Course Description: This is the 2nd of two prep courses for the calculus sequence. We study properties and graphs of trigonometric functions, their inverses, trig identities, conic sections, and polar coordinates.

Text and Materials
- **Book**: The required textbook is *Precalculus: A Prelude to Calculus, 3rd edition*, by Axler Wiley. ISBN 9781119321514
- **Scientific Calculator**: No graphing calculators will be allowed during quizzes or exams. You may use a non-graphing calculator during exams (such as TI 30-XS Multiview). Any TI-30 series will be sufficient.

Prohibited Resources (during quizzes and exams only)
- Graphing Calculator (TI 83, 84, NSpire, etc), online graphing utilities, such as desmos
- A friend, family member, or any other individual who helps you work math exercises.
- Online math resources, such as Chegg, wolfram alpha, etc.

Course Requirements
- **Homework**— Students will be assigned exercises from the textbook for each topic in the course.
- **Quizzes**—Students will have periodic quizzes which are to be worked independently. Although these quizzes will be asynchronous, they will have a start date, a set duration, and a due date.
- **Two synchronized exams**—Students are expected to join the synchronized zoom meeting at the specified exam times. For more information, see the section on Exams below.
- **Cumulative final exam**—The final exam is Friday, August 7, 10:30 am – 12:30 pm via Zoom.
- **Zoom meeting attendance and participation** – Students are expected to join the synchronized zoom meetings if possible. Although it is feasibly possible to merely watch the posted recordings asynchronously, the best way to be successful in mastering the learning objectives will be to join the meetings and interact with the instructor.
- **Preparing for class** – Students should be prepared to invest 2-4 hours per day outside of Zoom meetings studying: reading the textbook, practicing examples, and working assigned homework exercises. Check your SFA @jacks email and Brightspace (D2L) daily, as I may send reminders, assignments, or announcements.
Notes to the Student: MTH 142 is a prep course for the calculus sequence at SFA, which prepares 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 MTH 142 prepares you for the calculus sequence is by getting you accustomed to a fast-paced, content-driven course. To do well in MTH 141, 142, and later in the calculus sequence, you need to keep up. That does NOT mean that you need to have mastered the material before the class even starts. It DOES mean that you need to try the homework each night to see if you can do it. If you can, great; keep rolling. If you cannot do the homework independently, seek help immediately the next day in the zoom meeting or during my virtual office hours (VOH). Please do not wait until the end of the summer session if you need help. By that time, it is too late.

Grading Policy
Your overall grade is determined by the following formula:

\[ 0.03(\text{Effort}) + 0.12(\text{Quiz Average}) + 0.25(\text{low Exam}) + 0.28(\text{high Exam}) + 0.32(\text{Final Exam}) \]

That is, it is a weighted average with the following weights:

<table>
<thead>
<tr>
<th></th>
<th>Effort</th>
<th>Quiz Average</th>
<th>Exam 1</th>
<th>Exam 2</th>
<th>Final Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weight</strong></td>
<td>3%</td>
<td>12%</td>
<td>25%</td>
<td>28%</td>
<td>32%</td>
</tr>
<tr>
<td><strong>Letter Grade</strong></td>
<td>A</td>
<td>90 – 100</td>
<td>B</td>
<td>C</td>
<td>D</td>
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**Effort** – This is a measure of the student’s overall effort in the course. Although it has a subjective nature, there are a number of objective elements students should practice and for which your instructor will watch. These include the following

1. Asking honest and relevant questions
2. Joining Zoom meetings or otherwise scheduling occasional VOH,
3. Academic Honesty,
4. Submitting quizzes professionally and punctually.

This is not an exhaustive list but should give the student a good idea of how to earn this 3% of your grade.

**Quizzes** – There will be quizzes assigned via D2L on a regular but asynchronous basis. Each quiz will have a start date (following the coverage of that material), a duration (e.g. 30 minutes), and a due date (usually 11:30pm on a specified date). These will be the measure by which your instructor gauges how well you have mastered the learning objectives as well as put forth the necessary effort and energy to work all assigned HW exercises. Students who can work the HW exercises without resources will (generally speaking) perform quite well on the quizzes. Each quiz is to be worked independently and without prohibited resources. Understanding the material is important, yet equally important is the ability to articulate what you understand (speaking and writing the mathematics correctly). For this reason, quizzes are a good opportunity for feedback from your instructor as students refine their understanding in preparation for the exams. If your instructor suspects a student used prohibited resources, then he reserves the right to schedule a Zoom meeting with the student during which a similar math problem will be worked and critiqued in a live manner. There will be no make-up quizzes. At the end of the summer session, your instructor will drop every student’s lowest few Quiz grades as a matter of grace and understanding. Students are encouraged, however, to plan ahead and be prepared to submit assignments before the due date and time. This habit will help students deal with technological obstacles and other life issues when they inevitably arise.

**Exams** – The two regular exams will take place in a synchronized manner on the specified dates (see the schedule in Brightspace). Each exam is to be worked independently and without prohibited resources. To help ensure that this happens, students will join a Zoom meeting and will be proctored on a webcam (smartphones have cameras) as they work the exam. If a student cannot attend the specified time(s), then he or she must notify the instructor at least 48 hours before the exam time, and a suitable accommodation will be presented.
Attendance Policy
Students are expected to attend all Zoom meetings if possible. However, in order to accommodate students who cannot attend synchronized meetings, your instructor will record and post instructional lecture videos for students to watch (and re-watch) at their leisure.

Tips for Success:
1. Print the available slides. Join the Zoom meetings. Take notes. Ask questions!
2. Be professional and punctual.
3. Check your SFA email and Brightspace (course page) at least once per day. I will do the same.
4. Do all assigned HW exercises independently and promptly.

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.