MATH 1351.040, 04Z Mathematics for EL/MS II Spring 2022



Monday/Wednesday 11:00am-12:45pm

Instructor: Mrs. Ashlee Fuchs

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Phone: (325) 486-5433 Office: MCS 220E

Office Hours:

Monday: 9:00 – 10:00am Tuesday: 12:30 – 2:15pm

Wednesday: 9:00 - 10:00am; 1:00 - 2:15pm

Thursday: 12:30 - 2:15pm

Friday: 9:00 – 10:00am; 11:00am – 1:15pm

Note: Office hours can be attended in person or virtually. Scheduling an appointment for office hours is strongly preferred. Appointments are scheduled using Navigate and more instructions

can be found in Blackboard.

Course Information

Course Description

Decimals and real numbers, nonmetric geometry, metric geometry, measurement, graphs, probability and statistics. 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

Math 1314 or Math 1324 with a grade of C or better Math 1350 with a grade of C or better

Student Learning Outcomes

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 also 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;
- 5. Students will gain a broader understanding and appreciation for mathematics.

Course Delivery

This course will be in a face-to-face format this semester. All students are expected to attend class regularly. Testing must be done in person. To allow for illness and other unavoidable absences, class will be recorded each day. Students that need to miss class will be allowed to ask for the class recording via email and will have 48 hours to watch the recording and complete all activities. Absences from illness (doctor's note required) or university events are considered excused absences and will not be penalized.

Required Texts and Materials

- Notebook paper or spiral
- One 3-inch 3-ring binder
- One packet of 8 tabs
- Protractor, ruler, scissors & markers/colored pencils
- MyMathLab access (this includes an ebook) for A Problem Solving Approach to Mathematics for Elementary Teachers, 13th Edition by Billstein, Libeskind, and Lott
- The 1351 lab manual (only available at the ASU Bookstore)

Technology Requirements

To successfully complete this course, students need to have

- Access to MyMathLab as listed above. (Students who previously purchased this access for Math 1350 may not need to purchase it again.)
- The ability to scan documents as a PDF and upload to Gradescope.
- Access to a computer and printer
- Reliable internet access

Communication

I 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 or Blackboard Collaborate

Grading

Evaluation and Grades

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

Assessment	Grade
Daily grades and homework	20%
Exams 1-4 Average	60% (15% each)
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 = 90.00-100 points

B = 80.00-89.99 points

C = 70.00-79.99 points

D = 60.00-69.99 points

F = 0-59.99 points (Grades are not rounded up)

Assignment and Activity Descriptions

In-Class (Attendance) Grades

Due to the large number of in class activities we do during the semester, you will receive a daily grade for a particular activity each class day. Those who are in class and participating will automatically receive a 100. For those using a class recording, instructions for completing your daily grade will be given via email. Excused absences may still earn a 100 for the in class grade, but unexcused absences can only earn a 70.

Centers

Center activities require students to come into the classroom outside of class time and complete an activity. Centers often involve hands on materials and activities. Due to the current circumstances, centers will be modified so that they can be completed with little or no sharing of materials.

Exams

There will be four in class exams and a comprehensive final exam. If you miss an exam and cannot make arrangements to take it before graded exams are handed back, your final exam will replace the missed exam. For those who do not miss an exam, the final exam can replace your lowest test grade if it is to your benefit. The exact dates and coverage of these tests will be announced in class; however, as a planning guide, you may expect to take the exams as noted in the schedule at the end of the syllabus below. All exams must be taken in class or in an approved testing center.

You may take an exam outside of the scheduled time ONLY if I give you written permission. If you think you will need to miss an exam, you must contact me at least 48 hours before the scheduled test time. All decisions regarding changes in testing will be made at my discretion.

If you are seen on your phone or other electronic device (such as a laptop or Apple watch) during an exam it is an automatic zero. Any academic dishonesty during an exam will result in a zero on the exam.

Homework

Homework in this class will be in one of two formats: 1) Online assignments that will be completed and graded in MyMathLab and 2) assignments from the lab manual. All lab manual assignments should be worked in an organized, readable form with answers clearly boxed. Once an assignment is completed it will be uploaded to Gradescope. All submissions must be in PDF form, with the pages in the correct order, with proper orientation. Also, make sure all intended pages are included within the document BEFORE you submit. For variable length assignments you must specify the problems on each page. Failure to follow directions will result in a grade deduction. More information about Gradescope can be found on Blackboard.

Homework assignments will be given at the end of class and will also be posted on Blackboard. It is your responsibility to keep up with assignments and due dates. **All homework is due at 10:00 pm (CST) on the assigned due date.**

I do not accept late homework., but I will drop six daily grades before computing your daily average. This is the leeway you are given to allow for unavoidable absences. You need to think of this as your insurance in case you get sick or have a family emergency. Do not waste them! If you know you are going to be absent, submit your homework early via Gradescope. For MyMathLab assignments, they can be worked on after the due date, but there is a 25% grade deduction each day after the due date.

Portfolios

A portfolio is a collection of various things for and about each student. It has 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, etc. Please purchase a 3-ring binder and a package of 8 dividers. Your divider tabs need to be labeled: Assignments, Test 1 material, Test 2 material, Test 3 material, Test 4 material, tests, lab manual, and miscellaneous. You also need to make a title page that includes the following: MATH 1351, Mathematics for Elementary/Middle School Teachers II, Spring 2022, and your name. You must bring your portfolio to class every day. Instructions on compiling the portfolio will be given on the first day of class

Attendance

Attendance will be taken **daily** and is **mandatory for the entire class period.** We will also be doing many in-class activities. Reading about an activity is very different from experiencing an activity, so it is imperative that you make every effort to attend class. Most of these activities will involve the use of math manipulatives and will be done in small groups. Besides learning mathematical content in an inquiry-based environment, these activities will focus on learning how to communicate your thinking and how to listen to your peers. During all activities, we will utilize proper sanitation before and after, which may require the use of disposable gloves. If you have your own, you may bring them with you on a daily basis.

Missing Class

If you are sick or must miss class for another reason, you must:

- Email me the SAME DAY you are going to miss class (before class if possible). Let me
 know why you are missing class and attach a doctor's note if you have one.
- Watch your ASU email. I will send you a link to the class recording, along with instructions on what you need to send me for your daily attendance grade.
- Watch the class recording and complete all activities.
- Email me your documents for your attendance grade.
- Complete all assignments by the due date.

Expectations of Students

As a future educator, you are expected to:

- Participate in class consistently.
- Foster a learning environment by practicing common courtesy at all times. Be respectful of your classmates and work cooperatively and constructively during activities.
- Pay attention fully during class remove distractions by turning off cell phones and other electronics.
- Complete each assignment by the specified due date. All homework is due at 10:00 pm (CST).
- Maintain academic honesty.

- Work outside of class on homework and review materials to master concepts and adequately prepare for exams. Seek out extra practice when needed.
- Utilize, as needed, all available study-aid options (including visiting the math lab, meeting with the instructor, etc.) to resolve questions.

Last Day to Drop

The last day to drop a class is April 28, 2022.

Course Schedule

Day	Date	Subject Matter
1	Wednesday, 01/19	Syllabus, Class Expectations, Ratio and Proportion
2	Monday, 01/24	Ratio and Proportion
3	Wednesday, 01/26	Ratio and Proportion, Scale Drawings, Conversions
4	Monday, 01/31	Percent
5	Wednesday, 02/02	Percent Methods, Basic Geometry
6	Monday, 02/07	Review, Percent Increase/Decrease, Basic Geometry
7	Wednesday, 02/09	Review, Triangles
8	Monday, 02/14	EXAM 1
9	Wednesday, 02/16	Planar Figures, Polygons
10	Monday, 02/21	Planar Figures, Polygons, Quadrilaterals
11	Wednesday, 02/23	Quadrilaterals, Circles, Intro to Space Figures
12	Monday, 02/28	Review, Space Figures, Euler's
13	Wednesday, 03/02	Review, Space Figures, Euler's Formula
14	Monday, 03/07	EXAM 2
15	Wednesday, 03/09	Space Figures, Nets, Mirror Images
16	Monday, 03/21	Symmetry, Transformations
17	Wednesday, 03/23	Similar Triangles, Mira Reflections
18	Monday, 03/28	Dilations, Tessellations, Measurement Intro
19	Wednesday, 03/30	Review, Measurement
20	Monday, 04/04	Review, Area and Perimeter, Geoboards
21	Wednesday, 04/06	EXAM 3
22	Monday, 04/11	Area of Polygons, Circles, Composite Shapes
23	Wednesday, 04/13	Pythagorean Theorem, Volume and Surface Area
24	Monday, 04/18	Volume and Surface Area, Scale Factor
25	Wednesday, 04/20	Statistics, Review
26	Monday, 04/25	Averages, Standardized Test Scores, Review
27	Wednesday, 04/27	EXAM 4
28	Monday, 05/02	Probability
29	Wednesday, 05/04	Final Exam Review
30	Monday, 05/09	FINAL EXAM (1:00pm – 3:00pm)

General Policies Related to This Course

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

- Angelo State University Student Handbook¹
- Angelo State University Catalog²

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 <u>Statement of Academic</u> Integrity.³

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. 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 <u>Grading Procedures</u>⁵ for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's <u>Academic Integrity policy</u>⁶ 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.

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.<u>19 Student Absence for Observance of Religious Holy Day² for more information.</u>

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 Form⁸

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 <u>Title IX website</u>.⁹

Information About COVID-19

Please refer to ASU's <u>COVID-19</u> (<u>Coronavirus</u>) <u>Updates</u>¹⁰ 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.

¹ https://www.angelo.edu/current-students/student-handbook/

² https://www.angelo.edu/academics/catalog/

³ https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97

⁴ https://www.angelo.edu/current-students/disability-services/

⁵ https://angelo.policystat.com/policy/10659448/latest/

⁶ https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97

⁷ https://angelo.policystat.com/policy/10659368/latest/

⁸ https://www.angelo.edu/incident-form

⁹ https://www.angelo.edu/title-ix

¹⁰ https://www.angelo.edu/covid-19/