PRECALCULUS

Math-2412-601





FALL 2025

Welcome to Precalculus

Meets on Monday and Wednesday at 5:30 p.m. in the Lubbock Downtown Center room B011 in Lubbock, TX

Are you ready to explore the integrated algebra, trigonometry, and analytic geometry skills used in Calculus? As your instructor, I am looking forward to providing you the opportunity to acquire and practice the math skills needed to be successful in Calculus.

Student Help Sessions (A.K.A. Office Hours) Levelland Campus (M120A):

Mondays and Wednesdays 2:30 pm - 3:30 pm

Lubbock Downtown Center (B001):

Mondays and Wednesdays 5:00 pm - 5:30 pm Mondays and Wednesdays 7:40 pm - 8:10 pm

Online (Virtual) (Link on Blackboard):

Tuesdays 9:00 am - 10:00 am Wednesdays 10:00 am - 11:00 am Thursdays 2:00 pm - 3:00 pm Fridays 1:00 pm - 2:00 pm



or by appointment

(scan QR code or use the link to make an appointment) Schedule an appointment

PH: 806-716-2665 MATH BUILDING 120A



Dr. Sheyleah Harris-Plant (she, her, hers) DR. HP

CONTENTS

- What will we learn in this class?
- What are we required to do in this class?
- How do we pass this class?
- What resources do we have to be successful?

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What are we required to do for this class?

Our classroom is hybrid. This means the questions, exams, and lectures (as much as possible) are completed inside the class. Lecture completion, practice, and other assignments occur outside of class.

Practice problems (homework problems) will not be collected for a grade because the amount of practice each person needs is individual to their learning style and mathematical history.

COURSE LEARNING GOALS

At the end of the semester, we will be able to:

- Apply knowledge of properties of functions.
- Solve algebraic and transcendental equations.
- Apply graphing techniques to algebraic and transcendental functions.
- Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.
- Prove trigonometric identities.
- Solve right and oblique triangles.

SUPPLIES & OPTIONAL TEXTS

Writing Utensil







8.5 inch x 11 inch paper



Web Camera



Non-Programmable Scientific Calculator (No Graphing)



Precalculus, 2nd ed. OpenStax ISBN 9781951693398

> Precalculus, 8th ed. Ron Larson ISBN 9781439045770





Precalculus, 2nd ed. Cynthia Young ISBN 9780470904138

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What are the assignments for this class?

Weekly Lecture Notes (Worth 0.50 points each)

Each week has lecture notes available to be printed and lecture videos covering the lecture notes. The lecture notes will be submitted on Blackboard or the Class OneNote Notebook and graded on completion. There will be fifteen (15) notes, with five (5) notes being extra credit. Any missed lecture notes will not be allowed to be taken after the due date.

Memory Quizzes (Worth 0.50 points each)

Multiple Choice assessment that will be completed using your memory. Notes or calculators are not allowed to be used. The assignment is administered and submitted weekly in Blackboard. The assignment will be graded as correct or incorrect. There will be fourteen (14) quizzes, with four (4) quizzes being extra credit. Any missed Memory Quiz will not be allowed to be taken after the due date.

Mastery Assessments (Worth 0.50 point each)

Free response assessment that you can use your notes. The purpose of the assignment is to give us a snapshot of the mastery of the course material for that week. The assignment is administered weekly in Blackboard. Upload work weekly on Gradescope. There will be fifteen (15) assessments, with five (5) assessments being extra credit. Any missed Mastery Assessment will not be allowed to be taken after the due date.

Learning Reflections (Worth 0.50 points each)

Answer questions on Blackboard weekly to reflect, review mistakes, and learn from them. The assignment will be graded by completion. There will be fifteen (15) assignments, with five (5) assignments being extra credit. Any missed Learning Reflection will not be allowed to be taken after the due date.

Unit Exams (Worth 10 points each)

Free response assessment that you can not use your notes or practice problems. Any missed exam will not be allowed to be taken after the due date. The purpose of the assignment is to give us a snapshot of the mastery of the unit material at that time. The assignment is administered in class. Upload work on Gradescope. There will be six (6) exams, with no extra credit assignments.

Final Group Project (Worth 10 points)

Each group will create and record a lecture from a skeleton lecture provided on skills directly applicable to Calculus and use the Class Collaboration feature in Blackboard to record the lecture. The instructor will assign the groups. The project grade will be part of each student's final exam grade and will consist of multiple parts. The lecture presentation will be worth five (5) points, the self-reflection activity will be worth two (2) points, the peer evaluations will be worth two (2) points, and the submission of the team contract will be worth one (1) point. Due to this format, each student in the group can receive a different grade according to the amount of work and collaboration each member does. So it is important to work together and communicate.

Final Exams (Worth 10 points)

Comprehensive free-response assessment that you can not use your notes or practice problems. If you do not attempt the Final Exam you will earn an F for the class even if enough points to pass has been earned. There will only be one assignment at the end of the semester. $\begin{tabular}{ll} \hline t & $t$$

ASSIGNMENT WEIGHTS

The 100 point system is used for grading and will the highest grade reported at the end of the semester. All assignments will add up to 100 points.

89.5 and above earn an A 79.5 - 89.49 earn a B 69.5 - 79.49 earn a C

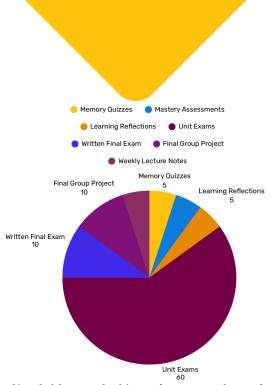
59.5 - 69.49 earn a D 59.49 and below earn an F

• Memory Quizzes: 5 points

• Mastery Assessments: 10 points

• Assignment Wrappers: 5 points

Unit Exams: 60 pointsFinal Exam: 20 points



To find the relative (percentage) grade, divide the total points by the possible points and multiply by 100.

Participation Expectations

Accountability

If you miss class or fall behind for any reason, all notes presented in class will be on the Class OneNote Notebook for you to access.

Unfortunately, I cannot repeat material or change the schedule for the entire class. Late coursework is not accepted, nor will be allowed to be taken or submitted after the due date.

Communication

Communication is key. If you have an emergency, please let me know by email or phone **immediately**. Letting me know the following day or later makes it difficult for me to discern and assess your situation. Therefore, this makes it harder to help and work with you.

Integrity

The focus of higher education is to foster learning and encourage critical thinking. While taking shortcuts to save time or earn a grade may seem like a good idea, the results usually are lower scores and losing the opportunity to learn material. The consequences of being caught cheating could be between a zero on the assignment to being expelled from South Plains College.

Reasonable Flexibility

Extra credit points are available for all students. If you should miss an assignment deadline those extra credit points can "replace" the missed points.

EXPECTATIONS OF INSTRUCTOR

- Show up, as scheduled.
- Provide notice of any schedule changes.
- Keep Blackboard updated with grades and materials.
- Present the material in a way that the majority of the class can understand.
- Be available to those who need assistance outside of the classroom, by e-mail or in person, during office hours or scheduled appointment times.
- Maintain the course calendar and assignments.
- Uphold the policies of the college.
- Respect each student and provide the opportunity to discuss the material presented during the lecture period.
- Provide examinations based on the information discussed in course material.

WEB & EMAIL

Emails Should Include



Your first and last name



Your class name and section



Your questions and/or comments in the body of the email (not subject line)

I Will



Check my messages regularly during weekdays before 7:00 pm



Do my best to respond within 24 hours

I Will Not



Always respond immediately on weekends or holidays



Respond to parents or counselors. You are the student in an adult class and should communicate for yourself

Success Roadmap

Watch Videos

Each section has lecture videos embedded in Blackboard in the Course Content for each week. Please watch them before attending class.

Practice Math Skills

Each lecture has examples worked out and some examples for you to practice. Each lecture has practice problems for you to practice your math skills.

COURSE OBJECTIVES

- Communications skills to include effective written, oral and visual communication
- Critical thinking skills to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- Empirical and quantitative competency skills—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

ATTENDANCE POLICY

Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the total class meetings and submit at least eighty percent (80%) of the total class assignments to have the best chance of success. If the student fails to meet these minimum requirements, the instructor may remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student can not receive an X, the instructor will assign an F.

We Remember

by Edgar Dale

10% of what we read

20% of what we hear

30% of what we see

50% of what we see and hear

70% of what we say and write

90% of what we do

TIPS FOR SUCCESS

- Avoid distractions (cell phone, social media, games, television, or open tabs and windows on your device) when watching and working through lecture videos
- Use the resources (notes, extra videos on Blackboard, free tutoring through the college, each other, and myself) available to you
- Don't hesitate to ask for help and always communicate
- Be sure to complete the assigned work
- Read the feedback given to you on graded work to improve your skills
- Save all of your notes and work

MATHEMATICAL PRACTICES TO IMPROVE

- 1. Making sense of problems and persisting while solving them.
- 2. Engaging in productive struggle with mathematics problems.
 - 3. Productively collaborate with others.
 - 4. Communicate through mathematical writing.

Student Resources

Class Resources

In our Blackboard course, there are a lot of resources to help us be successful.

- Each example, even the ones not worked out in the lecture videos, has a video in the example videos folder. Please keep in mind that the videos are in a playlist, and you will need to choose the required video from the list provided by the menu icon on the upper right.
- Keys (worked-out solutions) are provided for every practice problem and every assessment (after the due date) in the Keys folder.
- All notes written in class can be found in your Class OneNote Notebook which has a link provided in Blackboard for us to access after entering our SPC credentials.
- Under Additional Resources, there are virtual flashcards for the memory quiz information, study tips, prerequisite math rules, graph paper, and online resources.

Free SPC Tutoring

South Plains College provides free tutoring to students. The most current schedule can be

https://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.p hp or this QR Code.



South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: https://www.southplainscollege.edu/syllabusstatements/ or this QR Code.

South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: https://www.southplainscollege.edu/emergency/covid19-faq.php.

The person who asks a question is a fool for five minutes, they who does not ask a question remains a fool forever.

- Chinese Proverb

I find that the harder I work, the more luck I seem to have.

- Thomas Jefferson

Learning is never done without errors and defeat.

- Vladimir Lenin

However difficult life may seem, there is always something you can do and succeed at.

- Stephen Hawking

Your talents and abilities will improve over time, but for that, you have to start.

Health & Wellness

- Martin Luther King, Jr



REAL LIFE EMERGENCY HELP

Sometimes life happens and we need help. This is the reason the South Plains College Health and Wellness Center has provided a list of emergency resources. This list includes, but is not limited to community food assistance, help paying bills, and other free or reduced cost programs. To find this list, please click on the Emergency Resources tab, and click the linked here. The Health and Wellness Center site is found at

https://www.southplainscollege.edu/health/studenthealth.php or this QR Code





Applications Used

Gradescope

We will use Gradescope this term, which allows us to provide fast and accurate feedback on your work. Homework will be submitted through Gradescope, and homework and exam grades will be returned through Gradescope. As soon as grades are posted, you will be notified immediately so that you can log in and see your feedback. You may also submit regrade requests if you feel that there is a mistake in the grading.

You can use your phone's camera or another scanner to upload work to Gradescope. Download the Gradescope mobile app on the **App Store** or **Google Play** to use your phone's camera and follow the prompts. If you cannot scan your assignments for any reason, please get in touch with me to make alternative arrangements. All submissions to Gradescope must be clear, legible, and double-checked to ensure all answers are properly marked. You will receive an email confirmation once your assignment is successfully submitted; please retain this for your records.

Honorlock

Honorlock will proctor your exams this semester. Honorlock is an online proctoring service that allows you to take your exam from home. You **do not** need to create an account or schedule an appointment in advance. Honorlock is available 24/7, and all required is a computer, a working webcam/microphone, your ID, and a stable internet connection.

You will need Google Chrome and download the Honorlock Chrome Extension to get started.

When you are ready to complete your assessment, log into your LMS, go to your course, and click on your exam. Clicking "Launch Proctoring" will begin the Honorlock authentication process, where you will take a picture of yourself and show your ID. You may be prompted to complete a room scan during the authentication steps. This is a test taker authentication step in which you will be asked to perform a 360-degree scan of your environment with the computer or webcam to confirm the integrity of the testing environment. Honorlock will be recording your exam session through your webcam and microphone and recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it's on a secondary device.

Honorlock support is available 24/7/365. You may contact them through live chat on the support page or within the exam itself if you encounter any issues.

Blackboard

We will use Blackboard this term, which allows is our Learning Management System (LMS). It will house all of the course materials, resources, and grades. The gradebook will automatically give a zero for any assignment not graded by the due date. Do not worry if you submitted your assignment, I will change the grade once the assignment is graded.

Download the Blackboard mobile app on the **App Store** or **Google Play** to have mobile access to Blackboard.



Fall 2025 MATH-2412 Tentative Calendar

Week	Day	Date	Topic	Learning Reflection Due	Memory Quiz Due	Lecture Notes Due	Mastery Assessment Due	Exam Due		
0	Thu	21 Aug		Not due this week	Not due this week	Not due this week	Not due this week	Preparatory		
	Fri	22 Aug	Class IntroductionAlgebra Review					Sun, 31 Aug by 23:30 (11:30 pm)		
	Mon	25 Aug		Not due this week	Not due this week	Sat, 30 Aug by 23:30 (11:30 pm)	Sun, 31 Aug by 23:30 (11:30 pm) Use Honorlock	Wed, 10 Sep by 19:35 (7:35 pm) In Class		
	Tue	26 Aug								
1	Wed	27 Aug	Angles Non-Acute Angles							
	Thu	28 Aug								
	Fri	29 Aug								
	Mon	1 Sep	Functions and	No School – Labor Day						
	Tue	2 Sep	Function Notation Linear Functions	Thu, 4 Sep by 23:30 (11:30 pm)	Radian & Degree	Sat, 6 Sep by 23:30 (11:30 pm)	Sun, 7 Sep by 23:30 (11:30 pm) Use Honorlock	Wed, 10 Sep by 19:35 (7:35 pm) In Class		
2	Wed	3 Sep	Quadratic Functions		Sat, 6 Sep by 23:30 (11:30 pm) Use Honorlock					
	Thu	4 Sep	Polynomial Functions							
	Fri	5 Sep	Review for Unit 1 Exam							
	Mon	8 Sep		Thu, 11 Sep by 23:30 (11:30 pm)	Sat,	Sat, 13 Sep by 23:30 (11:30 pm)	Sun, 14 Sep by 23:30 (11:30 pm)	Wed, 24 Sep by 19:35		
3	Tue	9 Sep	Radical FunctionsRational FunctionsTrigonometric Functions							
	Wed	10 Sep	Non-Standard Position Angles	Take Unit 1 Exam (7:35 pm) In Class						
	Thu	11 Sep			Use		Use			
	Fri	12 Sep			Honorlock		Honorlock			
4	Mon	15 Sep	Trigonometric	Thu, 18 Sep by 23:30 (11:30 pm)	Standard Position		Sun, 21 Sep by 23:30 (11:30 pm) Use Honorlock			
	Tue	16 Sep	Function Graphs Exponential		Trig Functions	Sat,		Wed,		
	Wed	17 Sep	Functions • Logarithmic		Sat,	20 Sep by 23:30		24 Sep by 19:35 (7:35 pm) In Class		
	Thu	18 Sep	Functions • Review for Unit 2		20 Sep by 23:30 (11:30 pm)	ep by :30 (11:30 pm)				
	Fri	19 Sep	Exam		Use Honorlock					



Week	Day	Date	Topic	Learning Reflection Due	Memory Quiz Due	Lecture Notes Due	Mastery Assessment Due	Exam Due
5	Mon	22 Sep	 Properties of Logarithmic Functions Fundamental Identities Sum and Difference Identities Double-Angle Identities 		Standard Position			
	Tue	23 Sep		Logarithmic Functions Fundamental Identities	Thu, 25 Sep by 23:30 (11:30 pm)	Trig Functions Sat, 27 Sep by 23:30 (11:30 pm)	Sat, 27 Sep by 23:30 (11:30 pm)	Sun, 28 Sep by 23:30 (11:30 pm)
	Wed	24 Sep			In Class			
	Thu	25 Sep			Use		Use	
	Fri	26 Sep			Honorlock		Honorlock	
	Mon	29 Sep	Half-angle and Power-Reducing Identities Sum-to-Product		Function Values of	Sat, 4 Oct by 23:30 (11:30 pm)	Sun, 5 Oct by 23:30 (11:30 pm) Use Honorlock	Wed, 8 Oct by 19:35 (7:35 pm) In Class
6	Tue	30 Sep			Degree Angles			
	Wed	1 Oct	and Product-to- Sum Identities		Sat, 4 Oct by 23:30			
	Thu	2 Oct	 Combining Functions Inverse Functions Review for Unit 3 Exam 					
	Fri	3 Oct			(11:30 pm) Use Honorlock			
	Mon	6 Oct	TransformationsBinomial Expansion	Thu, 9 Oct by 23:30 (11:30 pm)	Function Values of	Sat, 11 Oct by 23:30 (11:30 pm)	Sun, 12 Oct by 23:30 (11:30 pm)	Wed, 22 Oct by 19:35 (7:35 pm)
7	Tue	7 Oct			Degree Angles Sat, 11 Oct by 23:30 (11:30 pm)			
	Wed	8 Oct	Rates of Change	Take Unit 3 Exam				In Class
	Thu	9 Oct			Use		Use	
	Fri	10 Oct			Honorlock		Honorlock	
8	Mon	13 Oct	Symbolic Algebraic Manipulation	Thu, 16 Oct by 23:30 (11:30 pm)	Function Values of Radian			
	Tue	14 Oct			Angles Sat,	Sun, 19 Oct by	Wed,	
	Wed	15 Oct	Verifying Trigonometric		Sat, 18 Oct by	m) (11:30 pm)	23:30 (11:30 pm) Use Honorlock	22 Oct by 19:35 (7:35 pm) In Class
	Thu	16 Oct	Identities • Review for Unit 4 Exam		23:30 (11:30 pm)			
	Fri	17 Oct			Use Honorlock			



Week	Day	Date	Topic	Learning Reflection Due	Memory Quiz Due	Lecture Notes Due	Mastery Assessment Due	Exam Due
9	Mon	20 Oct	 Other Types of Equations Exponential and Logarithmic Equations Roots of Polynomial Functions 	Thu, 23 Oct by 23:30 (11:30 pm)	Function Values of Radian	Sat, 25 Oct by 23:30 (11:30 pm)	Sun, 26 Oct by 23:30 (11:30 pm)	Wed, 5 Nov by 19:35 (7:35 pm)
	Tue	21 Oct			Angles Sat, 25 Oct by 23:30 (11:30 pm)			
	Wed	22 Oct				In Class		
	Thu	23 Oct			Use		Use	
	Fri	24 Oct			Honorlock		Honorlock	
	Mon	27 Oct		Thu, 30 Oct by 23:30 (11:30 pm)	Function Values of	Values of legree and legree and legree and legree and legree Sat, and legree S	Sun, 2 Nov by 23:30 (11:30 pm) Use Honorlock	Wed, 5 Nov by 19:35 (7:35 pm) In Class
10	Tue	28 Oct	Systems of Equations		Radian			
	Wed	29 Oct	Equations Inequalities in One Variable Review for Unit 5 Exam		Sat, 1 Nov by			
	Thu	30 Oct						
	Fri	31 Oct			(11:30 pm) Use Honorlock			
	Mon	3 Nov			Basic Identities		Sun,	Wed, 19 Nov by 19:35
11	Tue	4 Nov	 Partial Fractions Sequences and Series Geometric 	Thu, 6 Nov by 23:30 (11:30 pm)	Sat, 8 Nov by 23:30 (11:30 pm)	Sat, 8 Nov by 23:30 (11:30 pm)	9 Nov by 23:30 (11:30 pm)	
	Wed	5 Nov	Sequences and Series	Take Unit 5 Exam				(7:35 pm) In Class
	Thu	6 Nov			Use		Use	
	Fri	7 Nov			Honorlock		Honorlock	
12	Mon	10 Nov		Thu, 13 Nov by 23:30 (11:30 pm)	Basic Identities Sat, 15 Nov by 23:30 (11:30 pm) Use Honorlock Sat, 15 Nov by 23:30 (11:30 pm)		Sun, 16 Nov by 23:30 (11:30 pm) Use Honorlock	Wed, 19 Nov by
	Tue	11 Nov	 Parabolas Ellipses Circles Hyperbolas Review for Unit 6 Exam 			15 Nov by		
	Wed	12 Nov						19:35 (7:35 pm)
	Thu	13 Nov						In Class
	Fri	14 Nov						



Week	Day	Date	Topic	Learning Reflection Due	Memory Quiz Due	Lecture Notes Due	Mastery Assessment Due	Exam Due	
13	Mon	17 Nov		Thu, 20 Nov by 23:30 (11:30 pm) Sasic Identities Sat, 22 Nov by 23:30		22 NOV by 23:30		Mon, 8 Dec by 19:00	
	Tue	18 Nov	Using a Calculator Solving Right		Sat, 22 Nov by		Sun, 23 Nov by 23:30 (11:30 pm)		
	Wed	19 Nov	Triangles • Law of Sines		(7:00 pm) In Class				
	Thu	20 Nov			Use		Use		
	Fri	21 Nov			Honorlock		Honorlock		
	Mon	24 Nov			Multiple Angle Identities		Sun, 30 Nov by 23:30 (11:30 pm) Use Honorlock	Mon, 8 Dec by 19:00 (7:00 pm)	
14	Tue	25 Nov	Law of CosinesTriangle ApplicationsRadian	Thu, 27 Nov by 23:30 (11:30 pm)	Sat, 29 Nov by 23:30 (11:30 pm) Use Honorlock	Sat, 29 Nov by 23:30 (11:30 pm)			
	Wed	26 Nov	Applications					In Class	
	Thu	27 Nov		N					
	Fri	28 Nov							
	Mon	1 Dec	VectorsVectorApplications		Multiple Angle				
	Tue	2 Dec		Thu, 4 Dec by 23:30	<i>Identities</i> Sat,	Sat, 6 Dec by 23:30 (11:30 pm)	Sun, 7 Dec by 23:30 (11:30 pm)	Mon, 8 Dec by 19:00 (7:00 pm)	
15	Wed	3 Dec		(11:30 pm)	6 Dec by 23:30 (11:30 pm)				
	Thu	4 Dec			In Class				
	Fri	5 Dec			Use Honorlock		Use Honorlock		
	Mon	8 Dec	Final Group Project Due by 23:30 (11:30 pm)	Mon, 8 Dec by 19:00 (7:00 pm)		Final Exam Du y 19:00 (7:00 p In Class		Mon, 8 Dec by 19:00 (7:00 pm) In Class	
16	Tue	9 Dec	Semester Over						
	Wed	10 Dec							
	Thu	11 Dec							
	Fri	12 Dec	Graduation						