Math 1351.020 - Mathematics for Elementary/Middle School Teachers II - Fall 2020

Syllabus

Disclaimer: This syllabus is current and accurate as of its posting date, but will not be updated. For the most complete and up-to-date course information, contact the instructor.

Instructor Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Office Hours:</th>
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<tbody>
<tr>
<td>Mrs. Codi Jaynes</td>
<td>Monday &amp; Wednesday 10:00 – 11:00 am &amp; 2:00 pm – 3:30 pm</td>
</tr>
<tr>
<td>Office: MCS 220C</td>
<td>Tuesday &amp; Thursday: 11:00 am – 12:00 pm &amp; 2:00 – 3:00 pm</td>
</tr>
<tr>
<td>Phone: 325-486-5446</td>
<td>Friday: 10:00 – 11:00 am</td>
</tr>
<tr>
<td>Email: <a href="mailto:codi.jaynes@angelo.edu">codi.jaynes@angelo.edu</a></td>
<td>All hours listed are available online via Blackboard Collaborate. Face-to-face meetings can be arranged by appointment.</td>
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</table>

This class meets TR 9:00 – 10:45 am in MCS 211 and online via Blackboard Collaborate.

Course Delivery: To maintain academic quality while accommodating social distancing needs this semester, this course will use a split delivery model that combines face-to-face teaching with remote instruction. The goal is to provide face-to-face instruction to students who want to return to campus, while also allowing students who may need to learn remotely to participate via virtual class sessions.

How Does It Work? Your class will be divided and you will be placed into a smaller group of students to maintain physical distancing requirements in our assigned classroom space.

Your assigned group will receive a schedule of in-person class meetings. This schedule is not flexible. For instance, if you are supposed to attend class on a Monday, you cannot elect to go on Wednesday with another class group instead.

When you are not in the physical class, you will attend live remote sessions at the same time as our scheduled course. You will also be expected to complete coursework via Blackboard.

Please refer to this Health and Safety web page for updated information about campus guidelines as they relate to the COVID-19 pandemic.

Blackboard & Email:

- I post notes, reviews, and other documents on Blackboard. I expect you to print these documents and bring them with you to class when I tell you to. I will also post grades and other important announcements on Blackboard.
- Blackboard can be accessed through RamPort or by visiting http://blackboard.angelo.edu.
- I will frequently send you information via email. It is your responsibility to regularly check your angelo.edu email account. All communication outside of class will be sent to your ASU e-mail account. I will do my best to respond to all emails by the next business day.

Technology Requirements

To successfully complete this course, students need to have daily access to the following technology: smartphone or scanner, laptop/tablet/desktop with webcam/mic, and a printer. Students also need to purchase access to TopHat™ classroom response system. More information regarding this system will be given during the first week of class. TopHat does require a subscription. It is available as an app for smartphones/tablets and as a website for computers.

Tests/Final Exam: We will have 3 tests and a comprehensive final exam. The final exam will be Tuesday, November 24th from 8:00 – 10:00 am. I do not give make-up exams. 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 below. If you leave the room during an exam, I may take your test and grade it AS IS!!

If you are not able to take your exam at the scheduled time, you need to speak with me IN PERSON at least 2 days (48 hours) before the scheduled test time. Communication via email is not sufficient, unless you are ill. If this is the case, you must send me an official doctor’s note stating that you cannot come take the exam before the scheduled test time. All decisions regarding changes in testing will be made at my discretion.

If you are not able to attend class physically to take your test, you will still be required to take it at the scheduled time. You will have to log into Blackboard Collaborate to allow me to monitor your exam. More details on this will be announced as the first exam date approaches.

Approximate exam dates are as follows: 9/17, 10/22, 11/17. Exact exam dates and coverage of material will be announced in class and on Blackboard.

**Attendance & In-Class Activities:** Attendance will be taken daily via TopHat 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. Hopefully, they will give you a deeper understanding of the content, and also give you ideas on how to teach math to children. 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.

Note: If you are caught texting, sleeping, or working on material for another class, you will receive a grade of zero for that day.

**Expectations of Students:** As a future educator, in this class you will be expected to:

- Attend class consistently and in a timely manner.
- Foster a learning environment by practicing common courtesy at all times. Be respectful of your classmates and work cooperatively and constructively during group activities.
- Pay attention fully during class – remove distractions by turning off cell phones and other electronics.
- Complete each assignment by the specified due date. Homework is due at the beginning of class.
- 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.

**Grading:** Assignments and grades will be posted on Blackboard. Throughout the semester there will be: homework, in-class activities, journal assignments, portfolio checks, etc. These will all be combined to form the daily average. I use the standard: 100 – 90 A, 89 – 80 B, 79 – 70 C, 69 – 60 D, below 60 F. This class is part of the coursework for your major, so a grade of C or better is required to pass.

**Grading Scheme**

| Daily average- 20% | Each regular exam (3)- 20% (total of 60%) | Final exam- 20% |
**Homework:** All homework and quizzes should be worked with a pencil or blue/black ink. Please use standard size white notebook paper (or unlined bond) for homework. All assignments will be submitted digitally using Gradescope. If you have more than one piece of paper, make sure all pages are included in the correct order within your submission. Box in your answers. Except for true/false and completion problems, show your work in an organized readable form. When I grade your tests, I will grade your work as well as your answers. A general rule is to show as much work on your papers as I show on similar problems in class. If you submit homework with no work shown, you will receive a grade of 0.

**I will accept 1 set of late homework only.** I plan to 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, bring your homework by my office before class, or send it with a classmate. **Homework assignments are due promptly at 8:45 am.** If you are absent, it is your responsibility to look on Blackboard and find out what homework was assigned. I would also appreciate it if you contact me to discuss your absences.

**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 bring a 3-ring binder and a package of 8 dividers to the 2nd class period so that we can put your portfolio together. Bring your portfolio to class every day.

Your divider tabs need to be labeled:
- Assignments, Test 1 material, Test 2 material, Test 3 material, tests, lab manual, and miscellaneous.
You also need to make a title page that includes:
- MATH 1351, Mathematics for Elementary/Middle School Teachers II, Fall 2020, and your name.

**Prerequisites**
1) College Algebra (MATH 1314) OR Finite Mathematics (MATH 1324) with a grade of C or better
2) Mathematics for Elementary/Middle School Teachers I (MATH 1350) with a grade of C or better

**Required text/lab manual**
- We will be using an online homework system called MyMathLab on a weekly basis. It is important to note that an eBook will be available through MyMathLab.
- The MATH 1351 lab manual (only available at the ASU Bookstore)

**Supplies**
Notebook paper, one 3-inch 3-ring binder, one packet of at least 6 tabs, protractor, ruler, colors (markers or colored pencils- at least 8 colors), scissors, and tape or glue. You will need to bring these supplies with you to class each day. If you would like your own gloves for manipulatives/activities, you may bring those as well.

**Common Courtesy:**
Please refrain from carrying on personal conversations once class has started. Be courteous to your peers when they are responding in class by listening to what they have to say.

You are not given a grade in a college course; you EARN your grade. It is your responsibility to put in as much effort as it takes to earn this grade. This includes utilizing (as needed) all available study aid options (my office hours, the Math Lab, reading outside texts, etc.) to resolve any questions or concerns you might have about any aspect of the course.
Drop Date: November 10th is the last day to drop a course with a W or withdraw from ASU.

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
- Angelo State University Catalog

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.

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:

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 for more information.

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 for more information.

Title IX at Angelo State University
The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a
Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit www.angelo.edu/title-ix.9

Required Use of Masks/Facial Coverings by Students
As a member of the Texas Tech University System, Angelo State University has adopted the mandatory Facial Covering Policy10 to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

Modifications to the Syllabus
This syllabus, including grade evaluation and course schedule, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice.

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;
• learn how to use resources (such as the Internet and NCTM journals) in planning classroom activities.

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

Course Content:
The following chapters from the textbook are covered:

• Chapter 6: Rational Numbers and Proportional Reasoning
  o Proportional reasoning
• Chapter 7: Rational Numbers as Decimals and Percents
  o Converting percents; basic percent problems; percent increase and decrease
• Chapter 9: Probability
  o Probability; experimental and theoretical probability; probability rules and simulations.
• Chapter 10: Data Analysis / Statistics
  o Observational studies and experiments; statistical graphs and tables; misleading graphs and statistics; mode, median, and mean; measuring spread; standardized test scores. (as time permits)
• Chapter 11: Introduction to Geometry
  o Beginning geometry; polygons; triangles, quadrilaterals, and circles; angle measures of polygons; three-dimensional geometry; viewing and drawing solid figures; symmetry
• Chapter 12: Congruence and Similarity
  o Congruent triangles; similar polygons
• Chapter 13: Area, Pythagorean Theorem, and Volume
  o Measurement. systems of measurement; perimeter and area; areas of quadrilaterals, triangles, and circles; the Pythagorean theorem; surface area; volume; lengths, areas, and volumes of similar figures.
• Chapter 14: Transformations
  o Translations; rotations; reflections; dilations; tessellations

Subject Matter: (tentative schedule- subject to change)
The subject matter schedule listed below is tentative, and subject to change and adaptation. For current, updated information about course topics, contact the instructor or see Blackboard.

Course Schedule

<table>
<thead>
<tr>
<th>Class Day</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Syllabus, class expectations, ratio and proportions</td>
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<tr>
<td>2</td>
<td>Ratio and proportions</td>
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<tr>
<td>3</td>
<td>Ratio and proportions &amp; scale drawing</td>
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<tr>
<td>4</td>
<td>Conversions, percent</td>
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<tr>
<td>5</td>
<td>Percent, decimals, fractions</td>
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<tr>
<td>6</td>
<td>Percent problems, basic geometry</td>
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<tr>
<td>7</td>
<td>Basic geometry, triangles</td>
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<tr>
<td>8</td>
<td>Triangles, planar figures</td>
</tr>
<tr>
<td>9</td>
<td>Planar figures, polygons</td>
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<tr>
<td>10</td>
<td>EXAM 1</td>
</tr>
<tr>
<td>11</td>
<td>Quadrilaterals</td>
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<tr>
<td>12</td>
<td>Circles, space figures</td>
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<tr>
<td>13</td>
<td>Space figures, nets</td>
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<tr>
<td>14</td>
<td>Space figures, 3-D drawings, symmetry</td>
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<tr>
<td>15</td>
<td>Symmetry, transformations</td>
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<tr>
<td>16</td>
<td>Transformations, similar figures</td>
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<tr>
<td>17</td>
<td>Dilations, tessellations</td>
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<tr>
<td>18</td>
<td>EXAM 2</td>
</tr>
<tr>
<td>19</td>
<td>Tangrams, measurement intro</td>
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<tr>
<td>20</td>
<td>Measurement, geoboards</td>
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<tr>
<td>21</td>
<td>Area and perimeter, circumference</td>
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<tr>
<td>22</td>
<td>Pythagorean Theorem, composite shapes, alternate area formulas</td>
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<tr>
<td>Class Day</td>
<td>Topic</td>
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<tr>
<td>23</td>
<td>Surface area, volume</td>
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<tr>
<td>24</td>
<td>Surface area, volume</td>
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<tr>
<td>25</td>
<td>EXAM 3</td>
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<tr>
<td>26</td>
<td>Statistics</td>
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<tr>
<td>27</td>
<td>Probability</td>
</tr>
<tr>
<td>28</td>
<td>Review for the Final Exam</td>
</tr>
<tr>
<td>29</td>
<td>Final Exam</td>
</tr>
</tbody>
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1. [https://blackboard.angelo.edu/](https://blackboard.angelo.edu/)
3. [https://www.angelo.edu/student-handbook/](https://www.angelo.edu/student-handbook/)
4. [https://www.angelo.edu/catalogs/](https://www.angelo.edu/catalogs/)
6. [https://www.angelo.edu/services/disability-services/](https://www.angelo.edu/services/disability-services/)
7. [https://www.angelo.edu/content/files/14197-op-1011-grading-procedures](https://www.angelo.edu/content/files/14197-op-1011-grading-procedures)
8. [https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of](https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)
9. [https://www.angelo.edu/services/title-ix/](https://www.angelo.edu/services/title-ix/)