Department of Mathematics and Statistics
MATH 1351 – 500 Intermediate Mathematics for Elementary Teachers
Summer I 2024 Syllabus and Course Policy

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Class meeting time and place: This will be an online, asynchronous course. We do not have a scheduled class time. Content is posted on D2L for you to read and review, then you will complete the assignments on D2L by the due date. Due dates will be every Monday and Thursday, starting Thursday, June 6, 2024.

Office Hours: Office hours are held through Zoom by appointment.
Office hours ZOOM: link: https://sfasu.zoom.us/my/drcarriere?pwd=M3VDZkpRMnRSUUFRWFBmRXgzUzkwdz09 or use the Meeting ID: 451 497 5134 and Passcode: 429842

*** Email me to set up an appointment to zoom for office hours.

Current Text and Materials

- A compass used for drawing circles, scissors, and a ruler (straight edge) are required for the activities and exams in this course.
- A scientific or graphing calculator with a pi and square root key is needed in this course. However, you should not rely on computers and/or calculators to such an extent that they keep you from developing your own skills. Technology should be used as an aid, but without a good understanding of the underlying mathematical concepts, the calculator will quite happily mislead you without your even knowing it. In general, technology is a good thing, but as with everything, sometimes too much of a good thing can lead to problems.


- We will use the Class activities from the 6th edition (all required class activities are posted in a module called Class Activities 6th edition under the content tab in D2L)

Course Goals

- To understand the mathematics essential to successful teaching in the elementary school classroom.
- To acquire a foundation in geometry, statistics, probability, and counting.
- To gain skill in problem solving and critical thinking.

Course Requirements: Major course requirements are various homework assignments as determined by your instructor, homework from textbook, class activity quizzes on D2L, one midterm exam, and a comprehensive final exam.

- A midterm exam lasting 2 hours and final exam lasting 2 hours will be administered through a D2L quiz. Written work will be scanned as 1 PDF, oriented correctly, and uploaded to a specified drop box folder in D2L. The dates for the exams are listed in the chart below and on the ‘Tentative Course Calendar’ on D2L.
- Ability and resources needed to be able to upload written work to D2L.
- Reliable internet access
- Good computer, ability to print class activities and other documents as necessary
- D2L access. You will be required to access SFA’s Learning management Software(at https://d2l.sfasu.edu) daily
• **Homework** from the textbook will be collected and graded. You will submit written work to the appropriate drop box in D2L for that homework set. Homework due dates are posted in D2L but are subject to change so check the D2L news feed on the homepage of our class in D2L and check your email frequently.

• **Class activities quizzes** will be completed via Quizzes on D2L.

• Additional assignments at the instructor’s discretion

• **There is no extra credit.**

• Initiative to seek help outside of class, with the professor or the AARC may be necessary in order to succeed in the course

**Attendance Policy**

• You should log on to the D2L system daily to read or review content or feedback, and to check for email messages, announcements, and updates.

• This course is taught with an emphasis on inquiry rather than lecture.

• Late work is not accepted.

• Exams may be taken before the scheduled time if the rescheduling is approved beforehand with documentation of a valid university sanctioned excuse. Exams will not be given late.

• More information about absences can be found of the Dean of Student’s website: [https://www.sfasu.edu/thehub/sos/notification-request](https://www.sfasu.edu/thehub/sos/notification-request).

**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.

• 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 and any drawings are legible.

• Write you name in the upper right--hand corner of each page.

• Problems should be clearly labeled and numbered on the left side of the page. There should also be a 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.

• You should write up your solutions by yourself. You should always acknowledge any help received at the top of the assignment or in the right--hand margin.

• Take advantage of the instructor by emailing questions or setting up appointment(s) for ZOOM meeting(s).

**Grading and Exams**

There will be a 2-hour midterm exam and a 2-hour final exam. The exams will be administered through a quiz on D2L, with written work scanned as 1 PDF document, oriented correctly, and uploaded to a specified
drop box within 10 minutes of submitting the exams. You will have a 1-day window for taking the exam. (See Tentative Course timeline in the Getting Started Module for more details.)

Your course grade will be calculated as follows:

<table>
<thead>
<tr>
<th>Component:</th>
<th>Class Activity quizzes</th>
<th>Homework</th>
<th>Midterm Exam (June 20)</th>
<th>Final Exam (July 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage:</td>
<td>15%</td>
<td>20%</td>
<td>30%</td>
<td>35%</td>
</tr>
</tbody>
</table>

When I calculate your final grade at the end of the course, I will calculate a score on a 0-100 point scale using the scores that you have obtained during the course, and the grade breakdown below.

<table>
<thead>
<tr>
<th>Numerical Grade:</th>
<th>0-59</th>
<th>60-69</th>
<th>70-79</th>
<th>80-89</th>
<th>90-100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corresponding Letter:</td>
<td>F</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
</tbody>
</table>

Course contact hours and Study hours:

MTH 1351 is a 3 hour credit course. This means that you should spend at least 6 hours per week outside of class studying for this class. Studying should include but is not limited to completing assignments. Please refer to the excerpt from SFA Policy 5.4 below.

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 [https://math.sfasu.edu/docs/syllabi/MATH1351Syllabus.pdf](https://math.sfasu.edu/docs/syllabi/MATH1351Syllabus.pdf) for elements common to all sections.

**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. See [10.4.pdf](https://sfasu.edu) for more information. A note about cheating: Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism. A few words about academic integrity—I may opt to ask for an in-person oral examination if I have any reason to suspect that work that you present is not your own. Possession of materials that can be used to cheat, whether or not they are used, is considered academic dishonesty.
Consequences for academic dishonesty will be determined in accordance with university policy at the time of the violation.

**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](http://www.sfasu.edu/disabilityservices).

**Withheld Grades Semester Grades Policy (5.5)**

For information, go to [https://www.sfasu.edu/policies/course-grades-5.5.pdf](https://www.sfasu.edu/policies/course-grades-5.5.pdf)

**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](http://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](http://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](http://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)
- johCrisis Text Line: Text HELLO to 741-741
Math 1351 – Intermediate Mathematics for Elementary Teachers
Course Syllabus

Course description: Elementary concepts of geometry and measurement, probability, and statistics with an emphasis on problem solving and critical thinking.

Credit hours: 3

The following is an excerpt from SFA Policy 5.4:

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Course Prerequisites and Corequisites: Math 1350.

Course outline:

- Geometric Figures: Definitions, Properties, and Relationships
  - Build basic vocabulary of geometric figures
  - Analyze properties of two and three dimensional figures
  - Explore relationships between lines, planes, polygons, and solids
  - Approximate time spent: 20%

- Geometry and Measurement
  - Investigate standard and nonstandard units of measure
  - Explore linear measurement: perimeter, circumference
  - Explore area of regular and irregular shapes
  - Use the Pythagorean Theorem appropriately
  - Explore measures of surface area and volume: lateral surface area, base, height, slant height
  - Investigate temperature as a form of measurement
  - Approximate time spent: 30%

- Geometry of Congruence, Similarity, and Transformations
  - Investigate properties of congruent and similar figures
  - Explore ratio and proportion as applied to geometric figures
  - Perform basic constructions using Mira, paper folding, compass, straightedge, and technology (when applicable)
  - Perform rigid and similarity transformations on a variety of figures
  - Explore properties and outcomes of rigid transformations
  - Explore types of symmetry
  - Approximate time spent: 20%

- Statistics
  - Collect, organize, analyze, and present real data
  - Utilize appropriate types of graphs for various data types
  - Interpret graphs and tables
  - Investigate the use of graphs to distort statistics
  - Analyze measures of central tendency and dispersion
  - Approximate time spent: 15%
• **Counting Principles and Probability**  
  o Explore basic counting principles  
  o Understand and utilize factorial notation  
  o Explore the language of uncertainty: sample space, outcome, event, equally likely, mutually exclusive events, certain and impossible events  
  o Investigate experimental probability: simulation  
  o Determine Expected Value

**Student Learning Outcomes (SLO):** At the end of MTH 128, a student who has studied and learned the material should be able to:

1. Use problem solving strategies to model, construct, and solve problems within and outside mathematics.
2. Use technology to explore geometric concepts and perform geometric constructions and transformations.
3. Apply spatial visualization skills to construct, transform, and measure two and three dimensional objects.
4. Apply concepts of congruence and similarity.
5. Use mathematical reasoning to develop strategies of conjecture and justification, leading to geometric proof.
6. Understand measurement as a process and apply basic concepts of measurement to real world settings.
7. Use basic counting principles and apply concepts of probability theory.
8. Apply basic concepts of statistics, including data classification, collection, and analysis.
9. Understand geometry as an axiomatic system.

*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**

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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.

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

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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)
- Crisis Text Line: Text HELLO to 741-741

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