Welcome to MATH 1352!!!!

Instructor
Dr. Brian Church
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Bush Math 322
(936) 468.1582

Office Hours
By appointment via Zoom

Class Meeting Time
Online at d2l.sfasu.edu

Course Description
Problem solving and critical thinking skills applied to the study of a broad range of topics, including sequences and series, recursion, and mathematical modeling with families of functions, including connections to the classroom.
https://math.sfasu.edu/docs/syllabi/MATH1352Syllabus.pdf

Text and Materials:
The textbook for this course is

Although no calculator is required for MATH 1352, a simple four-function calculator might be useful. I encourage you to use your calculator as needed; however, you should not rely on computers and 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.

Course Information
- You will need D2L access. You will be required to access D2L (at http://d2l.sfasu.edu) to complete class activities (via quizzes tool), homework assignments (via the dropbox tool), and two exams (via the quizzes tool). You should log on daily to participate and to check for announcements, updates, and email messages from the instructor.
- There may be additional assignments at the instructor’s discretion.
- Scheduling note: this course is structured around fixed due dates for assignments and content availability. Students should NOT expect to work through the course entirely at their own pace – interaction with peers and feedback from the instructor are important components of the learning process, so the course is structured to maximize these opportunities.
- Due dates for this course will generally fall on Wednesday and Sunday at 11:59pm. See tentative course calendar for more detail, and assignments that do not follow this trend.
- Reading the textbook is essential to the learning process and is expected. You should read the sections covered in each module carefully before attempting class activities or
attempting homework problems. It will likely be necessary to read each section more than once.

- There is NO extra credit in this course and late work is not accepted.
- Should I suspect any acts of academic dishonesty, I may request a meeting via Zoom.
- Feel free to reach out with any question you have by sending an email. I am also available to set up Zoom meetings to discuss class activity problems.

Class Activity Requirements

- For each module, a set of class activity questions will be assigned.
- You are allowed unlimited attempts on class activities as this is your chance to play with the material before being held responsible for the content. Use the activities as a tool to help you THINK about the material, and UNDERSTAND how to discuss it.
- You are welcome to work and discuss questions with others when completing the activities.
- Active participation is expected. This course is taught with an emphasis on inquiry rather than lecture. Learning within this framework requires completing class activities and understanding them.
- Feel free to reach out with any question you have about class activity problems by sending an email. I am also available to set up Zoom meetings to discuss class activity problems.

Homework Requirements

- For each module, a set of homework problem from the textbook will be assigned. Homework is collected for grading based on correctness.
- **Scan handwritten pages and upload 1 PDF document to the appropriate D2L Dropbox.**
- Make sure your handwriting and any drawings are legible.
- Homework questions often ask you to EXPLAIN your thinking. This explanation should be in full sentences and use vocabulary from the course.
- 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. For five extra credit points in the homework category, send Dr. Church an email with a joke by June sixth. This will help you turn in a clean finished product.
- While you can talk through homework questions with others, you should write up your solutions by yourself.
- Homework corrections can be resubmitted on the following due date for additional points.
- Feel free to reach out with any question you have about homework problems by sending an email. I am also available to set up Zoom meetings to discuss homework problems.
Exam Requirements

Exams in this course will be administered through a quiz in D2L during the specified time period listed in the table below and in the Tentative Course Calendar. Each exam will have an online and written component. After opening the quiz, you will have 2 hours to complete the exam. The written work will be scanned and uploaded at the end of the quiz. All work will be done individually. No communication should be made between students while taking the exam or after the exam until the exam window is closed. More information for the exam will be posted on D2L prior to each exam.

Exams must be taken within the range of dates listed below. 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 Office of Student Rights and Responsibility notify me.

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

The above are the only allowable excuses for taking the exam before the scheduled time.

Grading Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Due</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>Due according to dates on calendar on D2L</td>
<td>25%</td>
</tr>
<tr>
<td>Flipgrid Videos</td>
<td>Due according to dates on calendar on D2L</td>
<td>15%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>Sunday June 16th - Monday, June 17th</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Tuesday July 2nd - Wednesday, July 3rd @ 3:00pm</td>
<td>30%</td>
</tr>
</tbody>
</table>

Semester numerical scores will be converted into letter grades according to the following method.

<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</td>
<td>B</td>
</tr>
<tr>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>0-59</td>
<td>F</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 given above. Your course grade will then be obtained using this table.
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.

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](http://www.sfasu.edu/deanofstudents), 936.468.7249, [dos@sfasu.edu](mailto: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](mailto: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
Course description: Problem solving and critical thinking skills applied to the study of a broad range of topics, including sequences and series, recursion, and mathematical modeling with families of functions, including connections to the classroom.

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: Math 1351.

Course outline:

- The Real Number System
  - Common Subsets of the Real Numbers
  - Decimals and Real Numbers
  - Connections between Fractions and Decimals in the Context of Terminating and Nonterminating Decimals
  - Connections to the Classroom

- Algebraic Thinking
  - Sequences, Series, and Recursion (Including the Fibonacci Sequence)
  - Arithmetic and Geometric Progressions as Functions; Connections to Recursive and Closed Form Rules
  - Simulations as a Tool to Model and Solve Problems
  - Developing and Validating Conjectures about Patterns and Relationships in Data Presented in Tables, Sequences, or Graphs
  - Finite Differences
  - Interpreting and Using Graphs for Mathematical Modeling
  - Problem Solving Strategies
  - Connections to the Classroom

- Standards
  - National and state mathematics standards for grades EC-8
    - Reference: Texas Essential Knowledge and Skills (TEKS), Texas Education Agency
  - National and state mathematics standards for beginning teachers of grades EC-8
Math 1352 – Concepts and Applications
Syllabus Continuation

**Student Learning Outcomes (SLO):** At the end of MTH 129, a student who has studied and learned the material should be able to:

1. Identify the number sets. [SBEC: I]
2. Identify and define recursively and explicitly (when possible) arithmetic and geometric sequences. [SBEC: II, V]
3. Use finite differences to find the closed form rule for sequences defined by a polynomial. [SBEC: II]
4. Use geometric series to find the rational number representation of a repeating decimal. [SBEC: I, II, V]
5. Define relations and represent them in a variety of ways. [SBEC: II]
6. Determine whether a relation satisfies the reflexive, symmetric, and transitive properties. [SBEC: II, V]
7. Define functions and function properties. [SBEC: II]
8. Identify the function families. [SBEC: II]
9. Interpret graphs of functions. [SBEC: II, V]

*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.*

Texas State Board for Educator Certification (SBEC): Mathematics Standards: Standard I. Number Concepts: The mathematics teacher understands and uses numbers, number systems and their structure, operations and algorithms, quantitative reasoning, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics. Standard II. Patterns and Algebra: The mathematics teacher understands and uses patterns, relations, functions, algebraic reasoning, analysis, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics. Standard V. Mathematical Processes: The mathematics teacher understands and uses mathematical processes to reason mathematically, to solve mathematical problems, to make mathematical connections within and outside of mathematics, and to communicate mathematically.

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

sfasu.edu/math
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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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

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936.468.4008
thehub@sfasu.edu

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- National Suicide Crisis Prevention: 9-8-8
- Suicide Prevention Lifeline: 1.800.273.TALK (8255)
- Crisis Text Line: Text HELLO to 741-741

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