Instructor
Stacia Prince
Department of Mathematics and Statistics
Office: Math 334 (anytime my door is open)
TEL: (936) 468–6262 (Please email before calling.)
Email: princes@sfasu.edu
Office Hours: TR: 2:00pm - 3:30 pm
With an online class, these office hours will be available by Zoom. The Zoom meeting times out if not in use, so understand if it takes a minute to let you in the meeting. If you are in town and would like to meet face to face, please email me for an appointment.

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. For a more detailed course description, Student Learning Outcomes, and Exemplary Educational Objectives, go to https://www2.sfasu.edu/math/docs/syllabi/MATH1350Syllabus.pdf

Course Time and Meeting Place
The format for this course will probably be different from your previous math classes. Students spend time working, discussing, and explaining problems through the online platform. You should not expect that the instructor will post lectures, or that you will have a clearly defined set of notes or PowerPoint-type slides. Getting used to this format requires some time, so be patient. I will send emails to the entire class during the course. Remember to be respectful and kind to your classmates as you interact online. Check your D2L email daily. Ask questions often.

This is an asynchronous online course. We do not have a scheduled class time. Content is posted on D2L for you to read and review. The textbook is very good, so be sure to read the sessions. There is extra information in the D2L modules. Videos are listed on the Tentative Course Calendar to help you understand the concepts. Discussion Boards are due before homework assignments so you receive feedback to explain any misconceptions before homework is due.

Current Text and Materials
- Calculators may be used in this course, but this course is not about just finding the answer. Understanding and explaining how you determined answers is the most important part of this course.

The Online Classroom
- The format for this course will probably be different from your previous math classes. Students spend time working, discussing, and explaining problems. You should not expect that the instructor will lecture, or that you will have a clearly defined set of notes or PowerPoint-type slides. Instead, you and your classmates will construct your own knowledge with the professor facilitating discussions and asking questions. Getting used to this format requires some time, so be patient. The discussions in this course will be conducted on
The instructor will ask many questions. These are not rhetorical questions. These questions are asked so that you can develop a deeper understanding of the course content.

I will send emails to the entire class and/or make News Feed announcements during the course. Check your BrightSpace D2L email and News Feed daily.

Course Requirements:

- **D2L access.** You will be required to access D2L, SFA’s learning management software (at http://d2l.sfasu.edu) on a daily basis. Read and complete discussion boards and assignments, through the D2L system. You should log in daily to participate in required/graded course discussions and to check for announcements, updates, and email messages from the instructor.

- **Reading** the textbook is essential to the learning process and is expected. You should read the sections covered in each module carefully before attempting investigations, discussions, and/or homework problems. It will likely be necessary to read each section more than once.

- Section quizzes are assigned to help with your understanding of the concepts.

- The discussion boards are used to mimic the discussions that you would have in a face to face class. It is very important that you participate in these discussions. See the Discussion Board Guidelines for instructions.

- Active participation through completing assignments and asking questions is expected. This course is taught with an emphasis on inquiry rather than lecture. Learning within this framework requires completing classroom activities and discussion boards to create a deep understanding of the mathematical content in this course. Discussion board guidelines are contained in the Getting Started module under the Content tab.

- Working homework problems from the textbook is essential to the learning process and is expected. Homework is collected for grading. Scan handwritten pages and upload a single PDF document, oriented correctly, to the appropriate D2L Dropbox. Discussion board posts regarding homework problems are NOT required. You will be given a feedback and a grade on each assignment.

- A three mid-semester exams lasting 75 minutes will be administered through a D2L quiz. Written work will be scanned as a single PDF, oriented correctly and uploaded to the specified dropbox folder in D2L. The dates for the mid-semester exams are listed on the “Tentative Course Calendar” in the Getting Started module under the Content tab.

- Initiative to seek help through emails, ZOOM meetings may be necessary in order to succeed in the course.

Attendance Policy

- You should log into the BrightSpace D2L system daily to read or review content and/or feedback, to check for email messages, announcements and updates, to post on discussion boards and to upload assignments into dropbox folders.

- This course is taught with an emphasis on inquiry rather than lecture. You will be required to participate in discussions through discussion posts and other activities online as part of your grade.

- Late work is not accepted.

- Exam makeups must be approved beforehand with documentation of a valid university sanctioned excuse.

- The university’s Attendance and Excused Absences Policy can be found at http://www.sfasu.edu/policies/class_attendance_excused_abs.asp

The Online Class Environment

- The format for this course will probably be different from your previous math classes. Students spend time working, discussing, and explaining problems. You should not expect that the instructor will lecture, or that you will have a clearly defined set of notes or PowerPoint-type slides. Instead, you and your classmates will construct your own knowledge with the professor facilitating discussions and asking questions. Getting used to this format requires some time, so be patient and join in the discussions.

- The instructor will ask many questions. These are not rhetorical questions. These questions are asked so that you can develop a deeper understanding of the course content.
I will send emails to the entire class and/or make News Feed announcements during the course. Check your D2L email and New Feed daily.

**Making Your Homework Easy to Read and Easy to Grade**

- Make sure your handwriting is legible and any drawings are legible and clearly labeled.
- Write your name in the upper righthand corner of each page.
- Problems should be clearly numbered on the left side of the page. There should also be a clearly visible separation between problems.
- To ensure that each problem is graded, problems and solutions should be written in the order that they are assigned.
- It is good practice to first work out the solutions to homework problems on scratch paper, and then to neatly write up your solutions. This will help you turn in a clean finished product that is easy for the instructor to read.
- You should write up your solutions by yourself. You should always acknowledge any help received at the top of the assignment or in the righthand margin. Classmates, AI and internet help are readily available. This “help” may get you a grade, but they will not always get you the understanding of the concepts that the instructor desires for you to have. Please ask questions and read the instructor's responses on the discussion boards.
- Take advantage of the instructor by posting questions on the discussion boards, emailing questions or setting up appointment(s) for ZOOM meeting(s). You will be informed when the AARC is open.

**Grading and Exams**

See specific dates on the Tentative Course Calendar under in the Getting Started module Content in D2L.

<table>
<thead>
<tr>
<th>Component</th>
<th>Date</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Boards</td>
<td>Discussion Boards are due each Wednesday by 11:59pm.</td>
<td>5%</td>
</tr>
<tr>
<td>Homework</td>
<td>Textbook homework is uploaded as a single PDF document oriented correctly to the appropriate dropbox each Friday by 11:59pm.</td>
<td>15%</td>
</tr>
<tr>
<td>Exams</td>
<td>The Mid-semester and Final Exams will be administered as quizzes in D2L. The dates and instructions are listed on the Tentative Course Calendar.</td>
<td>80%</td>
</tr>
</tbody>
</table>

Your final grade is calculated at the end of the course on a 0–100 point scale using the scores that you obtain during the course, according to the grade percentages given above. Your course letter grade will then be determined using this table below. In the event of a fractional score, the score be rounded up to the nearest integer. There is no provision for extra credit in this course. All grades will be entered into the D2L gradebook, but the final average will be determined on a spreadsheet downloaded from D2L after the final exam.

<table>
<thead>
<tr>
<th>Range of numerical values</th>
<th>Corresponding Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>90–100</td>
<td>A</td>
</tr>
<tr>
<td>80–89.5</td>
<td>B</td>
</tr>
<tr>
<td>70–79.5</td>
<td>C</td>
</tr>
<tr>
<td>60–69.5</td>
<td>D</td>
</tr>
<tr>
<td>0–59.5</td>
<td>F</td>
</tr>
</tbody>
</table>

**Exam Policy**

Exams in this course will be administered through a quiz in D2L during the specified time period listed on the Tentative Course Calendar in the Getting Started module under the Content module in D2L. The midterm exam will include the topics listed on the Tentative Course Calendar. The Final Exam is comprehensive. Each exam will include an online quiz written work uploaded to the appropriate dropbox. After pressing ‘Start Quiz’ you will have 120 minutes (2 hours) to complete the midterm and final exams. The written work for each exam will be scanned and uploaded to a specified dropbox as a single PDF, oriented correctly, within 10 minutes of submitting the quiz.
Exams must be taken within the range of dates on the Tentative Course Calendar in the Getting Started module under the Content module in D2L. There should be no reason to miss an exam other than:

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 us.

The previous list are the only allowable excuses for taking an exam before the scheduled time. Under no circumstances will an exam be administered late.

The following is an excerpt from SFA Policy 5.4:

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.

Add/Drop Policy
The Add/Drop Policy can be found at http://www.sfasu.edu/policies/add_drop.asp

On-campus Resources:

1. SFASU Counseling Services
   www.sfasu.edu/counselingservices
   3rd Floor Rusk Building. (936)468-2401

2. SFASU Human Services Counseling Clinic
   www.sfasu.edu/humanservices/139.asp
   Human Services Room 202. (936)468-1041

Crisis Resources:
Burke 24-hour crisis line: 1(800) 392-8343
Suicide Prevention Lifeline: 1(800) 273-TALK (8255)
Crisis Text Line: Text HELLO to 741-741
**Math 1350 – Introduction to Foundation of Mathematics I**  
**Course Syllabus**

**Course description:** Properties of the natural numbers, integers, rational and real number systems, and number theory 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

**Credit hours:** 3

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.

**Course Prerequisites and Corequisites:** See general course prerequisites.

**General Education Core Curriculum:** This course has been selected to be part of SFA’s core curriculum. The Texas Higher Education Coordinating Board has identified six objectives for all core courses: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. SFA is committed to the improvement of its general education core curriculum by regular assessment of student performance on these six objectives. Assessment of these objectives at SFA will be based on student work from all core curriculum courses. This student work will be collected in D2L, the assessment management system selected by SFA to collect student work for core assessment.

By enrolling in MTH 1350 – Introduction to Mathematics for Elementary Teachers you are also enrolling in a Core Curriculum Course that fulfills the Mathematics Core Objective requirement.

The chart below indicates: (a) The core objectives that are required to be taught in this course per the Texas Higher Education Coordinating Board (THECB), (b) How the required core objectives will be addressed.

[Examples of the things that can be included in the final column are: Specific assignments, class module(s), chapter(s), strategies, activities, and/or techniques that address the core objectives.]
Core Curriculum Objective Table

<table>
<thead>
<tr>
<th>Core Objective</th>
<th>Definition</th>
<th>How the Core Objective Will be Addressed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking Skills</td>
<td>To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.</td>
<td>Inquiry-based activities – Reasoning about Rounding, Fractions, etc.</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>To include effective development, interpretation and expression of ideas though written, oral, and visual communication.</td>
<td>Explanation of concepts along with diagrams on activities</td>
</tr>
<tr>
<td>Empirical and Quantitative Skills</td>
<td>To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.</td>
<td>Using and explaining algorithms to determine products and quotients.</td>
</tr>
</tbody>
</table>

Course outline:

- Techniques of problem solving and estimation skills [CO 1, 2, 3]  
  Approximate time spent: 15%
  Explicit instruction in Critical Thinking, Communication and Empirical and Quantitative Reasoning is in addition to implicit instruction, modeling and practice that occur daily in the discussion of numbers and operations. This explicit instruction includes explanation of solving mathematical problems by thinking critically, communicating logically ordered solutions with complete and correct notation, and applying empirical or quantitative skills as appropriate to the problem. The following topics will be threaded throughout the course in order to develop the habits of mind necessary to be successful in mathematics:
  - Introduce Polya’s Problem Solving Process: Understand the Problem, Devise a Plan, Carry Out Plan, Look Back
  - Explore Basic Problem Solving Strategies
  - Explore Patterns in Language, Figures, Numbers, Sequences and Geometry
  - Develop Estimation Skills with Mental Arithmetic
  - Investigate temperature as a form of measurement

- Whole Numbers and Numeration: Concepts and Algorithms [CO 1, 2, 3]  
  Approximate time spent: 25%
  - Define the Set of Whole Numbers
  - Model Whole Number Operations using a Variety of Methods
  - Verify Properties of Operations: Binary Operation; Closed, Commutative, Associative, Distributive
  - Property of Multiplication over Addition, Identities, Multiplication by Zero; Division Algorithm
  - Explore Place Value Systems using Base Five Arithmetic
  - Develop and Apply Algorithms for Whole Number Operations
  - Develop Definition and Properties for Whole Number Exponents

- Number Theory: An Introduction [CO 1, 2, 3]  
  Approximate time spent: 10%
  - Define and Explore Primes and Composites
  - Explore Basic Divisibility Properties of Sums and Products
  - Explore Applications of the Fundamental Theorem of Arithmetic
  - Define the GCD and LCM and Use Algorithms for Finding Each

- Integers: Concepts and Algorithms [CO 1, 2, 3]  
  Approximate time spent: 25%
  - Model Integer Operations Using a Variety of Methods

sfasu.edu/math
Investigate Extensions of Whole Number Operations and their Properties: Closed, Commutative, Associative, Distributive Property of Multiplication over Addition, Identities, Additive Inverse, Multiplication by Zero

- Real Numbers: Concepts and Algorithms [CO 1, 2, 3] 25%
  - Investigate Practical Uses for Fractions
  - Explore Connections between Fractions, Rational Numbers, Decimals, and Percents
  - Investigate Order of Numbers in Decimal Form
  - Illustrate the Pythagorean Theorem
  - Develop Proportional Thinking to Include Ratio and Proportion, Properties of Proportions, Fundamental Law of Fractions

- Explicit instruction in Critical Thinking, Communication and Empirical and Quantitative Reasoning is in addition to implicit instruction, modeling and practice that occur daily in the discussion of numbers and operations. This explicit instruction includes explanation of solving mathematical problems by thinking critically, communicating logically ordered solutions with complete and correct notation, and applying empirical or quantitative skills as appropriate to the problem.

**Student Learning Outcomes (SLO):** At the end of MTH 127, a student who has studied and learned the material should be able to:

1. Solve a variety of problems using multiple problem-solving techniques. [CO 1, 3]
2. Demonstrate understanding of core concepts underlying standard and non-standard algorithmic procedures for performing operations on subsets of real numbers. [CO 1, 3]
3. Communicate his/her knowledge effectively in multiple formats – verbally, concretely, and in writing. [CO 2]
4. Define, identify, and use the fundamental properties of real number operations. [CO 3]
5. Provide logical justification of mathematical thinking. [CO 1]
6. Use mathematical language and notation appropriately to communicate ideas. [CO 2]

There are no specific program learning outcomes for this major addressed in this course. It is a general education core curriculum course and/or a service course.

**Academic Integrity**

The Code of Student Conduct and Academic Integrity outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy.

Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially.
Withheld Grades 
Semester Grades (SFA Policy 5.5) 
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average. The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C. For additional information, go to https://www.sfasu.edu/policies/course-grades-5.5.pdf.

Students with Disabilities 
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices.

Student Wellness and Well-Being 
SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

On-campus Resources: 
The Dean of Students Office  (Rusk Building, 3rd floor lobby) 
www.sfasu.edu/deanofstudents
936.468.7249
dos@sfasu.edu

SFA Human Services Counseling Clinic Human Services, Room 202
www.sfasu.edu/humanservices/139.asp
936.468.1041

The Health and Wellness Hub “The Hub”
Location: corner of E. College and Raguet St.

To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:

- Health Services
- Counseling Services
- Student Outreach and Support
- Food Pantry
- Wellness Coaching
- Alcohol and Other Drug Education

www.sfasu.edu/thehub
936.468.4008
thehub@sfasu.edu

Crisis Resources: 
- Burke 24-hour crisis line: 1.800.392.8343
- National Suicide Crisis Prevention: 9-8-8
- Suicide Prevention Lifeline: 1.800.273.TALK (8255)

sfasu.edu/math
Acceptable Student Behavior
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy 10.4). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom.

Date of document: 08/23/2023