MATH 0324/1324 - Mathematics for Business and Social Sciences with Support- Spring 2025

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Office Hours: MW: 11 am - 2:15 pm, Friday: 8 am - 11 am
or by appointment

Note that students are responsible for knowing the policies of SPC as an institution. This information is available in the student handbook. Policies specific to the math department are found in the common course policies preceding this document. Below are the course policies specific to this course section and this instructor.

Materials: The following materials are required for this course

Writing: Pencil and paper are required for taking notes during videos, while reading the text, or during any virtual/remote meetings, as well as for completing written assignments. Generally, I recommend having a spiral notebook dedicated to notes and solving problems for this class, which makes it easy to email pictures of problems and ask questions about the work.

Calculators: You will need a calculator with e^x and ln keys. These can be found on scientific calculators (inexpensively obtained from Wal-Mart or any other big-box store) or graphing calculators. (NOTE: graphing calculators are nice, but not required for this course.) Online options exist such as Wolfram Alpha (`wolframalpha.com`), Desmos (`www.desmos.com` Desmos also has smartphone apps) or GeoGebra (`www.geogebra.org`). Smartphone apps such as Panecal or ClassCalc are also available for low cost (or free). All are great for doing homework or studying.
Please note that computer software and mobile apps will not be allowed on exams.

Computer: Access to a computer with stable internet connection will be required for viewing course materials as well as using other software (see "Calculators" above and "Blackboard" below). The use of Chromebooks or other computers running the Chrome Operating System (ChromeOS) is discouraged, as ChromeOS is not always compatable with the software we may be using during this course. If you do not have a computer you may find success using mobile devices in many cases, and you also have access to suitable computers via the computer labs found at every SPC campus.

Blackboard: Blackboard (accessible via the SPC website) will be used as a central hub for the course. You can find this syllabus, and all other course materials, as well as assignments, grading rubrics, etc. You should be checking Blackboard daily for announcements and updates, and to access the homework. Blackboard utilizes students' SPC email, thus you should also be checking your SPC email regularly.

Gradescope: You will need to submit written documents in this course, via the Gradescope app. You will need access to a smartphone for this app. If you do not have a smartphone, you will need access to a scanner to scan your documents and upload them to Gradescope from your computer. ***NOTE:*** *When accessing Gradescope, do not create an account to log in. Instead, select the option to use school credentials and then select SPC. You will be able to use your SPC login information to use Gradescope.*

OneNote: *(This is optional, but highly recommended.)* You should already have access to Microsoft OneNote as an SPC student, and you should have received an email indicating that you have been added to a course (this course) on OneNote. Any student can post questions to their individual notebooks on OneNote, and email me and I can put responses directly into one note. I will also use OneNote to demonstrate problems for students coming in during office hours (in person or virtual). Lastly, any changes made to notes, or additonal examples done for the class will be posted there as well as on blackboard.

Assessment: Grading will be done according to the standard 10 percent scale (i.e. 100% - 90% is an A, etc.) with assignments weighted as follows:

Assignments	15%
Tests	60%
Final Exam	25%

Support Grades will generally follow the college-level grade according to the assessment table above; that is, a grade of C or better will result in a support grade of "Passing" (P) and a grade below C will result in a support grade of "Failing" (F).

Class Attendance: Attendance is managed by participation in the course (i.e. assignments turned in), however students should be involved with working the course material as often as possible in order to develop mastery of the topics presented.

If a you miss more than 5 assessment items (assignments, quizzes, etc.), you may be dropped from the course with an X or an F.

Students should plan their work time at the beginning of each week so that they are committed in advance to the completion of their assignments. It has been well documented that spreading out study and practice over a longer period of time helps to retain knowledge, create new connections, and gain additional insights into the material. This can also help with quizzes (see below).**Make arrangements now and plan ahead for what you will do in the event that your own computer or internet connection becomes unavailable or unreliable.**

Assignments: Daily work is essential to developing mastery over the topics presented in this course. Problems may be attempted an unlimited number of times in order to achieve mastery over each lesson. It is important for you to be as thorough as possible in completing the assignments as well as taking notes over the lessons. At the end of each week, you will submit your notes and your worked problems over the week's lessons on Gradescope.

Quizzes: Quizzes will be given at least weekly in order to provide low-level assessment of related 'chunks' of material learned throughout the week. They are in the same grade category as Assignments

Exams: There are three midterm exams, one project (graded as an exam), and one final exam. All exams are to be taken in person. For each exam, a survey will go out 2 weeks prior to the exam date for students to choose when they will take the exam. Exams cannot be made-up, remade, or retaken.

Final Exam: The final exam is comprehensive, and a required part of the course. Failure to take the final exam results in an automatic F in the course. The Final Exam is Monday, 5 May at 8 am

Email: The email at the header of the syllabus is the best way to get into contact with the me. This should be used as often as necessary to ask questions, schedule appointments for office hours (physical or virtual) or turn in written assignments in the event that blackboard is down. You may also email incomplete parts of projects and case studies in order to get feedback from me on how to proceed.

All emails should be formatted with the course number and section, and an adequate heading (i.e. "Math 1324-151 project questions"). Failure to format the subject line properly may result in emails being caught by SPC's email filter. Neither I nor SPC are responsible for emails lost due to improper formatting.

Be sure to confirm that all relevant attachments are sent with the email and that the body of the email contains all relevant information for that correspondence.

Showing Work: In all written assignments submitted work of one kind or another needs to be shown in order for the me to properly assess how much of the content has been properly learned and implemented. *When submitting written work any question or component that does not have work associated with it will be given reduced (or no) credit.* Students may view the document titled "Mathematical Writing" in the syllabus content area for specific examples of properly showing work.

Civility in the classroom: Students are expected to assist in maintaining a classroom environment that is conducive to learning. Given that this is an online course, "the classroom" is defined as any set of interactions that students will have with one another (primarily discussion boards). Students who are found to be intentionally hurtful or disrespectful, or repeatedly detract from the focus of the discussion boards will have their grade in this category penalized (up to zero credit for a discussion assignment), and may be administratively dropped from the course (with an X or F) for creating a hostile learning environment.

It is important to note the role that students play in their own mathematical education. Just as everybody has had (and continues to have) different life experiences, we all have different mathematical experiences as well. And while it is important that the systems and institutions that people interact with (of which this class is one) are impartial, to expect such from human beings borders on impossible. To that end, it is imperative that students give space for their classmates to come into the material from where they are, and that we seek to understand each other. The most important capacity students can give each other is the space to be wrong, and to be gently guided out of misconceptions or errors. Both instructor and student are not just the product of their own hard work and thinking, but also of what their environments (both past and present) allowed them to work or think hard about.

Students in disagreements over results or processes must disagree professionally. Blanket statements ("you're wrong" or "that doesn't work") cannot be given without explicit evidence, and should still be framed more in terms of your own understanding: phrases like "I think the problem is asking for..." or "did you consider..." are more appropriate to use when correcting and/or helping other students. People cannot escape their biases, but everybody can recognize that people do not always look at a problem the same way. Make every attempt to be charitable and generous in your interactions with other students.

Honesty: "Scholastic dishonesty" includes but is not limited to cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student. Incidents of academic dishonesty will be promptly reported and dealt with.

Student Resources: Students have access to tutoring at all SPC campuses, specifically in room M116 in the Math and Engineering building on the Levelland campus, or Floor 1 of the Lubbock Downtown Center in the southeast corner.

To schedule a face-to-face or virtual meeting with SPC tutors, go to the SPC webpage, click Student Services, and click on Tutoring. There students may choose at which center they wish to have tutoring or if they wish to have a virtual session (face-to-face sessions only require an open spot, while virtual sessions require 4 hours notice). Click the Booking link and log in with SPC credentials. Students can then choose the subject and tutor.

Students also have access to the use of Tutor.com for a few hours each week. Students can access Tutor.com directly from the blackboard homepage, or from the Help section of this Blackboard course.

Week	Content Covered	Due Dates Labs, Quizzes, Exams due at end of class period Assignments due by 11 pm on corresponding Friday
Week 1	Lesson 1: Basic Arithmetic with integers, fractions, and decimals	
1/13 - 1/17	Lesson 2: Basic Arithmetic (PEMDAS), Fractions/Decimals/%	Labs 1 and 2, Quiz 1 (Wed)
	Probability, Distributions and Expected Value	Assignment 3
Week 2	Lesson 4: Basic Algebra Review (linear eq/ineq 1 var)	
1/20 - 1/24	Lesson 5: Linear Equations in 2 variables and their Graphs	Lab 4, Quiz 2 (Wed)
	Lesson 6: Applications of Linear Equations	Assignments 5 and 6
Week 3	Lesson 7: Systems of Linear Equations	
1/27 - 1/31	(Graphing, Substitution, Elimination	Quiz 3 (Thurs)
		Assignment 7
Week 4	Lesson 8: Matrices and Gauss-Jordan Elimination	
2/3 - 2/7	Lesson 9: Applications of Systems of Linear Equations	Assignment 8
	Exam 1 (lesson 1 through 9, Feb. 6)	
Week 5	Lesson 10: Matrix Arithmetic	
2/10 - 2/14	Lesson 11: Markov Chains	Quiz 4 (Thurs)
		Assignments 10 and 11
Week 6	Lesson 12: Matrix Inverses and Matrix Algebra	
2/17 - 2/21	Lesson 13: Leontif Input/Output Analysis	Quiz 5 (Thurs)
		Assignments 12 and 13
Week 7	Lesson 14: Systems of Linear Inequalities	
2/24 - 2/28	Lesson 15: Solving Linear Programs with Graphing	Lab 14, Quiz 6 (Thurs)
	Lesson 16: Solving Linear Programs with the Simplex Method	Assignments 15 and 16
Week 8	Lesson 17: Applications of Linear Programs	
3/3 - 3/7	Lesson 18: Solving Non-Standard Linear Programs (2 phase)	Quiz 7 (Thurs)
		Assignments 17 and 18
Week 9	Lesson 19: Using the Dual Problem of a Linear Program	
3/10 - 3/14	Exam 2 (lessons 10 through 19 - Mar 13)	Assignment 19
	Spring Break: 3/17 - 3/21	Exam 2 (lessons 10 through 19)
Week 10	Lesson 20: Exponent Rules, Polynomial Arithmetic	
3/24 - 3/28	Lesson 21: Factoring Review	Labs 20 and 21, Quiz 8 (Wed)
	Lesson 22: Functions	Assignment 22
Week 11	Lesson 23: Quadratic Functions and Applications	
3/31 - 4/4	Lesson 24: Polynomial Functions and Applications	Quiz 9 (Thurs)
		Assignments 23 and 24
Week 12	Lesson 25: Arithmetic on Rational Expressions	
4/7 - 4/11	Lesson 26: Rational Functions and Applications	
	Exam 3 (lessons 20 through 26, Apr. 10)	Assignments 25 and 26
Week 13		
4/14 - 4/18	Lesson 27: Exponential Functions	Quiz 10 (Thurs)
	Lesson 28: Logarithmic Functions	Assignments 27 and 28
Week 14	Lesson 29: Solving Exponential and Logarithmic Equations	
4/21 - 4/25	Lesson 30: Simple and Compound Interest	Quiz 11 (Thurs)
		Assignments 29 and 30
Week 15	Lesson 31: Annuities - Future Value and Sinking Funds	Assignments 31 and 32
4/28 - 5/2	Lesson 32: Annuities - Present Value and Loan Amortization	Finance Project
Week 16	Final Exam	
5/5 - 5/8	Monday, May 5 at 8 am.	