Addition, Subtraction with Whole Numbers,

Compose Whole Number Word Problems (Join, Separate, Part-Part-Whole, Compare Problems), & Three Stages of Child Development for Mental Processing of Whole Number Operations

Week 5 Properties of Numbers, Integers, Exam #1 Review

Week 6 Exam 1, Models and Strategies for Multiplication, and Division with Integers

<u>Week 7</u> Models and Strategies for Multiplication, and Division with Integers, G.C.F. and L.C.M, Factors, G.C.F and L.C.M, Number Theory, Divisibility Rules,

<u>Week 8</u> Introduction for Fractions, Line, Area, and Set Models for Fractions, & Using Manipulatives for Fractions

Week 9 Line, Area, and Set Models for Fractions, & Using Manipulatives for Fractions Exam #2 Review

<u>Week 10</u> Exam #2, Add and Subtract Fractions Using Line, Area, and Set Models, Four Ways to Subtraction Mixed Fractions

<u>Week 11</u> Models and Strategies of Multiplication and Division of Fractions, Equivalent Fractions, Fraction Sense

Week 12 Word Problems for Fractions and Using Pictures and Models to Solve Word

Problems with Fractions

<u>Week 13</u> Introduction of Decimal Numbers, Models for Decimal Numbers, Number Sense of Decimal Numbers, and Models and Strategies for Operations of Decimal Numbers,

Week 14 Review for Exam 3, & Exam 3

Week 15 Review for Final Exam

Week 16 FINAL EXAM Tuesday December 11

<u>Remaining enrolled in this course constitutes acceptance of all policies contained in this</u> <u>syllabus.</u>

Any changes to this syllabus will be communicated directly to you in class by the instructor. You are responsible for being aware of any such changes. <u>Good luck and work hard!!</u>