Math 1325.601MW Syllabus
Mathematics for Business, Economics, Life and Social Sciences
Mondays and Wednesdays 11am – 12:45pm
Spring 2023 Room – B031

Instructor: Mrs. Morgan Groves	**Office Hours:** MW	9:45am – 10:45am
Email: mgroves@southplainscollege.edu	TR	1pm – 2:30pm
Office: B017	F	9am – 12pm
Office Phone: 806-716-2735		(or by appointment)

Course Structure
- Flipped course
  - Watch lecture video (Blackboard) and fill in notes **before** class each day.
  - Students provide questions in class to discuss and solidify topics over the lesson(s).
  - Homework is to be attempted before class.
  - Assessments, such as labs and exams, will all be done in class.
  - All students are expected to be physically in class unless given explicit permission to be virtual.

Textbook
- No book for this section.

Course Requirements/Materials
- Attend all classes with notes and homework done in advance.
- All graded assessments assigned in class are expected to be completed in the allotted class time, unless otherwise instructed by the professor.
- Reliable internet access
- Printer (for notes), but notes can be done electronically (tablet/iPad) as long as they are written by hand
- Smart phone and/or scanner to turn a written document into a PDF file
- Solid work ethic and character.

Grading Policy:		**Grading Scale:**	
Participation	15%	90-100%	A
Exams	65%	80-89%	B
Final Exam	20%	70-79%	C
		60-69%	D
		Below 60%	F

***Note: Students must justify answers or show work on all problems to receive full credit.

Class Notes
- Found on Blackboard under Course Content.
- Should be completed by each student (hand-written) using lecture videos provided on Blackboard.
- Bring all notes to class each day (2-3 inch binder recommended)
- Upload completed notes to Blackboard before class starts each day.
  - This is part of the daily participation grade.

Lecture Videos
- Found on Blackboard under Course Content.
- Watch and fill in the notes, pausing often to allow for processing time.
- Organize your questions to bring to class the next day.
- All questions posed in the lecture videos must be answered by the student prior to coming to class each day.
  - Completion of the lecture videos is part of your participation grade each day.

Homework
- Written assignments
- Not graded nor submitted, but the only way to succeed in this course is to do every homework problem on every assignment.
- All work should be shown on your own paper.
- Problems must be in proper order on paper.
- Must use pencil.
- Must be done by hand (no typing).
- Show all work!!
- Must be your own work!
- Answers found on Blackboard.
- Using PhotoMath (or similar) is strictly prohibited and will result in academic dishonestly reports being submitted to your permanent record.
- Using ChatGPT on any assignment in this class is strictly prohibited.

Labs
- Daily, as time allows
- Can use notes
- If notes were not done before class and/or were not brought to class, the student forfeits the right to ask for help on the lab assignment that day.
- Not graded but is assessed by the instructor each class day.
  - Students will check their work using a lab key found at the front of the room during class.
  - Student must receive the "check" from the professor on the assignment paper before leaving the class for the day.
- Any student who does not complete the lab before the end of class may have up to 25% of their participation grade deducted for that day.
  - Reasons for not finishing a lab assignment during class might include (but not limited to):
    - Did not do the class notes prior to coming to class and thus cannot answer the questions
    - Not staying focused during the lab assignment.
    - Leaving the room for an extended period of time without permission
    - Taking a phone call during the class.

Tests
- 4 midterm exams and 1 comprehensive final exam
- No notes/homework/textbooks will be allowed on ANY exam
- Complete in the allotted class time
- No exam grades will be dropped.
- It is in your best interest to save ALL graded documents until your final grade is assigned at the end of the term.
- Exams may be comprehensive.

Final Exam
- The final exam is comprehensive.
- Any student who does not take the final exam will fail the classes with F's regardless of the student's average.
- No make-up final exam will be offered.
- The final exam will be held on **Monday, May 8th** from **10:15am to 12:15pm**.
- More details will be shared on Blackboard near the end of the term.

Late work
- Late work is not accepted.
- If you do not turn in an assignment on time, you will receive a zero.

Make-up
- Make-up work is given at the discretion of the instructor.
- NO make-up labs, quizzes, or tests are given without prior notification AND proper documentation.
- If you are absent from class, have given prior notification and proper documentation of your absence, you MUST make arrangements to take the lab, quiz, or exam BEFORE the next class period.
- Students who do not take labs or exams in-class, early or late, forfeit the right to attempt any extra credit on that lab or exam.

Attendance Policy
- Students are expected to attend **at least** eighty percent (80%) of the total class meetings (24 classes) **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.
- Unless given specific permission, students are expected to be in the class room and on time for class each class day.
- There are no excused absences, even with a doctor's note.
- Any student who arrives more than 10 minutes late will be counted tardy and 25% of their participation grade that day will be deducted.
- Any student who arrives more than 30 minutes late or leaves more than 30 minutes early without instructor permission will be counted absent that day and 50% of their participation grade that day will be deducted.
- Any student who falls asleep during class or who leaves class for an extended period of time, as determined by the instructor, will have 25% or more of their participation grade deducted for that day.
- Every 3 tardies count as 1 absence.
- Any student who is late to class may not be allowed to turn in homework that day.
- Transportation issues? Call an Uber, get a bus pass (Route 5 drops off just one block from the Downtown Center campus – Broadway and Ave Q – and starts at 7:50am and runs until 8:45pm), call a taxi (West Texas Cab Company (806) 559-9900), or ask a friend for a ride.

Participation Grade
- Daily participation grade.
- This grade is 50% attendance to/participation in class and the remaining 50% is awarded for watching the lecture video(s) prior to class and filling in and uploading the lecture notes before class each day, as well as finishing the daily lab assignment and receiving the "check" from the professor before leaving the class for the day.
  - Completed lecture notes should be scanned as a single PDF file and uploaded to Blackboard before each class time.

- o Failure to upload the completed notes or an upload that is in the wrong format will result in up to 25% of the participation grade that day being deducted.
- If the student does not come to class prepared (with notes), then that student forfeits the right to ask for assistance from the instructor and other students on any assignments or class lectures that day.
- In the event you are absent during class, you will get 0 pts for the Attendance/Promptness portion of this grade for that day.

Class Participation

	Unacceptable 0%	Acceptable 25%	Exemplary 50%
Attendance/Promptness	The student is absent.	The student is more than 10 minutes late to class and does not leave early.	The student is on time for class; does not leave early; stays awake and attentive.
Preparedness/Participation in class	The student did not complete any lecture examples from the assigned videos; student did not attempt the daily lab.	The student completed only a portion of the lecture examples completed on the assigned videos; Student did not finish the daily lab.	The student completed **all** lecture examples in the lecture material; Student finished and received the "Check" for the daily lab.

Total Score
Max = 100%
Min = 0%

Submitting Documents Online
- A single PDF file that is clear and legible should be created and uploaded to Blackboard.
- The document should be in proper order (problem 1, problem 2, etc.).
- Students are allowed to use whatever hardware/software they desire to create the PDF files, but here are a few suggestions:
  - App: **GeniusScan** – need a Google email to do this for free
  - App: **CamScanner** – limit on number of pages that can be compiles on the free version
  - Apple Phone – has a program on it already that will compile pictures into PDF files
- It is the student's responsibility to ensure the document is legible and in the correct format.
- Any assignment not submitted in the correct format will be given a 0 on the assignment.
- Assignments should be uploaded to Blackboard and <u>not</u> e-mailed to the instructor, except when given explicit permission to do so by the instructor.

Academic Integrity
- Any student involved in cheating will receive a zero on the assignment(s) and will be informed of why he/she received a zero.
- Student may be administratively dropped from the class and will receive an X or F.

Calculators
- This course is taught under the assumption that each student owns a graphing calculator.
- I recommend a TI 84 series calculator.
- TI-Nspires are NOT recommended unless you are an expert at using them, as the instructor will be of little help.

Class Rules:
- Be on time and ready to learn.
- Use only pencil for all assignments.

- Have the notes completed **prior** to coming to class.
- Students are not permitted to use electronic devices, other than a calculator, in class. **Put the cell phones away!!**
- During testing, all cell phones should be placed on SILENT or turned off, and all smart watches need to be removed and placed on the floor face-down to the left of your seat.
- Any student who leaves the classroom for any reason (bathroom, phone call, etc.) during an exam will not be allowed to continue the exam upon their return. Once you leave the classroom during an exam, you are done.
- Adhere to the requirements of the Student Code of Conduct.
- ***If you are joining the class through virtual means, please keep your microphone on mute until you have a question.***

Virtual Students
- Stay active and attentive during the entire class.
- Camera on and positioned in such a way as to allow the camera to catch both your face and your workspace.
- Keep your camera on until you have explicit permission from your instructor to turn it off.
- Students are expected to follow the same testing/quizzes/lab rules as any student in class.
- If you leave the view of the camera during an assessment without explicit permission from the instructor, you will be given a 0 on the assessment.
- Keep chat windows open during assessments as a way for the instructor to communicate (quietly) with you.
  - o If the student does not keep their chat window visible to themselves during assessments and misses a message from the instructor, 15% credit may be deducted from that assignment's score.
- If you break any of the rules listed above, you will receive a 0 on the assessment.
- Students who are virtual for an assessment have been given explicit permission by the instructor to take the assessment in this format. If you are not given this permission, you are expected to be in class for each and every assessment (labs, quizzes, tests). Instructor permission is not given lightly nor liberally and the decision to allow a student to work virtually is entirely at the instructor's discretion.

South Plains College
Common Course Syllabus: MATH 1325
Revised December 2022

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1325

Course Title: Calculus for Business and Social Sciences

Available Formats: conventional, hybrid, and internet

Campuses: Levelland, Downtown Center, and Dual Credit

Course Description: This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2313 or 2413, Calculus I.

Prerequisite: Successful completion with a grade of 'C' or better in MATH 1324 or MATH 1314.

Credit: 3 **Lecture:** 3 **Lab:** 0

Textbook: *Mathematics with Applications in Business and Social Sciences*, Hawkes Learning, 2022, Hawkes Learning

Supplies: Please see the instructor's course information sheet for specific supplies.

This course partially satisfies a Core Curriculum Requirement: Mathematics Foundational Component Area (020)

Core Curriculum Objectives addressed:
- **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

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:
1. Apply calculus to solve business, economics, and social sciences problems.
2. Apply appropriate differentiation techniques to obtain derivatives of various functions, including logarithmic and exponential functions.
3. Solve application problems involving implicit differentiation and related rates.
4. Solve optimization problems with emphasis on business and social sciences applications.
5. Determine appropriate technique(s) of integration.

6. Integrate functions using the method of integration by parts or substitution, as appropriate.
7. Solve business, economics, and social sciences applications problems using integration techniques.

Student Learning Outcomes Assessment: A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

Course Evaluation: There will be departmental final exam questions given by all instructors.

Attendance/Student Engagement 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 <u>may</u> 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.

Plagiarism violations include, but are not limited to, the following:
1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;
2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:
1. Obtaining an examination by stealing or collusion;
2. Discovering the content of an examination before it is given;
3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
4. Entering an office or building to obtain an unfair advantage;
5. Taking an examination for another;
6. Altering grade records;
7. Copying another's work during an examination or on a homework assignment;
8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
9. Taking pictures of a test, test answers, or someone else's paper.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect from the student and the instructor. Neither the instructor nor the student should be subject to others' rude, disruptive, intimidating, aggressive, or demeaning behavior**.** Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.
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/.
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.

SPC Bookstore Price Match Guarantee Policy: If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester. The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by* Amazon, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition and format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund.

Price matching is only available on in-store purchases. Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

Week	Day	Date	Topics	Homework
1				
	Wednesday	Jan 18	Syllabus/Introduction	
2	Monday	Jan 23	Algebra Review	R.1 & R.2
	Wednesday	Jan 25	Limits; One-Sided Limits & Limits Involving Infinity	1.1 & 1.2
3	Monday	Jan 30	Rates of Change	1.3
	Wednesday	Feb 1	Tangent Lines & Derivatives	1.4
4	Monday	Feb 6	**Exam 1**	
	Wednesday	Feb 8	Basic Derivative Rules & Marginal Analysis	2.1
5	Monday	Feb 13	Product & Quotient Derivative Rules & Marginal Analysis	2.2
	Wednesday	Feb 15	The Chain Rule	2.3
6	Monday	Feb 20	Derivatives of Exponential & Logarithmic Functions	2.4
	Wednesday	Feb 22	Continuity & Differentiability; Price Elasticity of Demand Case Study	2.5 &Case Study
7	Monday	Feb 27	Review	
	Wednesday	Mar 1	**Exam 2**	
8	Monday	Mar 6	Local Extrema & First Derivative Test	3.1
	Wednesday	Mar 8	The Second Derivative & The Second Derivative Test	3.2
	March 13 – March 15		*Spring Break*	
9	Monday	Mar 20	Optimization	3.3
	Wednesday	Mar 22	Implicit Differentiation	3.4
10	Monday	Mar 27	Related Rates	3.5
	Wednesday	Mar 29	Review	
11	Monday	Apr 3	**Exam 3**	
	Wednesday	Apr 5	Antiderivatives	4.1
12	Monday	Apr 10	Integration by Substitution	4.2
	Wednesday	Apr 12	Integration by Parts	4.3
13	Monday	Apr 17	Area and the Definite Integral, FTOC, Avg Value	4.4
	Wednesday	Apr 19	Area Between Curves	4.5
14	Monday	Apr 24	Applications of Integrals	4.6
	Wednesday	Apr 26	Review	
15	Monday	May 1	**Exam 4**	
	Wednesday	May 3	Final Exam Review	
16	Monday	**May 8**	**Final Exam - Comprehensive 10:15am – 12:15pm**	
	Wednesday			

Last Day to Drop – April 27, 2023