<div align="center">

South Plains College
Common Course Syllabus: MATH 1325
Revised December 2019

</div>

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1325

Course Title: Calculus for Business and Social Sciences

Available Formats: conventional and internet

Campuses: Levelland, Reese, 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 the Management, Natural, and Social Sciences*, Lial, Hungerford, Holcomb, and Mullins, 2019, 12th Edition, Prentice Hall/Pearson Education

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

This course partially satisfies a Core Curriculum Requirement: None

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 Policy: Attendance and effort are the most important activities for success in this course. Records of your attendance are maintained throughout the semester. Five (5) absences, *for any reason*, are allotted to the student for the semester. Tardies count as one-half (1/2) of an absence. Tardies will be applied for consistently being late to class, as deemed by the instructor and leaving class early. If this number is exceeded, the instructor has the right to drop you with a grade of F or an X, depending on their discretion.

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 on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning**.** 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.

Diversity Statement: In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

Disability Statement: Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

Nondiscrimination Policy: South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

Title IX Pregnancy Accommodations Statement: If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

Campus Concealed Carry: Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page at: http://www.southplainscollege.edu/campuscarry.php

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

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.

MATH 1325—Calculus for Business and Social Sciences
South Plains College
Summer Session II 2020

Section: 151, Online

Instructor: Mr. Robert E. Plant, II, M.S.

Office Info: Phone—(806) 468-2607 (Google Voice number)
Hours—Virtual Hours are 8 AM – 8 PM Monday-Thursday and 8 AM – Noon
Friday; call the above number or send an e-mail

E-mail: rplant@southplainscollege.edu

O.P.I.*:   This syllabus is © 2020 by Mr. Robert E. Plant, II
* O.P. I. means "other pertinent information," or in layman terms, "something else that you need
to know."

Tutoring: Due to CoViD-19, all tutoring will operate virtually for this session. Free tutoring
is ***normally*** available in room 116 of the Mathematics-Engineering Building, at the
Reese Center campus in Room RC207 and in Building 8. (Please remember to
verbally request a tutor and to sign in when you seek the help of a tutor in each of
these places.)
There are alternate tutoring resources available online for students upon request.

"Practice & Application Sustain Success. #PASS"

—Instructor

Fundamental Principles of Mathematics

Mathematics is built upon two fundamental principles—pattern recognition and problem solving. Students must become able to recognize patterns in order to solve *types* of problems. Too often have I observed students hang a majority of time up on each specific problem, so it is my mission as your instructor to emphasize that there are sets of problems within the homework (HW) assigned that require *one concept or skill to solve all problems in each set!* It is the ultimate objective of this and any other mathematics course to enable you as the student to become proficient in both of these areas. But until you have reached the point of mastery in both, I submit to you a paraphrase of a quote taken from Tupac Shakur: **"All eyes on me!"**

Guide to Being Successful in This Course

In order for YOU the student to be successful at this or any other level of higher education, YOU must be aware of one very important aspect: student accountability. I as the instructor am accountable for aiding in your success by properly presenting the mathematical concepts of this course, as well as any real-world applications, in a manner that allows for the general group of students to display understanding of said information. YOU as the student are accountable for your success by putting forth the effort necessary to gain such understanding. This is achieved by completing all assignments using the information that I have presented in the lecture and by asking questions regarding any concepts that are not understood. If YOU fail to do what is required in this course, then YOU will be responsible for the just grade that is received.

Guide to Working with Mathematical Problems

When working with a mathematical problem, the following questions must be answered:

Q1. **What *known* information does the problem give me?**

A1. You will be shown, through examples given by the instructor, how to list the known information of the problem. Use this process unless a more suitable one is known by you. Spare no details until you have *mastered* this concept of setting up the problem. Once you have done so, then you can afford to spare some of the details.

Q2. **What information given in the problem do I *not know*, and how do I *find* it?**

A2. In this course, you will deal with problems that have unknown information which must be found. Most of these problems will have one unknown; however, there will be a few that will have two, which is the *maximum* number of unknowns that will be examined for any problem. The instructor will show you the procedures necessary for finding these unknowns.

Q3. **When is the problem solved or completed?**

A3. The problem will be solved or completed *when there is no unknown information remaining*. Each section covered in this course will have problem exercises that are designed to reinforce the concept(s) of the section, and there will be more than one problem assigned per concept (unless otherwise stated by the instructor at the time of assignment).

Expectations of the Student for the Instructor

The Student is within all rights to expect that the Instructor do the following:
- ➢ Provide notice of any schedule changes.
- ➢ Be accessible to those who need assistance outside of the classroom setting, by way of e-mail or in person, during office hours or reasonably scheduled appointment times.
- ➢ Respond to all e-mails in a timely and discretionary manner
- ➢ Hold to any assignment(s) given during the semester unless removed.
- ➢ Uphold the policies of the college as it pertains to the student's welfare in the course.
- ➢ Not make any exceptions regarding the dismissal of any student from the course for reasons listed herein.
- ➢ Provide examinations, based on the information presented, that contain problems which use solving methods *like* those assigned from sections pertaining to the exam.

Expectations of the Instructor for the Student

The Instructor is within all rights to expect that the Student do the following:
- ➢ Be mindful of any schedule changes.
- ➢ Take advantage of *all* resources available to you.
- ➢ Be respectful of your peers and the Instructor as stated in the SPC Student Handbook.
  - o In the collegiate setting, all students are adults and are expected to uphold conduct worthy of such consideration.
  - o Failure to do so is sufficient grounds for the Student to be dismissed from the course.
- ➢ Be willing to work together with—**BUT NOT DO WORK FOR**—fellow classmates.
  - o Networking is an essential tool both in the workforce and in the classroom; furthermore, the greater the numbers of minds there are involved, the less mental labor is required for each individual.
  - o No one is an island… *except on the exams!*
- ➢ Be mindful of the classroom setting and the roles therein.
  - o While student tuition is vital to the well-being of this academic institution, this does NOT warrant the concession of any instructor to you in a manner that compromises the integrity of the classroom setting and that of the institution itself.
- ➢ Bring all materials needed for the course and refrain from bringing anything that is not needed. This allows you to pay attention to the subject matter only and shows me that you are prepared to learn.
- ➢ Obtain all missed information and assignments from a fellow classmate.
  - o In the spirit of holding to all course objectives in a manner that warrants personal accountability, I will not relay such information unless absolutely necessary.
  - o This means that *if there is no documented reason for missing the information, then find your peers, not me*.
- ➢ READ THE SYLLABUS!!!
  - o You are held responsible for the information stated herein.
  - o There are *no exceptions* to this rule!

Attendance Policy

As this is an online course, attendance will not be taken; rather, your enrollment in the course will be tied to the completion of your assignments. Failure to complete and submit 10 homework assignments, 5 quizzes, *or* one midterm exam will result in my having the right to administratively drop you from this course.

Required & Disallowed Materials for the Course

The following materials are required of the Student for this course:
- **Graphing calculators—**These are allowed in this course and <u>cannot</u> <u>exceed</u> <u>the</u> <u>quality</u> <u>of</u> <u>a</u> <u>TI-84</u> <u>Calculator</u>; no extra calculators are required of the Instructor to provide in the event of the Student not having his/her own
- Syllabus Acknowledgment of Receipt—The filling in, signing, and returning of said form is prerequisite for any accommodations stated in the syllabus to be recognized for the Student; nonetheless, the Student is still expected to uphold any responsibilities that are stated herein

The following materials and situational items are disallowed in this course:
- Online math answering programs—Programs that provide "solutions" to unworked problems, such as Chegg, MathWay, PhotoMath, and Wolfram Alpha are strictly prohibited from use in this course
  - First Offense—Dismissal from lecture and counted absent
  - Second Offense—Student will be dropped from the course
- TI-89 and *n*-Spire calculators—As the TI-89 can symbolically differentiate as well as integrate, the use thereof is prohibited; as the *n*-Spire calculator can save webpage information, the use thereof is prohibited; cell phone calculator usage is also disallowed; two violations will result in the ***dismissal of the Student from the course***
- Pen for doing graded work—Use thereof in said circumstance will result in a zero percent (0%) for the assignment in question
  - All work must be shown in pencil
  - Writing each question in pen is permitted
  - Circling/boxing answers in pen/highlighter is allowed
- Notes on exams—Use thereof in said circumstance that is not permitted by the Instructor will result in the immediate dismissal of the Student from the course.

If the Student has any concerns pertaining to the information above on this page, then the Student is to contact the instructor by the means stated in this document. The Instructor cannot be reasonably expected to address any such concerns if no communication is had with the Student.

Grading Policy

90% or above	A	Homework Assignments:	38 @ 1% each
80-89%	B	Multi-Section Quizzes:	12 @ 1% each
70-79%	C	Midterm Examinations:	3 @ 10% each
60-69%	D	Course Final Examination:	1 @ 20%
59% or below	F		

* All grades are rounded from the first decimal. Upon the submission of grades at the end of the session, **ALL GRADES ARE FINAL!**

Holiday/Travel Statement

If you the student have pre-existing plans to either travel out of the area during scheduled class times, you must inform me by **NO LATER THAN Monday, July 20, 2019**. Failure to do so will result in the forfeiture of any assignments that will come into question during your dates of absence.

Religious Holy Days

In accordance with Section 51.911, Texas Education Code, South Plains College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within seven (7) calendar days after the absence. Students are required to file a written notification of absence with each instructor within the **first fifteen (15) days of the semester** in which the absence will occur. Forms for this purpose are available in the Student Services Office along with instructions and procedures. "Religious holy days" means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code.
(Copied from current South Plains College Catalog)

Midterm Examination Policy

On the day of the exam, be sure to *take care of your "bathroom business" BEFORE STARTING*; also, *empty ALL of your pockets* and *turn all smart devices OFF*.
1st Offense: Warning and 20% Penalty
2nd Offense: 0% on the Exam in question

Final Examination Policy

There will be a final examination for this course. *All students are required to take this exam at the appointed time listed herein.* Also, due to the insurance of outcomes assessment at the end of any semester, there will be no guarantee of exemption from the final exam for this course. *If any exam is missed, then the final will replace ONE such exam upon notification <u>before</u> the exam is scheduled.* All other exams missed will receive a grade of 0% or be handled at the Instructor's

discretion. **If the final exam is missed by any student required to take such, the student will receive a 0% for the final and an "F" for the course!**

Equal Opportunity, Disability, and Diversity Statements

South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability or age.

Reese Center and Lubbock Center– Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability. For more information, call or visit the Disability Services Office in rooms 809 and 811, Reese Center Building 8, 806-716-4675.

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

Sexual Misconduct Confidentiality Statement

As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help. It is important for you to know, however, that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me.

The Director of Health & Wellness can advise you confidentially as can any Counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach the director by phone at 716-2563 or by going to the Health & Wellness Center. You can schedule an appointment with a Counselor by calling 716-2529.

Key SPC Dates

July 13th – 4th Class Day
August 3rd – Last Day to Withdraw from Classes
August 12th – Final Exam

The "Course Fishing" Rule

This rule has been implemented for the Fall Semester of 2007 and is effective hereafter. As per House Bill 116 (Senate Bill 1231) of the Texas legislature, *all* students will be limited to a total of six (6) mid-semester withdrawals for their entire undergraduate academic career. A mid-semester withdrawal is one that occurs after the twelfth (12th) class day and is noted on the student's transcript as a "W", and upon the student receiving the sixth W, all future attempts to withdraw from a course mid-semester will be denied. As a result, a terminal course grade (A, B, C, D, or F) will be issued for the course in question. This does not include any withdrawals acquired by the student before the Fall Semester of 2007, so the count for each student under this rule is currently zero (0). **BE SURE OF YOUR INTENTIONS TO FINISH OUT THE COURSE BEFORE CONTINUING!**

Campus Concealed Carry

Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations.
For a list of locations, please refer to the SPC policy at:
(http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.php)
Pursuant to PC 46.035, the open carrying of handguns is prohibited on *all* South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

Mr. Robert E. Plant, II
SUMMER II 2020 COURSE CALENDAR

Wk.	Monday	Tuesday	Wednesday	Thursday	Fri.-Sun.
1	**Last Day of Summer 1**	**Registration**	Day 1; MLM Answers Lab	Chapter 2 HW due	Chapter 3 HW due Sun.
2	Quiz 1 due by 8 PM Chapter 4 SC & 4.1 due	Quiz 2 due by 8 PM	4.3, 4.4, 11 SC, and 11.1 due	Quiz 3 due by 8 PM **Exam 1 open**	**Exam 1 due by 8 PM (Fri.)** 11.2 & 11.3 due (Sun.)
3	Quiz 4 due by 8 PM 11.4 & 11.5 due	Quiz 5 due by 8 PM 11.6 & 11.7 due	Quiz 6 due by 8 PM	11.8 & 11.9 due	Quiz 7 due by 8 PM (Fri.) **Exam 2 open (Sun.)**
4	**Exam 2 due by 8 PM** 12 SC-12.2 due	Quiz 8 due by 8 PM	12.3 & 12.4 due	Quiz 9 due by 8 PM	12.5 & 12.6 due (Sun.)
5	Quiz 10 due by 8 PM **Exam 3 open**	**Exam 3 due by 8 PM**	13 SC due	13.1 & 13.2 due	Quiz 11 due by 8 PM (Fri.) 13.3 & 13.4 due (Sun.)
6	Quiz 12 due by 8 PM **Final Exam open**	13.5 & 13.6 due	**Final Exam due**		

Assignment Expectations

- ➤ MyLab Math Quizzes will be graded as follows:
    - o 50% of the MLM Grade will account for **up to 0.5 point**
    - o Verified scratch work will account for **up to 0.5 point**
- ➤ MyLab Math Midterm Exams will be graded as follows:
    - o 50% of the MLM Grade will account for **up to 5 points**
    - o Verified scratch work will account for **up to 5 points**
- ➤ The Final Exam will be graded as follows:
    - o 50% of the MLM Grade will account for **up to 10 points**
    - o Verified scratch work will account for **up to 10 points**
- ➤ The amount of points received will be based on the following:
    - o **Accuracy** of your solutions
    - o **Completeness** of your work
    - o **Correctness** of your work
- ➤ **Suspected cheating is grounds for immediate dismissal from the course!**
- ➤ **Missing 15 HW Assignments, 6 quizzes, or one Midterm Exam is also grounds for dismissal from the course!**
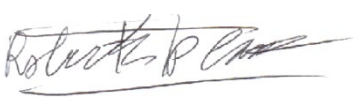
ACKNOWLEDGMENT OF RECEIPT

As a student in this course, I hereby acknowledge that I have received, read, and clearly understood the syllabus. Furthermore, I hold myself accountable for adhering to the expectations stated therein. I also acknowledge that it is my duty and responsibility to notify the instructor of all personal situations that affect my standing in this course before any occur. I am fully aware that any breach of said expectations and responsibilities on my part will result in any necessary consequences that the instructor has stated to me through the syllabus, and that any differences of opinion will be discussed with the instructor in a manner befitting of adults. Finally, in the event of a later dispute by me, I will refer to the syllabus and will, by my signature, forfeit any pursuit that is not backed by the syllabus.

_____   _____

Student's Printed Name   Date of Acknowledgment

_____   _____

Student's Signature   Instructor's Signature

Monday & Wednesday Schedule		Tuesday & Thursday Schedule	
Class	**Time**	**Class**	**Time**