MATH 1324 Finite Mathematics  
Course Policy Sheet  
Fall 2023

Instructor: John Sullivan  
Office: MATH 345  
Email: sullivanjb1@sfasu.edu  
Phone: 936-468-1547 (office)  
936-468-3805 (Math Dept.)

Class meeting times and rooms:  
Section .003: MWF: 10:00 AM – 10:50 AM, MATH 212  
Section .004: MWF: 11:00 AM – 11:50 AM, MATH 204

Office Hours: MWF: 9:30 AM – 10:00 AM, TR: 11:00 AM – 12:00 PM

Course Description: The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value.

Required Materials  
Book: The textbook is Finite Mathematics with Applications in the Management, Natural, and Social Sciences, 12th Edition, by Lial, Hungerford, Holcomb, and Mullins. Chapters 1 through 9 will be covered in this course.

MyLab Math Account: Online homework is done through www.mlm.pearson.com.  
To create a MLM account, students will need:  
1. a valid email address (use your SFA email)  
2. an access code (bundled with new textbooks, or may be purchased separately online)  
3. course id (provided in class)

Calculator: You may use a graphing calculator for this course, but you may not use a calculator equivalent to a Ti-89 or higher. A Ti-30XS Multiview is recommended (retails for under $20)

Remind App: Optionally, we can communicate through text with the Remind app. Send the message below to enable texting.  
Section .003: text “@1324se” to 81010  
Section .004: text “@1324sec” to 81010

Tutoring  
- There are multiple options for getting help outside of class. You have already paid for these resources with your tuition money, so take advantage of them!
  
1. Instructor office hours (see above) and text/email  
2. The Academic Assistance Resource Center (AARC) in the Steen Library offers both walk-in tutoring (no appointment needed). Other tutoring options are being finalized and will be announced in class
How Your Course Grade Will Be Computed

MyLab Math Homework
- Each textbook section covered in the course has a corresponding homework assignment on MyLab Math. Each assignment consists of 10 – 20 questions, and students (usually) have three attempts at the correct answer per question. Generally, the due date for all homework assignments covered on a particular exam will be the **Sunday Night Before the Exam, at 11:59 PM**. This due date structure was chosen to give you great flexibility in scheduling your work, but it requires discipline and responsibility from you. Check the calendar on MyLab Math frequently for due dates to be sure.

- To calculate your overall MyLab Math grade (15% of course grade), first drop the lowest two homework grades, then average the remaining 15 grades.

Exams
- Three exams will be given over the course of the semester (approximate dates listed in calendar). Each exam grade comprises 20% of a student’s overall course grade. A student’s final exam grade will replace their lowest regular exam grade (provided that the final exam grade is higher). However, your final exam grade can only replace one regular exam; if, for example, a student misses two regular exams, one of the scores will be an irreplaceable zero.

- Exam procedure: during exams, you may not (1) share calculators, (2) use your own scratch paper (I will provide scratch paper for you), (3) use your phone or other device, (4) use headphones or earbuds (foam earplugs are ok), or (5) use any unapproved notes or formula sheets.

- The final exam for this course will be given as scheduled on the university calendar, in our normal classroom. No alternate arrangements will be allowed.

General Policies and Information

- Setting yourself up for success at the beginning of the semester is crucial. In the first week, sit down and plan out your schedule, including specified times and locations for studying. Your performance on the first round of exams in your classes will play a huge role in the kind of semester you’ll have: relaxed and successful, or full of stress and worry.
I want to create a relaxed classroom environment, where students feel comfortable asking questions. You should always feel free to stop me during lecture to ask for clarification on some concept that is confusing you; there are no dumb questions. Students who disrespect or belittle their classmates will be asked to leave.

To communicate with students, either individually or as a group, I may use the Remind app, email, or the News feature on the course D2L page. Make sure you have configured your personal D2L settings so you receive these notifications (you can configure to D2L to send you a text message whenever I post a news item, post an exam grade, etc)

University Policies
For further information on the standard university policies below, consult the common syllabus for MATH 1324, which can be found at http://www3.sfasu.edu/math/docs/syllabi/MATH1324Syllabus.pdf

- Withheld Grades Semester Grades Policy (A-54)
- Students with disabilities
- Course outline with Core Objectives
- Acceptable Student Behavior
- Academic Integrity (Policy A-9.1)

Important Dates to Remember, Fall 2023 Semester
- Monday, 8/28: Classes begin
- Tuesday, 9/12: Last day that students can add themselves to a course
- Tuesday, 9/12: Official attendance reporting day
- Monday 10/31 – Friday 11/4: Early registration for Spring 2024 semester
- Monday 11/20 – Friday 11/24: Thanksgiving Holiday
- Monday 12/5: Last day to submit a withdrawal request
- Monday 12/4 – Friday 12/8: Dead week
- Monday 12/11 – Friday 12/15: Final exams
<table>
<thead>
<tr>
<th>Week of . . .</th>
<th>Topics Covered</th>
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<tbody>
<tr>
<td>8/28 – 9/1</td>
<td>Course Introduction  1.1 Linear Functions</td>
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<tr>
<td>9/4 – 9/8</td>
<td>1.2 Linear Applications (cont)</td>
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<tr>
<td>9/11 – 9/15</td>
<td>1.3 Systems of Linear Equations (cont) 2.1 Quadratic Functions and Applications</td>
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<tr>
<td>9/18 – 9/22</td>
<td>Exam I (Monday 9/18/23)</td>
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<tr>
<td>9/25 – 9/29</td>
<td>2.3 Rational Functions (cont) 3.1 Exponential Functions and Applications</td>
</tr>
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<td>10/2 – 10/6</td>
<td>3.2 Logarithmic Functions (cont)</td>
</tr>
<tr>
<td>10/9 – 10/13</td>
<td>3.4 Exponential &amp; Log Applications</td>
</tr>
<tr>
<td>10/16 – 10/20</td>
<td>Exam II (Monday 10/16/23)</td>
</tr>
<tr>
<td>10/23 – 10/27</td>
<td>5.1 Basic Matrix Operations</td>
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<td>10/30 – 11/3</td>
<td>5.2 Simplex Method &amp; Applications</td>
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<tr>
<td>11/6 – 11/10</td>
<td>5.2 Simplex Method &amp; Applications (cont)</td>
</tr>
<tr>
<td>11/13 – 11/17</td>
<td>Exam III (Monday 11/13/23)</td>
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<tr>
<td>11/20 – 11/24</td>
<td>Thanksgiving Holiday</td>
</tr>
<tr>
<td>11/27 – 12/1</td>
<td>6.3 Probability Analysis with Matrices</td>
</tr>
<tr>
<td>12/4 – 12/8</td>
<td>Review/Extra Instruction</td>
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<tr>
<td>Final Exam</td>
<td>Section .003: Monday, December 11&lt;sup&gt;th&lt;/sup&gt; 10:30 AM – 12:30 PM  Section .004  Wednesday, December 13&lt;sup&gt;th&lt;/sup&gt; 10:30 AM – 12:30 PM</td>
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</tbody>
</table>
Course description: Mathematical functions and graphs, linear systems of equations, matrices, linear programming, mathematics of finance; applications.

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 MATH 1324 Finite Mathematics 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.
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>Probability Analysis with Matrices</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>Analysis of the Simplex Method in Maximization Applications</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>Exponential and Logarithmic Applications</td>
</tr>
</tbody>
</table>

**Course outline:**

- **Functions [CO: 1, 2, 3]**
  - Linear Functions, including systems of linear equations
  - Quadratic Functions including Maxima and Minima
  - Polynomial Functions
  - Rational Functions
  - Logarithmic Functions and solutions to logarithmic equations
  - Applications (e.g. break-even analysis, supply and demand)

- **Mathematics of Finance [CO: 1, 2, 3]**
  - Simple Interest
  - Compound Interest
  - Annuities
    - Ordinary Annuities, Future and Present Value
    - Loans and Amortization

- **Matrices and Linear Programming**
  - Operations of Matrices
  - Simplex Method

- **Probability Analysis**
  - Basic Probability
  - Expected Value
  - Probability Analysis with Matrices

**Approximate time spent**

- Functions: 35%
- Mathematics of Finance: 15%
- Matrices and Linear Programming: 25%
- Probability Analysis: 20%

- 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 functions, matrices, linear programming and the mathematics of finance. 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. 5%
Student Learning Outcomes (SLO): At the end of MTH 1324, a student who has studied and learned the material should be able to:
1. Use linear functions and quadratic functions in business applications. [CO: 1,2,3]
2. Use matrices to solve systems of linear equations. [CO: 1,3]
3. Use matrices to solve linear programming problems. [CO: 1,3]
4. Use exponential functions and logarithmic functions and to solve equations using these functions. [CO: 1,2,3]
5. Solve simple interest and compound interest problems including annuities. [CO: 2,3]

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](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)
- 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*