MATH 1350 Mathematics for Elementary/Middle School Teachers I

Instructor: Susan E. Whitaker

Email: susan.whitaker@angelo.edu
Phone: (325)486-5439
Office: MCS 220 H

Office Hours:
MWF: 11:30 AM – 12:00 PM, 1:30 PM – 2:00 PM, and 3:00 PM – 4:00 PM
TR: 11:00 AM – 12:00 PM, 2:30 – 3:30
Office hours are in MCS 220 H but may be done virtually if student requests via email. Students may also make appointments using Navigate for other times.

Teaching Philosophy

I believe that all students can learn mathematics given appropriate instruction and by appropriate practice. I understand that each student is unique and possesses a variety of experiences which they can bring to bear on their learning and interactions with classmates. I recognize that all individuals have a right to mutual respect and to be accepted by others without biases based on differences of any kind.

Course Information

Course Description

Sets and relations, the system of whole numbers, numeration systems, the system of integers, elementary number theory, fractions and rational numbers, decimals and real numbers. Lab activities will include making and using math manipulatives, comparing different problem-solving techniques, making interdisciplinary connections, and

experiencing math concepts through auditory, visual, and kinesthetic approaches to inquiry-based activities.

Prerequisite and Co-requisite Courses

Mathematics 1324 or equivalent.

Prerequisite Skills

Accessing Internet websites and proficiency with a scientific calculator are expectations of this course.

Student Learning Outcomes

Upon completion of this course, students will be able to:

1. Students will gain factual knowledge including the mathematical terminology, classifications, and methods used in this course. Students will use the vocabulary, symbolism, structure, reasoning, and procedures that are needed to teach the mathematical content for grades K-8. See course content for more details.

2. Students will learn the fundamental principles, generalizations, and theories covered in this course. Students will demonstrate understanding of the conservation of area and volume, non-standard and standard measurement, proportionality, similarity, congruence, and basic probability.

3. Students will learn to apply course material. Students will be able to make connections between concepts and apply knowledge in a new and different setting. In particular, students will learn how to translate course content into K-8 grade appropriate lessons.

4. Students will develop specific skills, competencies, and points of view needed by K-8 mathematics teachers. In addition to learning the mathematical content of this course, students will:
   • become familiar with the Texas Essential Knowledge and Skills (TEKS) and the National Council of Teachers of Mathematics (NCTM) Standards;
   • learn multiple approaches to the teaching of mathematics;
   • use manipulatives to model mathematical concepts;
   • develop communications skills (oral, written, and listening), knowledge of appropriate vocabulary, and various questioning strategies;
   • learn how to use resources (such as the Internet and NCTM journals) in planning classroom activities. Students will gain a broader understanding and appreciation for mathematics.

Course Delivery

This is a face-to-face course with online components that students are expected to access in [Blackboard.](#)[1]

Required Texts and Materials

To successfully complete this course, students need *A Problem Solving Approach to Mathematics for Elementary School Teachers* access card through Pearson's MyMathLab.

A Problem Solving Approach to Mathematics for Elementary School Teachers, 13th Edition by Billstein, Libeskind, & Lott is the required text but you are not required to have a physical copy as an etext is part of the MyMathLab course.

Math 1350 Mathematics for Elementary/Middle School Teacher I (Summer 2021-Summer 2022) Lab Manual

Technology Requirements

To successfully complete this course, student needs to have regular and reliable access to a computer, webcam, and printer. Please note that tablets and phones will not always support the online tools utilized in this course. A reliable internet connection is also required. Further, student will need to have access to a scanner or a scanner application for turning in pencil/paper assignments. If you are planning to use campus owned technology, get a copy of the hours of operation for the various locations and set your study schedule accordingly. For technology assistance, contact the IT Service Center, which is located in MCS 111. Their phone number is (325) 942-2911 or check out their web page at [Tech Support](#)[2]

Communication

Faculty will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Written communication via email: All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

Virtual communication: Office hours and/or advising may be done with the assistance of the telephone, Collaborate, etc.

Grading

Evaluation and Grades

Course grades will be determined as indicated in the table below.

Assessment	Percent of Total Grade
Assignments and homework	15
Check-ins	5
Exam1	15
Exam 2	15
Exam 3	15
Exam 4	15
Final Exam	20
Total	100%

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:
>   A = 89.5 -100 points
>   B = 79.5 – 89.5 points
>   C = 69.5 – 79.5 points
>   D = 59.5 – 69.5 points
>   F = 0-59.4 points

Assignment and Activity Descriptions

Attendance

Attendance will be taken daily. If you are absent without accepted excuse, you will not receive credit for in-class activities for that day. If you arrive after attendance has been taken, you should check with me at the end of class to see that I updated your attendance status. Excused absences will require you to participate in an online activity to make up for the missed in-class activities.

Assignment and Homework Policy

- Assignments will be accessed through Blackboard, lab manual, and MyMathLab. Student will be expected to print out any files assigned.
- Due dates will be shown in course calendar in Blackboard. Any student who is having trouble meeting set deadline must contact the instructor before the assignment is due during regular business hours.
- Pencil and paper assignments will be submitted through Gradescope.
- At the end of the semester, the three lowest assignment/homework scores will be dropped.

In-class Activities

Class activities are an essential part of this course. As such, a daily grade is given for your participation. Those who are not present for class will receive a grade of zero for those activities unless absence is excused. If excused, student will participate in an online activity to make-up for the missed in-class activity. Students who are present but spend the class time texting, sleeping or are engaged in other off task behavior will also receive a grade of zero for those activities.

Paper Homework and Quizzes

Assignments will be made from the lab manual. If you need additional paper to complete the assignment please use standard sized paper. Submission of all paper assignments will be through Gradescope. Upload the pages, in sequential order. Box in your answers and show your work. No work = no credit. Assignments are due at the beginning of class and will not be graded if submitted late.

Online Homework

We will be using an online program called MyMathLab for part of the homework this semester. The course is linked through Blackboard. The due dates and times are associated with the assignments in MyMathLab as well as on the course calendar in Blackboard.

Centers

Centers are hands-on activities that are used to introduce new concepts, enrich or reinforce concepts that have already been taught, or help children make connections between different ideas. Centers in this course will usually be done in small groups with little or no teacher assistance. I plan to set up centers for

you to do during the semester.   It will be your responsibility to do these centers outside of class time. You will need to purchase one piece of colored poster board for one of the activities.

Portfolio

A portfolio is a collection of various things for and about a student. It serves many purposes: to teach organizational skills, to keep track of assignments, to use as a study guide, to create a resource file for future use, and as an assessment of mastery. You will create a portfolio for this course using a three inch, three-ring binder and a set of eight tabbed dividers. The tabs are to be labeled: Assignments, Exam 1 material, Exam 2 material, Exam 3 material, Exam 4 material, Exams, and Lab Manual. You will also create a title page that will include: MATH 1350, Mathematics for Elementary/Middle School Teachers I, Spring 2022, and your name. The portfolio should be with you in class every day.

Exams

There will be four unit exams and a comprehensive final exam. The final exam will be Thursday, May 12, from 8:00 am to 10:00 am. If you know that you are going to miss an exam, make arrangements to take the exam prior to the exams being returned to students. If such arrangements are not made, then your final exam will be used to replace it. If you do not miss any tests, your final exam may be used to replace your lowest test score should it be to your benefit.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook[3]
- Angelo State University Catalog[4]

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university's Statement of Academic Integrity[5] (Page 97).

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website.[6] The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures[7] for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's Academic Integrity Statement[8] in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the [ASU Writing Center](#).[9]

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 [Student Absence for Observance of Religious Holy Day](#)[10] for more information.

Title IX at Angelo State University

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: [Incident Reporting Form](#)[11]
Face to Face: Mayer Administration Building, Room 210
Phone: 325-942-2022
Email: michelle.miller@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit the [Title IX website](#).[12]

Information About COVID-19

Please refer to ASU's [COVID-19 (Coronavirus) Updates](#)[13] web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification on potentially short notice based on developing circumstances.

Course Schedule

Date	Topic
1/18	Syllabus, class expectations, problem solving
1/20	Inductive and deductive reasoning, Working Backwards
1/25	Sequences and patterns
1/27	Sequences and Intro to sets
2/1	Venn Diagrams, sets
2/3	Intro to numeration, review
2/8	Exam 1
2/10	Rounding, Numeration systems, addition models and properties
2/15	Numeration systems, subtraction and multiplication models and properties
2/17	Numeration systems, division models and properties
2/22	Review categories and properties, order of operations, base 5
2/24	Base 5/Base 10, numeration review
3/1	Intro to number theory, review
3/3	Exam 2
3/8	Addition/subtraction algorithms, number theory
3/10	Multiplication/division algorithms, prime factorization, divisibility
3/22	Prime numbers, prime factor test, GCF, LCM
3/24	GCF, LCM, Fraction intro
3/29	Fractions with pictures, Cuisenaire rods, pattern blocks, and counters
3/31	Fraction strips, traditional fraction algorithms, review
4/5	Exam 3
4/7	Fractions, decimal intro
4/12	Decimals

4/14	Fraction and decimal conversions
4/19	Real numbers,
4/21	Integers
4/26	Operations with Integers
4/28	Exam 4
5/3	Review for the final exam
5/5	Review for the final exam
5/12	Final Exam 8:00 AM

1 https://blackboard.angelo.edu/

2 https://www.angelo.edu/services/technology/support/

3 https://www.angelo.edu/current-students/student-handbook/

4 https://www.angelo.edu/academics/catalog/

5 https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97

6 https://www.angelo.edu/current-students/disability-services/

7 https://angelo.policystat.com/policy/10659448/latest/

8 https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97

9 https://www.angelo.edu/current-students/writing-center/academic_honesty.php

10 https://angelo.policystat.com/policy/10659368/latest/

11 https://www.angelo.edu/incident-form

12 https://www.angelo.edu/title-ix

13 https://www.angelo.edu/covid-19/