South Plains College   Department of Mathematics and Engineering
Math 1324.011: Math for Business and Social Sciences
MW 11:00 – 12:45 AG 105
Spring 2018 Course Syllabus

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Office Hours: Tuesdays & Thursdays 11:00-2:30,
Fridays 9:00-12:00, or by appointment

Course Description: In Mathematics for Business and Social Sciences, Math 1324 (3:3:0), the application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. Pre-requisite: Two units of high school algebra or a grade of a C or better in MATH 0314, MATH 0320, or MATH 0324.

Course Objectives: Successful completion of this course should reflect mastery of the following objectives.
1. Demonstrate and apply knowledge of functions, including domain, range, composition, and inverses.
2. Understand polynomial, rational, radical, exponential, and logarithmic functions, and solve related equations and applications.
3. Use functions to model and understand interest, including annuities, sinking funds, and amortizations.
4. Solve systems of linear and non-linear equations, and apply them to solve problems.
5. Use matrix methods to solve systems of linear equations and linear programs.

Core Objectives:
- Apply elementary functions, including linear, quadratic, polynomial, rational, logarithmic, and exponential functions to solving real-world problems.
- Solve mathematics of finance problems, including the computation of interest, annuities, and amortization of loans.
- Apply basic matrix operations, including linear programming methods, to solve application problems.
- Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.
- Apply matrix skills and probability analyses to model applications to solve real-world problems.

Course Materials:
- Textbook: *Mathematics with Applications in the Management, Natural, and Social Sciences*, 12th Edition by Lial, Hungerford, Holcomb, and Mullins, Pearson. (ISBN-13: 978-0-13-476762-8)   (ISBN-10: 0-13-476762-4)
    Textbook Options (all 3 options include access to the electronic version of the book)
    1. Purchase a new physical book that includes a per-paid web access code.
        (physical book and e-book)
    2. Purchase a used book, then purchase the web access code directly from www.pearson.com/mylab .
        (physical book and e-book)
    3. Do not purchase a physical book; only purchase the we access code directly from
        www.pearson.com/mylab .   (no physical book; only e-book)

    Note: No matter how you are going to pay for the access code, MyMathLab does allow a grace period/temporary access for about and just make sure to enter your access code before the grace period ends.
- Calculator: You are <u>required</u> to bring your calculator to EVERY class. You may use a graphing calculator on most homework, quizzes, and exams.   TI-83, TI-83+, TI-84+ are preferred, but many others are also acceptable. Cell phones and similar devices may NOT be used as calculators and no sharing of calculators is allowed. If you have any questions about your calculator check with the instructor immediately.
- You will need a 3-ring binder (1.5 inch), dividers, paper, graph paper, hole punch, stapler, textbook, pencils, and erasers.

Methods of Learning Assessment: Students will be continually assessed throughout the course via in-class group work, questioning, and board work. Other methods of assessment include:

- **Attendance:** Attendance and effort are crucial for success in this course. It is your responsibility to make sure that I have marked you present for each class. Class attendance may be taken at any time during the class period, so please do not arrive late or leave early. Leaving early and being tardy will be considered ½ absence. You may be dropped from this course with a grade of X or F if you are absent four consecutive days or if you accrue five absences for any reason throughout the semester. Absences are not classified as 'excused' or 'unexcused'. If you should incur an absence, please refer to your syllabus, contact the instructor, or contact another student to get the assignment completed BEFORE the next class. Late homework and makeup quizzes are not an option. The last day for student-initiated drops is Thursday, November 15th.

- **Homework:** Homework will be assigned at each class meeting. The homework is not a tool by which I torture you, but rather an opportunity for you to practice the skills presented in class which you will be responsible to demonstrate on a quiz the following class period. If you are interested in passing the class, you will need to do well on the quizzes. To do well on the quizzes, you will need to complete the homework. No late assignments will be accepted. Simply writing the problem and the answer is not "doing homework." Using a solutions manual or an app that shows you the steps, and copying them down is NOT "doing homework." Remember your effort is key to your success. You have to focus your effort on being able to complete the problems on a quiz/exam without any outside resources. There will be 2 types of homework in this class: written homework and online homework.

    Online Homework: The online homework will be on MyMathLab at www.pearson.com/mylab . Our course ID is bartlett64882. All homework will be due before class at 10:30am on the specified date. See the MyMathLab instructions below.

    Written Homework: You should show all work when doing written homework just like you will have to on the quizzes and exams. You are responsible for the following homework requirements. Any written homework that does not follow the homework requirements will be recorded as a grade of a zero.

    Written Homework Requirements:

    1) It must be turned in at the beginning of the class period. Late homework will not be accepted. Late is defined to be: anything turned in after the start of the class period.

    2) Homework must be written in pencil on white 8.5 x 11 inch paper. It must be neat and legible. I will be the judge as to what is neat. Just because you can read it doesn't mean that I can interpret it.

    4) If you have more than one page to turn in, the pages must be stapled together. Multiple pages that are not stapled or held together by a paperclip, folded corner, spit, gum, etc. will not be accepted and be recorded with a grade of zero. You must staple multiple pages together.

    5) Homework must be presented in an orderly manner with the problem running in a single column down the page.

    6) ALL WORK must be shown in order to receive credit for each problem.

    7) All final answers must be circled to receive credit. Any algebraic answer not circled or "boxed" in will not be graded. Pictures/graphs do not need to be circled or boxed.

    8) If you have an assignment where you have to graph something, the ENTIRE ASSIGNEMENT must be on graph paper.

    9) All assignments must be done in pencil.

- **Notebook:** You will be required to keep all class materials (notes, handouts, homework, quizzes, and exams) organized in a notebook (3-ring binder). These materials are subject to be turned in for grading at any time. Please make certain all materials accompany you to each class meeting. The notebook will have 4 dividers labeled the following: Notes, Homework, Quizzes, and Exams. You will keep the corresponding material under the matching divider.

- **Quizzes:** Short, in-class quizzes that will be given regularly will have problems selected from, or closely related to, your homework. Most, if not all, quizzes will be pop-quizzes so you will need to be prepared every class period. Students arriving late may be denied the chance to take a quiz, if there is one that day. Quizzes must be taken in pencil.

- **Exams:** Exams must be taken in pencil. The tentative exam dates are as follows:

    Exam 1: Chapters 2 & 3   Monday, September 24th
    Exam 2: Chapters 4 & 5   Monday, October 22nd
    Exam 3: Chapter 6   Monday, November 12th
    Exam 4: Chapter 7   Monday, December 3rd

- **Final:** The comprehensive final will be given on Monday, December 10th from 10:15 – 12:15 as directed by the official South Plains College Schedule. No make-up final will be given. The final will cover all material covered in-class including chapters 2, 3, 4, 5, 6, and 7.

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

Grading Policy:

		Grading Scale:	
Daily Work (HW, quizzes, notebook checks, labs)	16%	90-100%	A
Exams (4 total)	16% each (total of 64%)	80-89%	B
Comprehensive Final	20%	70-79%	C
		60-69%	D
		Below 60%	F

This course and its grade will be recorded on your official transcript. Grades will be posted on Blackboard during the semester usually after exams.

Student Responsibilities and Expectations:

1. Come to class on time and prepared to learn. (Pencils, homework, notebook, calculator)
2. Read the syllabus.
3. Take notes, participate in class, and complete course assignments early enough to seek help if needed.
4. Food and drink are not allowed in class, with the exception of bottled water.
5. Cell phones and any other electronic devices must be silenced and put away before entering the classroom. Use of these devices during class will result in a zero for that day's quiz, homework, or exam.
6. Be courteous and respectful to your instructor and classmates at all times.
7. Use only pencil for all assignments.

Resources:

- I am your first and BEST resource for this class! Feel free to come by during my office hours or email me at jkbartlett@southplainscollege.edu .
- Blackboard is the online course management system that will be used for this course. The course syllabus as well as any other class handouts can be accessed through Blackboard. Login at http://southplainscollege.blackboard.com . The user name and password should be the same as the MySPC and SPC email.
    - User name: first initial, last name, and last 4 digits of the Student ID
    - Password: Original Campus Connect Pin No. (found on SPC acceptance letter)
- Free tutoring is available in M116 on the Levelland campus. Hours for the tutors will be posted by the door of M116.
- Form study groups: Networking is an essential tool both in the classroom and in the workforce!
- Your book that you have already purchased (or have an electronic copy of through MML)
- MyMathLab has videos from the book under the Multimedia Tab
- Websites that contain helpful videos:
patrickjmt.com
khanacademy.com

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)

Equal Opportunity: 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.

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 Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

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.

Sexual Misconduct 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 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. Dr. Lynne Cleavinger, 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 Dr. Cleavinger at 716-2563 or lcleavinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

MyMathLab Instructions:

To access MyMathLab where your online homework/quizzes are located, go to www.pearson.com/mylab. You will need the following information:

> Course ID: **bartlett64882**
> Student Access Code: This can be found in the MyMathLab kit inside the front cover of your new textbook or you can purchase access online with a credit card during the registration process.
> Email Address

To Register and Enroll:

> 1) Go to www.pearson.com/mylab and click the Register button in the Students Area.
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> 2) Follow the onscreen instructions to register and enroll. Remember, if you received the MyMathLab kit with your textbook, you do not need to purchase access online. Your student access code is included in the kit. If you did not purchase the textbook with the kit included, you will need to purchase access online using a credit card.
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> 3) During the registration process, you will design a username and password. Consider using the same username and password you use for TTU. Whatever your username and password, be sure you don't forget it.
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> 4) After logging in to the course for the first time, you will need to install the proper plug-ins for the graphics and videos to work on your computer. If the installation wizard does not start automatically, locate the link called "MyMathLab Installation Wizard", and follow the instructions. This will take 20 to 30 minutes.
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> 5) Once all the plug-ins are installed with the Installation Wizard and you have logged into the class, click the link "How to Enter Answers Using the MathXL Player" and watch the video that follows.
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> 6) Now you are ready to access your online homework. Inside the class, click "Do Homework" on the left side of the page, and begin! Also note, you can view your homework grades under the button called "Gradebook," and you can find the electronic copy of the book, videos, power points, etc. under "Multimedia Library."

Other things about MyMathLab:

1) Assignments will close at 10:30am before class the day they are due. You will be given an adequate amount of time to complete each assignment, so late homework will NOT be accepted and due date will NOT be extended for any reason. Because computer/internet problems can occur, I recommend you begin your homework assignments early!

2) MyMathLab has a 14 day grace period, during which you can use MyMathLab without purchasing access. This means you have plenty of time to purchase a code, for your paycheck to come in, or for financial aid to be processed and complete the assignments in MyMathLab. I will not accept not having a code as an excuse for late or incomplete homework.

3) The access code is good for the life of the textbook edition we are using. If you are repeating this course, you only need the class key below to add this class. You do not need to purchase a new access code. So don't forget your MyMathLab username and password the minute you complete the final this semester.

4) You must have Adobe Reader and Flash to use MyMathLab. For a full list of system requirements, you can search for "system requirements" through MyMathLab's help function.

5) MyMathLab's help function is really useful. Please make use of their "Student Support" if you have any technical questions about MyMathLab (getting into the class, completing your homework assignments, accessing your account, etc.). If you have already made use of this support and still need additional assistance, please feel free to contact me by email or come by my office during my office hours.