South Plains College Department of Mathematic and Engineering
Math 0324/1324.001 Math for Business and Social Sciences (CoRec)
MTWR 9:00 – 10:45
Spring 2019 Course Syllabus

Instructor: Mrs. Morgan Groves
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Office: M101

Office Phone: 716-2735

Office Hours: M 7:50am – 8:50am, 1:20pm – 2:20pm
 T 2:45pm – 3:45pm
 W 1:20pm – 2:20pm
 R 7:50am – 8:50am
 F 8am – 11am

Course Description: Background topics, which are necessary for a student to successfully complete Math 1324, will be covered with an emphasis on fractions, factoring polynomials, functions, exponents, and operating with radical expressions. This course is designed for Business, Economics, and Life and Social Science majors. It is a heavy application course, meaning the course is primarily word problems relating to the majors listed previously.

Student Learning Outcomes/Competencies:
Upon successful completion of this course students should be able to competently perform the following:
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:
This course satisfies the following 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:
- 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 (3 inch), dividers, paper, graph paper, hole punch, pencils, and erasers.

Grading Policy:

Grading Policy		Grading Scale (0324):		Grading Scale (1324):	
Daily Work (HW, quizzes, labs)	15%	90-100%	A	90-100%	A
Exams (8 total)	65%	80-89%	B	80-89%	B
Comprehensive Final	20%	70-79%	C	70-79%	C
		65-69%	D	60-69%	D
		Below 60%	F	Below 60%	F

The MATH 0324 final grade is at the discretion of the instructor. If you want to know your 0324 grade, you may schedule an appointment with the instructor to discuss it in her office.

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 <u>absent five consecutive days or if you accrue five absences</u> 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. *If you keep your cell phones on silent and out a sight during every class, you will be awarded with the forgiving of one absence during that testing period. However, if you are caught with your phone out during class, you will be counted ½ absent for that day and will lose the forgiveness of an absence for that testing period.* <u>Late homework and makeup quizzes are not an option.</u> The last day for student-initiated drops is <u>Thursday, April 25th</u>.

- **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. <u>No late assignments will be accepted.</u> 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. All assignments that cover material for the 0324 course will be written. Most but not all assignments that cover material for the 1324 course will be online through Knewton.com. You should show <u>all work</u> 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.

    <u>**Written Homework Requirements:**</u>
    1) It must be turned in at the <u>beginning</u> of the class period. <u>Late homework will not be accepted</u>. 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.
    3) If you have more than one page to turn in, the pages <u>must</u> be <u>stapled</u> 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 <u>staple</u> multiple pages together.
    4) Homework must be presented in an orderly manner with the problem running in a <u>single column</u> down the page.
    5) <u>ALL WORK must be shown</u> in order to receive credit for each problem.
    6) <u>All final answers must be circled to receive credit</u>. Any algebraic answer not circled or "boxed" in will not be graded. Pictures/graphs do not need to be circled or boxed.
    7) All assignments must be done in pencil.
    8) No work will be graded that has been done on the given assignment sheet. The given assignment sheet is a cover sheet for your assignment. Graded work must be done on your own paper with all work and steps shown.

- **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 <u>tentative</u> exam dates are below. No notes/homework/textbooks will be allowed on ANY exam. All exams are expected to be completed in the allotted class time, no exceptions.

  Unit 1 Exam Tuesday, January 29th   Unit 5 Exam Monday, March 25th
  Unit 2 Exam Monday, February 11th   Unit 6 Exam Tuesday, April 2nd
  Unit 3 Exam Monday, February 25th   Unit 7 Exam Monday, April 15th
  Unit 4 Exam Tuesday, March 5th   Unit 8 Exam Monday, April 29th

- **Final:** The comprehensive final will be given on <u>Monday, May 6th</u> from <u>8:00 – 10:00</u> as directed by the official South Plains College Schedule. <u>No make-up final will be given.</u> The final will cover all material covered in-class. All students are required to take the final exam. If a student does not take the final exam, they will fail both classes, regardless of their average at the time of the final.

- **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 you 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.

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.
- 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)
- <u>Free tutoring</u> 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!
- Websites that contain helpful videos:
  patrickjmt.com
  khanacademy.com

Academic Integrity: Academic dishonesty will not be tolerated. You are expected to uphold the ideas of academic honesty. All work that is graded must be your own. This policy applies to all work attempted in this course. If this policy is violated the student will receive an F for the assignment and will be dropped with an F. For more details on what is considered cheating, see the South Plains College catalog. If you are caught cheating on any assignment, you will not be allowed to take another class with me in the future.

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)

Disabilities 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.   You must also talk directly to your instructor to inform her of your requests. This conversation must happen within the first two weeks of classes.

Non-Discrimination Statement
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 Chris Straface, Director of Health and Wellness at 806-716-2362 or email cstraface@southplainscollege.edu for assistance.

Campus Concealed Carry Statement
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: https://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.

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.

Disclaimer: *The instructor reserves the right to alter any class policies as deemed necessary by the instructor or South Plains College, and will announce any changes in class. If a student has any questions about a change in policy ask the instructor for clarification.*

Week	Day	Date	Topic
			Tentative Calendar for Math 0324/1324 Spring 2019
1	Monday	Jan 14	Syllabus, Assessment, 1.1: Integer Rules, Fraction Multiplication & Division
	Tuesday	Jan 15	1.1: Integer Rules, Fraction Multiplication & Division
	Wednesday	Jan16	1.2: Fraction Addition & Subtraction, Order of Operations
	Thursday	Jan 17	1.3: Exponent Rules & Radicals
	Friday	Jan 18	*Last Day to Add*
2	Monday	Jan 21	*No School: MLK Holiday*
	Tuesday	Jan 22	1.4: Polynomials: Add, Subtract, Multiply Radicals: Add, Subtract Factoring: GCF, Trinomials
	Wednesday	Jan 23	1.5: Factoring with Leading Coefficient not 1 Special Products
	Thursday	Jan 24	1.6: Factoring Summary
3	Monday	Jan 28	Review for Exam 1
	Tuesday	Jan 29	**EXAM 1**
	Wednesday	Jan 30	2.1: Rational Expressions & Equations
	Thursday	Jan 31	2.2: Solving Linear and Absolute Value Equations
4	Monday	Feb 4	2.3: Solving by Factoring, Quadratic Formula
	Tuesday	Feb 5	2.4: Solving by Square Root Property, Complete the Square
	Wednesday	Feb 6	2.5: Solve Rational Equations
	Thursday	Feb 7	Review for Exam 2
5	Monday	Feb 11	**EXAM 2**
	Tuesday	Feb 12	3.1: Graphs
	Wednesday	Feb 13	3.2: Equations of Lines
	Thursday	Feb 14	3.3: Linear Word Problems
6	Monday	Feb 18	3.4: Linear Inequalities with interval notation
	Tuesday	Feb 19	3.5: Functions & Graphs of Functions
	Wednesday	Feb 20	3.6: Applications of Linear Functions
	Thursday	Feb 21	Review for Exam 3
7	Monday	Feb 25	**Exam 3**
	Tuesday	Feb 26	4.1: Quadratic Functions and Applications
	Wednesday	Feb 27	4.2: Polynomial Functions
	Thursday	Feb 28	4.3: Rational Functions
8	Monday	Mar 4	worksheet/Review
	Tuesday	Mar 5	**EXAM 4**
	Wednesday	Mar 6	5.1: Exponential & Log Functions Log Properties and Conversion Lab
	Thursday	Mar 7	5.2 Log Properties and Lab

	Monday - Friday	Mar 11-Mar 15	*No School: Spring Break Holiday*
9	Monday	Mar 18	5.3: Logarithmic Properties & Equations Log Properties Lab
	Tuesday	Mar 19	5.4: Exponential Equations, Lab on Log/Exp Equations
	Wednesday	Mar 20	5.5 : Logarithmic and Exponential Applications
	Thursday	Mar 21	Review for Exam 5
10	Monday	Mar 25	**EXAM 5**
	Tuesday	Mar 26	6.1: Simple & Compound Interest
	Wednesday	Mar 27	6.2: Future Value of an Annuity
	Thursday	Mar 28	6.3: Present Value of an Annuity
11	Monday	Apr 1	Bonus Quiz, Finance Lab
	Tuesday	Apr 2	**EXAM 6**
	Wednesday	Apr 3	7.1: Direct Translation & Word Problems
	Thursday	Apr 4	7.2: Systems of Two Linear Equations
12	Monday	Apr 8	7.3: Gauss-Jordan Elimination (GJE)
	Tuesday	Apr 9	7.4: GJE special cases, Applications of Systems
	Wednesday	Apr 10	7.5: Products and Inverses of Matrices
	Thursday	Apr 11	7.6: Applications of Matrices – Leontief Input-Output Models Unit 7 Lab
13	Monday	Apr 15	**EXAM 7**
	Tuesday	Apr 16	8.1: Graphing Linear Inequalities Linear Programming: Graphical Method
	Wednesday	Apr 17	8.2: Linear Programming: Applications
	Thursday	Apr 18	8.3: Simplex Method: Maximization
14	Monday	Apr 22	*No School: Easter Holiday*
	Tuesday	Apr 23	8.4: Maximization Applications
	Wednesday	Apr 24	8.5: Simplex Method: Nonstandard Problems
	Thursday	Apr 25	8.6: Introduction to Probability, Expected Value
15	Monday	Apr 29	**EXAM 8**
	Tuesday	Apr 30	8.7: Markov Chains (not on exam 8, but is on Final)
	Wednesday	May 1	Review for Final
	Thursday	May 2	Review for Final
16	**Monday**	**May 6**	**Final Exam 8:00am – 10:00am**