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:
Instructor: Mrs. Paula Koca  
Fax: (325) 942 – 2503  
Office: MCS 220L  
e-mail: Paula.Koca@angelo.edu  
Office Phone: (325) 486-5437

Office Hours:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>10am – 12:45pm, 1:15pm – 2pm</td>
</tr>
<tr>
<td>Tuesday</td>
<td>10:30 am – 12pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>10am – 1pm</td>
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<tr>
<td>Thursday</td>
<td>10:30 am – 12pm, 2:30-3pm</td>
</tr>
<tr>
<td>Friday</td>
<td>By Appointment</td>
</tr>
</tbody>
</table>

Major Course Requirements

TESTS
We will have four tests and a comprehensive final exam. The final exam will be Monday 12/11/17 from 8-10am. I do not give make-up exams. If you miss an exam, your final exam will replace it. The final exam can also replace your lowest test grade if it is to your benefit. You may take an exam early ONLY if I excuse the absence.

IN-CLASS ACTIVITIES
We will be doing many in-class activities and I usually take a daily grade for your participation. 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.

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

HOMEWORK AND QUIZZES
All homework and quizzes should be worked with a #2 pencil and folded in half length-wise with your name and assignment number on the outside. Please use standard size white notebook paper (or unlined bond) for homework. If you have more than one piece of paper, staple your papers together in the upper left-hand corner. 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 hand in homework with no work shown, you will get a grade of 0.

I do not accept late/tardy homework. I plan to drop eight 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 the beginning of the class period. If you come in tardy, your homework will not be accepted. 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.

CENTERS
In a K-8 classroom, centers are hands-on activities that introduce new concepts, enrich or reinforce concepts that have already been taught, or help children make connections between different ideas. Centers are usually 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. Most (if not all) will require you to do them in our classroom because there will be instructions and materials provided. Times that are available for access to the classroom will be announced soon.
GRADING
Assignments and grades will be posted on Blackboard. Throughout the semester there will be:

Homework, in-class activities, Internet assignments, journal assignments, portfolio checks, etc. These will all be combined to form the daily average.

Daily average……………………..20% of the semester average
Each regular exam (4)………………15% of the semester average
Final exam………………………….20% of the semester 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.

MATH LAB
There is a free math lab where you can do your homework and get help with it. It is now located on the third floor of the library in room C302. Here’s the schedule:

Monday-Thursday: 9:00 am – 8:00 pm
Friday: 9:00 am– 12:00 pm
Sunday: 4:00 pm – 8:00 pm (Starting 9/10/17)

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. Your divider tabs need to be labeled: Assignments, Test 1 material, Test 2 material, Test 3 material, Test 4 material, NCTM journals, tests, and lab manual. You also need to make a title page that includes: MATH 1350, Mathematics for Elementary/Middle School Teachers I, Fall 2017, and your name. You may leave your textbook at home, but bring your portfolio to class every day.

ATTENDANCE POLICY

<table>
<thead>
<tr>
<th>0-4 Absences</th>
<th>No change to average</th>
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</thead>
<tbody>
<tr>
<td>5 + Absences</td>
<td>3 points will be subtracted from your final average for each absence</td>
</tr>
</tbody>
</table>

Attendance will be taken daily. If you are tardy, it is your responsibility to let me know after class so I can change my records. Do not make tardiness a habit. Also, it is your responsibility to check for missed assignments on Blackboard when you are absent.

PREREQUISITE
College Algebra with a grade of C or better.

REQUIRED TEXT

MISC.
Stuff to buy: Notebook paper
One 3-inch 3-ring binder
One packet of 8 tabs
Ruler
1 piece of colored poster board
The 1350 lab manual (only available at the ASU Bookstore)

I expect students to be respectful of all the members of our class. Please refrain from any avoidable distracting behavior such as talking during the lecture, getting off-task during the activity time, leaving your cell phone on, text messaging, etc.

Drop Date:
The last day to drop a class is November 3rd.
Additional Syllabus Statements

- **Student Disability Services**
  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. The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student’s responsibility to initiate such a request by contacting:
  
  Dallas Swafford  
  Director of Student Disability Services  
  Office of Student Affairs  
  325-942-2047  
  dallas.swafford@angelo.edu

- **Title IX**
  Angelo State University is committed to the safety and security of all students. If you or someone you know experience sexual harassment, sexual assault, domestic or dating violence, stalking, or discrimination, you may contact ASU’s Title IX Coordinator:

  Michelle Boone  
  Director of Title IX Compliance  
  325-486-6357  
  michelle.boone@angelo.edu

- **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. (http://www.angelo.edu/opmanual/ OP 10.19)

- **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. (http://www.angelo.edu/opmanual/ OP 10.19)

- **Student Conduct Policies**
  
  **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 Statement of Academic Integrity

  **Plagiarism**
  Plagiarism is a serious topic covered in ASU’s Academic Integrity policy 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 via Turnitin. Resources to help you understand this policy better are available at the ASU Writing Center.

  **Copyright Policy**
  Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

- **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
The subject matter schedule listed below is tentative and subject to change and adaption. For current updated information, contact the instructor.

<table>
<thead>
<tr>
<th>Day#</th>
<th>Date</th>
<th>Subject Matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M 8/28</td>
<td>Syllabus, class expectations, problem solving</td>
</tr>
<tr>
<td>2</td>
<td>W 8/30</td>
<td>Problem solving, inductive and deductive reasoning</td>
</tr>
<tr>
<td>3</td>
<td>W 9/6</td>
<td>Problem solving, sequences</td>
</tr>
<tr>
<td>4</td>
<td>M 9/11</td>
<td>Sequences and patterns</td>
</tr>
<tr>
<td>5</td>
<td>W 9/13</td>
<td>Tactile equations, patterns, sets</td>
</tr>
<tr>
<td>6</td>
<td>M 9/18</td>
<td>Venn Diagrams, sets</td>
</tr>
<tr>
<td>7</td>
<td>W 9/20</td>
<td>Intro to numeration, review</td>
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<tr>
<td>8</td>
<td>M 9/25</td>
<td>Exam 1</td>
</tr>
<tr>
<td>9</td>
<td>W 9/27</td>
<td>Rounding, Numeration systems, addition categories and properties</td>
</tr>
<tr>
<td>10</td>
<td>M 10/2</td>
<td>Numeration systems, subtraction and multiplication categories and properties</td>
</tr>
<tr>
<td>11</td>
<td>W 10/4</td>
<td>Numeration systems, division categories and properties</td>
</tr>
<tr>
<td>12</td>
<td>M 10/9</td>
<td>Review categories and properties, order of operations, base 5</td>
</tr>
<tr>
<td>13</td>
<td>W 10/11</td>
<td>Base 5/Base 10, numeration review</td>
</tr>
<tr>
<td>14</td>
<td>M 10/16</td>
<td>Intro to number theory, review</td>
</tr>
<tr>
<td>15</td>
<td>W 10/18</td>
<td>Exam 2</td>
</tr>
<tr>
<td>16</td>
<td>M 10/23</td>
<td>Addition/subtraction algorithms, number theory</td>
</tr>
<tr>
<td>17</td>
<td>W 10/25</td>
<td>Multiplication/division algorithms, prime factorization, divisibility</td>
</tr>
<tr>
<td>18</td>
<td>M 10/30</td>
<td>Prime numbers, prime factor test, GCF, LCM</td>
</tr>
<tr>
<td>19</td>
<td>W 11/1</td>
<td>GCF, LCM, Fraction intro</td>
</tr>
<tr>
<td>20</td>
<td>M 11/6</td>
<td>Fractions with pictures, Cuisenaire rods, pattern blocks, and counters</td>
</tr>
<tr>
<td>21</td>
<td>W 11/8</td>
<td>Fraction strips, traditional fraction algorithms, review</td>
</tr>
<tr>
<td>22</td>
<td>M 11/13</td>
<td>Exam 3</td>
</tr>
<tr>
<td>23</td>
<td>W 11/15</td>
<td>Fractions, decimal intro</td>
</tr>
<tr>
<td>24</td>
<td>M 11/20</td>
<td>Decimals</td>
</tr>
<tr>
<td>25</td>
<td>M 11/27</td>
<td>Fraction and decimal conversions, review</td>
</tr>
<tr>
<td>26</td>
<td>W 11/29</td>
<td>Exam 4</td>
</tr>
<tr>
<td>27</td>
<td>M 12/4</td>
<td>Real numbers, Integers</td>
</tr>
<tr>
<td>28</td>
<td>W 12/6</td>
<td>Integers, review</td>
</tr>
<tr>
<td>29</td>
<td>M 12/11</td>
<td>FINAL EXAM</td>
</tr>
</tbody>
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**Course Content**


1. **Mathematical Reasoning.** inductive and deductive reasoning; patterns; problem solving.
2. **Sets and Functions.** sets; operations on two sets; functions and relations.
3. **Whole Numbers.** numeration systems; addition, subtraction, multiplication, and division of whole numbers; properties, algorithms, mental computation, and estimation of whole numbers; place value and algorithms in other bases.
4. **Number Theory.** factors; divisibility; prime and composite numbers; common factors and multiples.
5. **Integers.** Addition, subtraction, multiplication, and division of integers; properties of integer operations.
6. **Rational Numbers as Fractions.** Rational numbers; addition, subtraction, multiplication, and division of rational numbers; properties, estimation, and error patterns with rational numbers.
7. **Decimals, Percents, and Real Numbers.** Place value, estimation, and mental computation; decimal arithmetic and error patterns; rational, irrational, and real numbers. (The rest of this chapter is covered in Math 1351.)
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 identify and apply properties of the real number system, algebraic thinking, patterning, the fundamental theorem of arithmetic, and both standard and non-standard arithmetic algorithms.

3. Students will learn to apply course material to improve thinking, problem solving, and decisions. Students will be able to make connections between concepts and also apply knowledge in new and different settings. 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. Besides learning the mathematical content of this course, student will:
   • become familiar with the Texas Essential Knowledge and Skills (TEKS) and the National Council of Teachers of Mathematics (NCTM) Standards;
   • understand different learning styles and learn multiple approaches to the teaching of mathematics;
   • use manipulatives to model mathematical concepts;
   • develop communication skills (oral, written, and listening), knowledge of appropriate vocabulary, and various questioning strategies;
   • learn appropriate calculator activities;
   • 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.