MATH 2211.010 & 2011.627, Precalculus A & Lab (Half-term 1)
Department of Mathematics and Statistics
Class Policy Sheet and Syllabus—Fall 2023

Professor: Dr. Britney Falahola  
Office: 324 Mathematics Building
Email: falaholabl@sfasu.edu
Office Phone: 936.468.1772
Office Hours: I am available in person or via Zoom during the following times. (See D2L for Zoom office hour information.)

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Times</td>
<td>1:30-3pm</td>
<td>1:30-2:30pm</td>
<td>1:30-3pm</td>
<td>11am-12pm</td>
<td>By appt.</td>
</tr>
</tbody>
</table>

A note on virtual office hours: We will treat virtual office hours as much like face-to-face office hours as possible! Just as you would wait in the hall should you find another student already visiting with me in my office, you will be placed in a “waiting room” on Zoom upon arriving for office hours. If there is no one else in the meeting, I will immediately let you in. Otherwise, you may have to wait a few minutes as I conclude a discussion with another student. I will get to you – even if my office hour has ended – so please hang out until we talk. In addition, during office hours, I may ask if you would be open to allowing another student to join our discussion. You are welcome to respond as best suits your needs; we can continue to meet one-on-one or we can let others join us – your choice!

Course description: This is a prep course for the calculus sequence. In Precalculus A (MATH 2211/2011), we study properties and graphs of algebraic, exponential and logarithmic functions and their inverses, systems of linear equations and matrices, and give an overview of conic sections. (We continue the preparation for calculus in Precalculus B (MATH 2212/2012) with trigonometric functions, right triangle definitions of the trig functions and their inverses; fundamental trigonometric identities; conic sections; polar and rectangular coordinate systems.)

Text and Materials: Precalculus, A Prelude to Calculus, 3rd edition, by Axler (loose leaf: ISBN 978-1119334675; paperback: ISBN 978-1119055815). It is strongly recommended that you have a hard copy of the textbook, but electronic copies are allowed if you so choose. You do not need to purchase access to WileyPLUS. Each student will need a scientific calculator to use during exams. No graphing calculators or cell phone calculators will be allowed during exams or quizzes.

Course Calendar: Please note that the dates for our in-class exams below are subject to change. The final is university scheduled and cannot be taken at a different time without permission of the Dean of the College of Sciences and Mathematics.

<table>
<thead>
<tr>
<th>Exam</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thursday, September 14</td>
</tr>
<tr>
<td>2</td>
<td>Thursday, September 28 &amp; Friday, September 29</td>
</tr>
<tr>
<td>Final</td>
<td>Thursday, October 12 &amp; Friday, October 13, usual class times</td>
</tr>
</tbody>
</table>

Course Requirements:

- **In-class exams**—If a student must miss an exam due to an excused absence, special arrangements should be made at least one week in advance, as possible. **Cell phones and graphing calculators are not allowed out during exams, even if that is all you brought.** Students are responsible for bringing their own scientific calculator to exams. No music (even through headphones) is allowed during exams.

- **Weekly in-class quizzes**—We will have weekly in-class quizzes on Tuesdays and Fridays (except on the Fridays of exam weeks). **There will be no make-up quizzes.**

- **Homework**—For roughly each learning target in the course, there will be a corresponding online homework set with due dates clearly labeled on each assignment. These assignments allow for practice with computational techniques with immediate feedback (the system will grade your answers upon submission). You are welcome to use your textbook and class notes to complete each homework set. Collaboration with your classmates is also welcome, but ensure that you are continually striving to master the concepts. Academic integrity should be maintained, as with other assessments 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.

Exercises assigned from the text (the list can be found on D2L) will not be collected for a grade. However, it is crucial to your understanding of the course material that you complete the assigned problems (at a minimum!) as preparation for quizzes, exams, and daily participation.

- **Class activities and participation**—Students are expected to attend all class meetings, arriving on time. If you are absent, you are responsible for determining what you missed and for being prepared for class when you return. We will have class activities throughout the week, and your active participation is critical to your success in this course.

- **Preparing for class**—Students should be prepared to invest several hours per day outside of class reading the text, practicing examples, and working homework exercises. *Material to be discussed in class should be read before coming to class.* Check your @jacks university email and our D2L course page regularly, as I may send reminders, assignments, or announcements.

- **Asynchronous Instruction**—This course may include instructional time that is delivered asynchronously. Examples of asynchronous instruction may include (but are not limited to): written content, video content, discussions, synthesis exercises, reflection activities, peer review, and skills practice.

**Notes to the Student:** Precalculus A and B are prep courses for the calculus sequence at SFA which prepare you for calculus in the obvious way by reviewing prerequisite concepts and skills that you will need to retain for success in understanding the calculus. The other, less obvious way that MATH 2011 & 2012 prepare you for the calculus sequence is by getting you accustomed to a fast-paced, content-driven course. To do well in MATH 2011 & 2012 and later in the calculus sequence, you need to keep up. Try the homework each night to see if you can do it. If you can, great; keep rolling. If you can’t do the homework, seek help immediately in my office hours. Please don’t wait until the end of the semester if you need help. By that time, it’s too late.

**Standards-Based Grading**

On semester assignments (midterm exams, weekly quizzes, and the final exam), grades will be assigned differently than how you may have typically encountered in other courses. Instead of using a percentage or points-based system, your grade will be determined by how well you display a mastery of specific sorts of mathematical tasks called learning targets. Since there are no points, there is no partial credit on most items. Indeed, you will find that the grading system in this course insists that you show consistent excellence in *all* assignments in the course – outstanding work on quizzes, for example, does not “bring up” poor work on exams. This can be challenging, but there is also a revision and reassessment system in place for most assignments that allows you to try a concept more than once to demonstrate understanding.

**Fair warning:** This may be a little more complicated than you are used to. That’s okay! If at any point in the semester you need clarification on how the system works or your standing in the course, you are encouraged to talk with me. The goal with this system is to give you more control over your grade with less stress and to reflect your effort and improvement (not the result of a single bad test day).

There are 18 learning targets that will be assessed during the semester, 7 of which are designated as “Core.” These are listed later in this syllabus. Each of these learning targets focuses on a skill or concept of precalculus. The Core Learning Targets are the most essential skills, in which every student must show some competency to pass the course.

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1 Some wording in this section comes from Dr. Robert Talbert of Grand Valley State University and Dr. Kate Owens of the College of Charleston, two professors who are champions of alternative grading in university mathematics.
The following sections describe the structure of this grading system and how it will work in our class. Pay close attention in each section to definitions of terms (such as “Earn Proficiency” vs. “Master,” or “Satisfactory”).

**Grading Standards**

Below you will see a description of the base feedback that you will receive on every assessment of a learning target. In addition to the letter S, P, or I, you will also receive detailed commentary on your work so that you can improve on your next attempt (if necessary). You are more than welcome to visit with me during office hours if you do not understand feedback that was given or disagree with the determination. My goal with the grading system is to provide clear and meaningful communication, so do not hesitate to contact me as needed to discuss your work.

**Learning Targets:** Learning targets will be graded as either Satisfactory (S), Progressing (P), or Incomplete (I) based on the following general criteria.

<table>
<thead>
<tr>
<th>Mark</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>S</td>
<td>The submission gives complete, clearly-written, and well-reasoned responses. The solution is organized in a thoughtful manner and the mathematics is correct, up to 1-2 minor errors which do not call into question your understanding of the precalculus concepts.</td>
</tr>
<tr>
<td>P</td>
<td>The submission is complete, neatly written up, and partial understanding of concepts is evident, but there are issues in the writing, mathematics, or reasoning that require revision.</td>
</tr>
<tr>
<td>I</td>
<td>The submission has significant omissions or widespread issues so that not enough information is present to determine whether there is adequate understanding.</td>
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</tbody>
</table>

**Online Homework:** Online homework will be graded automatically through WeBWorK using points. One point is awarded when the problem is correct (or, in the case of some multiple-part problems, when each part is correct), and zero points are awarded otherwise. Partial credit may be given in some multi-part problems. You will have unlimited attempts on each homework problem until the deadline of the assignment. After that deadline, there are no revisions allowed and that assignment’s grade is final.

**How your Final Course Grade is Determined**

See the table below for the requirements necessary to earn each letter grade. Please note the following definitions:

- To earn **PROFICIENCY** a learning target, one must earn a Satisfactory (S) grade on that target during a quiz, exam, or reassessment.
- To master a learning target, a second grade of Satisfactory (S) must be earned on that same target during a quiz, exam, or reassessment.

**IMPORTANT:** Notice when reading the table below that you only earn progress toward your desired letter grade by receiving Satisfactory (S) marks on learning target assessments. Learning targets which receive marks of Progressing (P) or Incomplete (I) must be reattempted in order to earn proficiency or master that learning target.

<table>
<thead>
<tr>
<th>To earn</th>
<th>Do ALL of the following:</th>
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</table>
| A       | • Earn **Proficiency** in 17 Learning Targets, 7 of which MUST be the Core Learning Targets.  
         | • **Master** all 7 Core Learning Targets plus an additional 9 Learning Targets.  
         | • Have a final online homework grade of at least 85%. |
| B       | • Earn **Proficiency** in 15 Learning Targets, 7 of which MUST be the Core Learning Targets.  
         | • **Master** 6 Core Learning Targets plus an additional 6 Learning Targets.  
         | • Have a final online homework grade of at least 75%. |
| C       | • Earn **Proficiency** in 12 Learning Targets, 7 of which MUST be the Core Learning Targets.  
         | • **Master** 3 Core Learning Targets plus an additional 3 Learning Targets.  
         | • Have a final online homework grade of at least 65%. |
| D       | • Earn **Proficiency** in 9 Learning Targets, 6 of which MUST be the Core Learning Targets.  
         | • Have a final online homework grade of at least 50%. |
| F       | Given if not all the requirements for a D are met. |
Revision and Reassessment

**Online Homework:** You may reattempt any online homework set as many times as you want until the deadline for the set. After this deadline, no revision is allowed and your grade on that set is final.

**Learning Targets:** Learning targets (LTs) will be assessed on weekly quizzes as well as on exams. You may reattempt any LT that receives a Progressing or Incomplete grade in two ways:

1. Reattempt a LT during an exam or during certain designated weekly quizzes. Note that you will not be allowed to reattempt *any* LT on *every* quiz; I will specify ahead of time which LTs will be assessed on each quiz. During exams, on the other hand, all LTs will be available for reattempting.
2. Reattempt a LT on *specified reassessment weeks* by scheduling a “reassessment quiz” with me ahead of time, subject to the following restrictions:
   - You may reattempt *at most three* LTs in a given reassessment week. The reassessment weeks are: **September 18 – 22** and **October 2 – 6**
     - You must schedule a reassessment of a LT by completing the appropriate sign-up form on D2L (available before each reassessment week as a quiz in D2L) or emailing me the LT(s) you wish to reattempt AND what you have done to prepare for that reassessment, by the given sign-up deadline on D2L.
   - **More information** about reassessment weeks will be announced before the first reassessment week.

LT assessments to attain Mastery may also be done in the above ways with the exception that your first attempt at attaining Mastery of a LT must occur on an exam.

**Tentative Course Schedule**
The schedule below is an approximation of the pacing of the course. The actual pace may vary.

<table>
<thead>
<tr>
<th>MATH 2211 – Precalculus A Topics</th>
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</tr>
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<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td>1.1, functions</td>
</tr>
<tr>
<td>8/28 – 9/1</td>
<td>1.2, coordinates and graphs</td>
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<tr>
<td></td>
<td>1.3, transformations, even/odd</td>
</tr>
<tr>
<td><strong>Week 2</strong></td>
<td>1.4, function composition</td>
</tr>
<tr>
<td>9/4 – 9/8</td>
<td>1.5, inverse functions</td>
</tr>
<tr>
<td></td>
<td>1.6, graphs of inverses, increasing/decreasing</td>
</tr>
<tr>
<td><strong>Week 3</strong></td>
<td>2.1, lines</td>
</tr>
<tr>
<td>9/11 – 9/15</td>
<td>2.2, quadratic functions</td>
</tr>
<tr>
<td></td>
<td>2.3, integer exponents</td>
</tr>
<tr>
<td></td>
<td><strong>Exam 1: Thursday, Sept 14</strong></td>
</tr>
<tr>
<td><strong>Week 4</strong></td>
<td>2.4, polynomials</td>
</tr>
<tr>
<td>9/18 – 9/22</td>
<td>2.5, rational functions</td>
</tr>
<tr>
<td></td>
<td>3.1 logarithms</td>
</tr>
<tr>
<td><strong>Week 5</strong></td>
<td>3.2, logarithms, change of base</td>
</tr>
<tr>
<td>9/25 – 9/29</td>
<td>3.3, log properties</td>
</tr>
<tr>
<td></td>
<td><strong>Exam 2: Thursday, Sept 28 &amp; Friday, Sept 29</strong></td>
</tr>
<tr>
<td><strong>Week 6</strong></td>
<td>3.4, exponential growth</td>
</tr>
<tr>
<td>10/2 – 10/6</td>
<td>3.5, natural logarithm</td>
</tr>
<tr>
<td></td>
<td>Systems of Linear Equations</td>
</tr>
<tr>
<td><strong>Week 7</strong></td>
<td>Matrices</td>
</tr>
<tr>
<td>10/9 – 10/13</td>
<td>Review</td>
</tr>
<tr>
<td></td>
<td><strong>Final Exam: Thursday, Oct 12 &amp; Friday, Oct 13</strong></td>
</tr>
</tbody>
</table>
Learning Targets
Below are the learning targets for our course, 7 of which labeled as “Core.” After the description of each learning target is the section of the textbook which corresponds to that learning target.

Boxes have been provided as a way to track your progress throughout the semester: Check off one of the boxes to the left of a learning target once your performance on that target merits a Satisfactory (S) score to indicate proficiency in that target. Check off the second box upon receiving a second score of Satisfactory on that target to indicate mastery.

<table>
<thead>
<tr>
<th>#</th>
<th>Learning Target</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT1</td>
<td><strong>(CORE) Basics of Functions</strong></td>
<td>Interpret and use formulas and tables of functions accurately, use proper function notation, and determine special characteristics of functions such as domain and range. (1.1)</td>
</tr>
<tr>
<td>LT2</td>
<td><strong>(CORE) Basics of Coordinates &amp; Graphs</strong></td>
<td>Locate points on a coordinate plane, determine the domain and range of a function from its graph, and use the vertical line test for detecting functions. (1.2)</td>
</tr>
<tr>
<td>LT3</td>
<td><strong>Function Transformations</strong></td>
<td>Perform and analyze the various vertical and horizontal function transformations. (Analyzing function transformations includes, but is not limited to, determining the domain, range, and graph of a transformed function.) (1.3)</td>
</tr>
<tr>
<td>LT4</td>
<td><strong>(CORE) Algebra of Functions</strong></td>
<td>Create new functions (symbolically) using the usual algebraic operations. (1.4)</td>
</tr>
<tr>
<td>LT5</td>
<td><strong>(CORE) Function Composition</strong></td>
<td>Compute the composition of multiple functions as well as write a complicated function as the composition of simpler functions. Express a function transformation as a composition of functions. (1.4)</td>
</tr>
<tr>
<td>LT6</td>
<td><strong>Inverse Functions</strong></td>
<td>Determine formulas for and characteristics of the inverses of functions, when possible. Analyze inverse functions graphically. (1.5 &amp; 1.6)</td>
</tr>
<tr>
<td>LT7</td>
<td><strong>(CORE) Linear Functions</strong></td>
<td>Create and interpret linear functions. In addition, graph a linear function and/or determine the equation of a line in the xy-plane. (2.1)</td>
</tr>
<tr>
<td>LT8</td>
<td><strong>Special Lines</strong></td>
<td>Determine whether lines are parallel or perpendicular or create equations of lines parallel or perpendicular to a given line. Know the distinguishing characteristics of horizontal and vertical lines. (2.1)</td>
</tr>
<tr>
<td>LT9</td>
<td><strong>(CORE) Exponents</strong></td>
<td>Manipulate and simplify expressions involving exponents. (2.3)</td>
</tr>
<tr>
<td>LT10</td>
<td><strong>Quadratic Functions</strong></td>
<td>Determine properties of a quadratic function by investigating its formula, as well as create formulas for quadratic functions with specified properties. In addition, create accurate graphs of quadratic functions. (2.2)</td>
</tr>
<tr>
<td>LT11</td>
<td><strong>(CORE) Quadratic Equations</strong></td>
<td>Determine the zeros of quadratic functions via factoring, completing the square, or the quadratic formula. (2.2)</td>
</tr>
<tr>
<td>LT12</td>
<td><strong>Polynomials</strong></td>
<td>Determine the degree, end behavior, and zeros of a polynomial from its formula and/or graph, or create polynomials with specified properties. (2.4)</td>
</tr>
<tr>
<td>LT13</td>
<td><strong>Rational Functions</strong></td>
<td>Decipher properties of rational functions (including zeros, end behavior, and asymptotes), as well as create rational functions with specified properties. (2.5)</td>
</tr>
<tr>
<td>LT14</td>
<td><strong>Long Division of Polynomials</strong></td>
<td>Decompose a rational function into a polynomial plus a rational function whose numerator has degree less than its denominator. (2.5)</td>
</tr>
<tr>
<td>LT15</td>
<td><strong>Logarithms &amp; Exponential Functions</strong></td>
<td>Understand the relationship between logarithms and exponentials as inverse functions, and apply that understanding to solve equations involving exponentials and logarithms. Furthermore, use the connections between the exponential function and the natural logarithm to manipulate equations. (3.1 &amp; 3.2, 3.5)</td>
</tr>
<tr>
<td>LT16</td>
<td><strong>Logarithm Rules</strong></td>
<td>Carefully apply the power, product, quotient, and/or change of base rules to algebraically manipulate logarithmic expressions and/or solve equations. (3.2 &amp; 3.3)</td>
</tr>
<tr>
<td>LT17</td>
<td><strong>Exponential Growth</strong></td>
<td>Describe the behavior of functions with exponential growth. Also, use exponential functions to model population growth and/or compute compound interest. (3.4)</td>
</tr>
<tr>
<td>LT18</td>
<td><strong>Systems of Linear Equations</strong></td>
<td>Use substitution, elimination, or matrices to solve systems of linear equations. (Supplemental material provided by the instructor.)</td>
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</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.

**Importance of Mental Health**

SFASU values students’ mental health and the role it plays in academic and overall student success. 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.

<table>
<thead>
<tr>
<th>On-campus Resources:</th>
<th>SFASU Human Services Counseling Clinic</th>
<th>Crisis Resources:</th>
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</thead>
<tbody>
<tr>
<td>Health and Wellness Hub&lt;br&gt;<a href="http://www.sfasu.edu/thehub">http://www.sfasu.edu/thehub</a>&lt;br&gt;Corner of E. College and Raguet St.&lt;br&gt;936-468-4008</td>
<td><a href="http://www.sfasu.edu/humanservices/139.asp">http://www.sfasu.edu/humanservices/139.asp</a>&lt;br&gt;Human Services Room 202&lt;br&gt;936-468-1041</td>
<td>Burke 24-hour crisis line&lt;br&gt;1 (800) 392-8343&lt;br&gt;National Suicide Crisis Prevention: 9-8-8&lt;br&gt;Suicide Prevention Lifeline&lt;br&gt;1 (800) 273-TALK (8255)&lt;br&gt;ChatCrisis Text Line:&lt;br&gt;Text HELLO to 741-741</td>
</tr>
</tbody>
</table>

**Need More Information?**
See https://math.sfasu.edu/docs/syllabi/MATH2211Syllabus.pdf for elements common to all sections.

**Have questions about the grading system?** Jot them down here and make sure to ask them in class or during an office hour. I will ask the class daily for the first week or so what questions I can answer!
Course description: Preparatory for the calculus sequence: properties and graphs of algebraic, exponential, and logarithmic functions and their inverses; an introduction to trigonometric functions and radian measure.

Credit hours: 2

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: TSI mathematics complete/exempt or successful completions of mathematics developmental education plan.

Course outline:

- Functions
  - Definition/notation
  - Domains/ranges of basic functions, their graphs, and topics appropriate to each type of function:
    - Linear functions: constant functions; slope; point-slope/slope-intercept form; solving linear equations/inequalities
    - Power functions: end behavior
    - Polynomials: intercepts, maximum/minimum number of turning points, and end behavior; solving polynomial equations/inequalities (factoring, Zero Product Principle, quadratic formula)
    - Systems of equations
    - Rational functions: horizontal, vertical, and oblique asymptotes; polynomial long division and proper rational functions, end behavior
    - Exponential functions: properties of exponents (including, especially, rational exponents); asymptotes and end behavior; exponential growth/decay; natural exponential
    - Logarithmic functions: properties of logarithms; asymptotes and end behavior; natural logarithms; solving exponential/logarithmic equations

Approximate time spent: 75%
- Piecewise-defined: common piece-wise defined functions (absolute value, stamp-price, etc.); graphing/interpreting piecewise-defined functions; 'skip' and 'jump' discontinuities
  o Transformations of the basic graphs: translations, reflections, and compressions/expansions
  o Combining functions: algebraically and by composition
  o Inverses of functions (including those that require branches, like the principal square root)

- **Introduction to Trigonometry and Radian Measure**  25%
  o Introduction to trigonometric functions via the unit circle
    - Definitions
    - Graphs, domains/ranges, asymptotes, and transformations of the circular functions
  o Radian measure
    - Definition
    - Conversions from degrees to radians and radians to degrees
    - Angles greater than $2\pi$

**Student Learning Outcomes (SLO):** At the end of MTH 141, a student who has studied and learned the material should be able to:
1. Define "function".
2. Recognize basic functions (including transcendental functions) algebraically and graphically.
3. Identify determining factors of the graph of a function either algebraically or from the graph, including the domain and range, intercepts, asymptotes, and end behavior.
4. Generate composite functions and identify domains/ranges.
5. Define and recognize when a function is one-to-one and explain why this is necessary for a function to have an inverse.
6. Compute the inverse of a function and understand that the domain may need to be restricted in order to do so.
7. Solve basic systems of equations.
8. Define circular trigonometric functions.
9. Determine the domains/ranges/graphs of circular trigonometric functions.

There are no specific program learning outcomes for this major addressed in this course. It is a specifically intended as preparation for the calculus sequence.

This course meets educator preparation standards for one or more certification programs; a complete listing of all the educator preparation standards this course meets can be found at: [https://sfasu.edu/docs/jacksteach/jacksteach-standards-alignment-chart.xlsx](https://sfasu.edu/docs/jacksteach/jacksteach-standards-alignment-chart.xlsx).

**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](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](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:  
[www.sfasu.edu](http://www.sfasu.edu)
• 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)
• 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.

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