MTH 127.001, Introduction to Mathematics for Elementary Teachers
Department of Mathematics and Statistics
Course Policy Sheet and Syllabus—Fall 2019

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Office Hours: For the times in the table below, no appointment is needed; simply come by as your schedule allows. In
addition, appointments may also be scheduled by emailing me in advance.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>3:00-5:00</td>
<td>3:15-4:15</td>
<td>9:15-11:15</td>
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Course description: Elementary concepts of sets, numeration systems, number theory, and properties of the natural
numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking

Core Objectives (CO):
1. Critical Thinking [CO 1]: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of
   information
2. Communication Skills [CO 2]: to include effective development, interpretation and expression of ideas through
   written, oral and visual communication
3. Empirical and Quantitative Skills [CO 3]: to include the manipulation and analysis of numerical data or observable
   facts resulting in informed conclusions

Text and Materials: The required textbook is Mathematics for Elementary Teachers, Fifth Edition, by Sybilla Beckmann,
Please note that calculators will not be used in this course.

Exam Calendar: Below are the dates for the exams throughout the semester. Please note that the date and time of the
final exam are NOT the date and time listed on the university’s final exam schedule.

Exam 1     Monday, September 16
Exam 2     Monday, October 14
Exam 3     Wednesday, November 13
Final Exam Tuesday, December 10, 6:30pm – 9:00pm; location TBA

Course Requirements:
• Three in-class exams—Exams are scheduled far in advance, and it is impossible to move the time or date. However,
in rare cases where it is impossible for an individual to take the exam at the scheduled time, we will work with you to
make other arrangements. Exceptions for taking the exam out of sequence are the following:
   1. A medical excuse. Please provide proper documentation according to university rules.
   2. A University sponsored event such as an athletic tournament, a play, or a musical performance. Your coach or
director must contact us in advance. Athletic practices and rehearsals do not fall into this category.
   3. A religious holiday. Please send a short email explaining the situation.
   4. Extreme hardship such as a family emergency. Please have the proper university office notify us.

The above are the only allowable excuses for taking the exam before the scheduled time. Under no circumstances do
we give late exams. Since we can only accommodate a limited number of students taking the exam at an earlier time,
please make sure that you fall into one of the above categories before you contact us. If you miss an exam due to
illness or a family emergency, you will not be penalized. The missed exam will be replaced with the final exam grade.

Calculator and cell phone use is not permitted in or out of the classroom during all exams (including the final exam).
If you bring your cell phone to the exam venue, please remember to turn it off. Violation of this policy will be
considered as academic dishonesty and dealt with accordingly.
• **Comprehensive Final Exam**—The final exam for all MTH 127 classes is on **Tuesday, December 10, 2019 at 6:30-9:00pm** in a location to be announced later. Students having another exam at this time will schedule an earlier time to take the MTH 127 final. If you have a conflict with the final exam (other than another exam at the same time), you must contact the Registrar. Only the Registrar can schedule an out-of-sequence final exam.

• **Homework**—Completing any assigned online and textbook homework exercises is a requirement in this course. Online homework exercises are located on the WeBWorK math homework system at webwork.sfasu.edu. Your WeBWorK login username is the same as your D2L username. If you run into a technical issue or error with WeBWorK (during submissions, for instance), email me a screenshot of the error you receive. In general, late submissions to WeBWorK will not be accepted, and deadlines are set in stone.

Homework will also be assigned from our textbook and turned it at the beginning of class. For more information about textbook homework submissions and policies, see the Homework Policy document and the tentative calendar (both available on D2L).

• **Class attendance and participation**—Students are expected to attend all class meetings, arriving on time and actively participating in class discussions. If you are absent, you are responsible for determining what you missed and for being prepared for class when you return. Students are strongly encouraged to ask questions (no matter how trivial or simple the question may seem!) as the material is presented and discussed in class. Remember, the class is being held for you to learn the material, not just to give you a time to copy notes off the board. Please be respectful of your fellow classmates and your instructor. Cell phones and other devices that have the potential to distract you, me, or your classmates should be put away and silenced.

• **Preparing for class**—Students should be prepared to invest several hours per day outside of class reading the text, practicing examples, and working textbook exercises. **Material to be discussed in class should be read before coming to class.** Check your university email regularly, as I may send reminders, assignments, or announcements.

**Grading:** As discussed above, there will be three 75-minute exams during the semester and a 150-minute comprehensive final exam. Your course grade will be determined as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework &amp; Writing Assignments</td>
<td>20%</td>
</tr>
<tr>
<td>Three Mid-Semester Exams (20% each)</td>
<td>60%</td>
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<tr>
<td>Comprehensive Final Exam</td>
<td>20%</td>
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Semester numerical scores will be converted into letter grades according to the following method:

<table>
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<tr>
<th>Percentage Range</th>
<th>90% - 100%</th>
<th>80% - 89%</th>
<th>70% - 79%</th>
<th>60% - 69%</th>
<th>0% - 59%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corresponding Letter</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
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When we calculate your final grade at the end of the course, we will calculate a score on a 0-100 point scale using the scores that you have obtained during the course, and the grade breakdown given above. Your course grade will then be obtained using this table.

**Resurrection Policy:** If you score a 70% or better on the final exam, we will replace your lowest midterm grade with your final exam grade if the midterm grade is lower. The resurrection policy does not apply to your homework or WeBWorK grade.

**Getting Help with Math 127:** Individual and group help is available at the Academic Assistance and Resource Center (AARC), which is located on the first floor of the Steen Library. Also available through the AARC is participation in Learning Teams. In a learning team, you will meet with five to seven other students who are also taking MTH 127 and a “coach” to review material and discuss the class as your team and/or coach lead. To join a learning team, you must sign up in person at the AARC during designated Open Enrollment periods. The first open enrollment period is:

- Wednesday, August 28 and Thursday, August 29 from 11am to 6pm
Finally, the AARC also hosts “power hours” for MTH 127, which are slots of time when there will be a tutor with experience in MTH 127 available. Those times are: Mondays from 4-6pm, Tuesdays from 1-3pm, Wednesdays from 6-8pm, and Thursdays from 2-4pm.

I also encourage each of you to take advantage of office hours.

**The following is an excerpt from SFA Policy 5.4:**

*The federal definition of a credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates:*

1. **Not less than one hour of classroom or direct faculty instruction and a minimum of two hours out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or 10 to 12 weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time, or;**
2. **At least an equivalent amount of work as outlined in item 1 above for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.**

To this end, all students in courses offered by the Department of Mathematics and Statistics that wish to be successful should plan to spend a minimum of two hours outside of class for every credit hour associated with this course. Expected activities to be completed in the time outside of class include reviewing notes from previous class meetings, reading assigned course resources, completing all assigned exercises and projects, and performing periodic assessment preparation.

See [http://www2.sfasu.edu/math/docs/syllabi/MTH127Syllabus.pdf](http://www2.sfasu.edu/math/docs/syllabi/MTH127Syllabus.pdf) for elements common to all sections.

**NOTE:** I, Dr. Falahola, reserve the right to make changes to any part of this syllabus as necessary, in the interest of the class. Students will be notified of any changes via email and in class.
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Activity</th>
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</table>
| 1    | Course Orientation  
1.1. The Counting Numbers  
1.2. Decimals  
1.3. Reasoning to Compare Numbers in Base Ten | 1C, 1E, 1F, 1I (mod) |
| 2    | 1.4. Reasoning about Rounding  
2.1. Solving Problems and Explaining Solutions  
2.2. Defining and Reasoning about Fractions | 1N, 1O, 2A, 2B, 2C, 2D, |
| 3    | 2.3. Reasoning about Equivalent Fractions  
2.4. Reasoning to Comparing Fractions | 2I, 2K, 2L, 2O, 2P, 2Q |
| 4    | Exam I - Chapters 1 and 2  
3.1. Interpretations of Addition and Subtraction | Strip Diag., 3D |
| 5    | 3.2. The Commutative and Associative Properties of Addition, Mental Math, and Single-Digit Facts  
3.3 Why the Standard Algorithms for Addition and Subtraction in Base Ten Work | 3E, 3F, 3G, 3I, 3J, 3K |
| 6    | 3.4. Reasoning About Fraction Addition and Subtraction  
4.1. Interpretations of Multiplication  
4.2. Why Multiplying by 10 is Special in Base Ten | 3O, 3P, (3Q, 3R), 4A, 4B, 4C |
| 7    | 4.3. The Commutative and Associative Properties of Multiplication, Areas of Rectangles and Volumes of Boxes  
4.4. The Distributive Property  
4.5. Properties of Arithmetic, Mental Math, and Single-Digit Multiplication Facts, | 4D, 4E, 4G, 4H, 4J, 4K, 4M |
| 8    | Exam II - Chapters 3 and 4.1 – 4.5  
4.6. Why the Standard Algorithm for Multiplying Whole Numbers Works | 4N |
| 9    | 5.1. Making Sense of Fraction Multiplication | 5A, 5C, 5D, 5E |
| 10   | 6.1. Interpretations of Division  
6.2. Division and Fractions and Division with Remainder | 6A, 6B, 6D, 6E, 6G |
| 11   | 6.3. Why Division Algorithms Work  
6.4. Fraction Division from the How-Many-Groups Perspective | 6I, 6J, 6M |
| 12   | 6.4. Fraction Division from the How-Many-Groups Perspective (con’t)  
Exam III – Chapter Sections 4.6, 5.1, 6.1- 6.4 | 6M (con’t) |
| 13   | 6.5. Fraction Division from "How-Many-Units-in-1-Group Perspective  
8.1. Factors and Multiples  
8.2. and Odd | 6P, 6Q, 8A, 8B, 8D, 8E |
| 14   | Thanksgiving Holiday | |
| 15   | 8.3. Divisibility Tests  
8.4. Prime Numbers  
8.5. Greatest Common Factor and Least Common Multiple | 8G, 8H, 8I, 8J, 8M |
| 16   | Final Exam - Tuesday, December 10, 6:30pm-9:00pm, Location TBA | |