South Plains College Common Course Syllabus: Contemporary Mathematics (MATH 1332) Spring 2024

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1332

Section: 608 (Tuesdays and Thursdays, 11:00am-12:15pm, Lubbock Downtown Center, room B009)

Course Title: College Algebra

Available Formats: conventional, hybrid, internet, and ITV. This class will be of the conventional format.

Campuses: Levelland, Downtown Center, Plainview Center, and Dual Credit. This class meets face-to-face at the Lubbock Downtown Center in room B009.

Course Description: Intended for Non-STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered.

Prerequisite: Minimum score of 350 on the TSIA1, minimum score of 950 on the TSIA2, a diagnostic score of 6 on the TSIA2, TSI-exempt status, a successful completion with a grade of 'C' or better in MATH 0337, or successful completion of NCBM-0112.

Credit: 3 Lecture: 3 Lab: 0

Instructor: Jerod Clopton

Office: Lubbock Downtown Center, B019

Telephone: (806) 716-2738

Email: jclopton@southplainscollege.edu

Email Policy: All students at South Plains College are assigned a standardized SPC email. Log into portal office com to access to your SPC email account. The instructor will only acknowledge, respond, and receive emails to your assigned email address.

- My expected response time to received emails is as follows:
 - o For emails sent on Monday-Thursday, I will attempt to respond within 24 hours.
 - o For emails sent on Friday-Sunday, I may not respond until the following Monday.
- I will not be checking / responding to messages sent through the Blackboard messaging system.

Virtual/Face-to-Face Office Hours:

- Monday: 3:00-5:00pm
- Tuesday: 9:00-11:00am
- Thursday: 9:00-11:00am
- Fridays: 10:00am-12:00pm
- And by appointment, as needed. (The appointments can be scheduled in Blackboard.)
- Virtual office hours also may be scheduled in Blackboard.

Textbook: A textbook is not required for this course.

Supplies: Besides pencils (please show your work in pencil) and paper, you will need a scientific calculator and a small supply of graph paper. Calculators on cell phones, TI-89, TI-92, or TI-Inspire calculators, or any other electronic devices will not be allowed during testing without permission from the instructor.

Blackboard: Blackboard is the online course management system that will be utilized for this course. This course is supplemented online, so all access to course information and your instructor is through the Internet. This course syllabus, as well as all course materials can be accessed through Blackboard. Login at https://southplainscollege.blackboard.com/. The username and password should be the same as the MySPC and SPC email.

Username: first initial, last name, and last 4 digits of the Student ID Password: Original Campus Connect Pin No. (found on SPC acceptance letter)

Questions regarding Blackboard support may be emailed to <u>blackboard@southplainscollege.edu</u> or by telephone to 806-716-2180.

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 the language and notation of sets.
- 2. Determine the validity of an argument or statement and provide mathematical evidence.
- 3. Solve problems in mathematics of finance.
- 4. Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
- 5. Interpret and analyze various representations of data.
- 6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.

Student Learning Outcomes Assessment: A pre- and post-test questions (assignments, quizzes, and major exams) 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. Assignments and quizzes will count for 20% of the final grade, while exams count for 80% of the final grade. Expect 33 assignments, and 5 scheduled exams throughout the course. Your final average in the course will determine the letter grade posted on your transcript. This grade is determined by the following scale: A (90-100%), B (80-89%), C (70-79%), D (60-69%), F (0-59%).

- Assignments/Quizzes = 20%
- Exam 1 = 15%
- Exam 2 = 15%
- Exam 3 = 15%
- Exam 4 = 15%
- Final Exam = 20%

Assignment Format and Policy: Assignments are given after each lesson and are collected according to the calendar below. Expect a quiz to accompany each assignment. For each question on each assignment:

- Write the question number.
- In solving the problem, show all necessary work.
- Clearly mark your answer.
- Check your answers in Blackboard to make certain you are practicing the exercises correctly.
- Write your name at the top of each page of your work.
- All homework assignments will be due by the end of class on the assigned due date (unless otherwise stated).

Make certain to complete and submit assignments on time (or early). Early submissions are welcomed! Late assignments will be accepted with a 15% deduction up to the time of the unit exam. Assignments may not be submitted after the unit exam.

Quiz Format and Policy: Quizzes may be given during any class meeting during the semester. No late quizzes will be accepted, as quizzes are to be taken during the class time.

Exam Format and Policy: Face-to-face examinations will be given on specified days in the calendar below. Exams are to be taken during the class time. No make-up exams will be given. The comprehensive final exam will be given on Monday, May 6 from 10:15am–12:15pm.

To maximize your potential for successfully completing this course:

- Login to Blackboard daily.
- Watch the lecture videos and take notes on them.
- Thoroughly complete and submit the assignments on time.
- Practice the exercises repeatedly until you have full mastery of them.

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 may 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.

SPC Tutors

Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, and view tutoring locations.

http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php

Tutor.com

You also have 180 FREE minutes of tutoring with Tutor.com each week, and your hours reset every Monday morning. Log into Blackboard, click on the tools option from the left-hand menu bar. Click on the Tutor.com link and you will automatically be logged in for free tutoring. You may access tutor.com tutors during the following times:

Monday – Thursday: 8pm-8am 6pm Friday – 8am Monday morning

For questions regarding tutoring, please email tutoring@southplainscollege.edu or call 806-716-2538.

Academic Integrity (Plagiarism and Cheating Policy):

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.

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension. (SPC General Catalog)

Plagiarism and cheating are not tolerated in this course. Under the policies of South Plains College, punishment for cheating may include no credit (failing) on the assignment, quiz, exam, or the course.

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.

Syllabus Statements: For information regarding official South Plains College statements about intellectual exchange, disabilities, non-discrimination, Title IX Pregnancy Accommodations, CARE Team, and Campus Concealed Carry, please visit https://www.southplainscollege.edu/syllabusstatements/.

COVID Response: 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.



Tips for Learning in a Flipped Classroom

This class is a flipped classroom and will operate differently than the face-to-face classroom that you have previously experienced. In a flipped classroom you will spend time outside of class watching and taking notes from lecture videos while during class you will work on your homework assignments. This flipped classroom setting will open more opportunities for me, the instructor, to work with you by addressing homework questions, facilitating class discussions, and having collaborative assignments. Here are some suggestions that will help you operate with in this flipped classroom environment and help you successfully complete this course.

Lecture Videos

- Watch the lecture videos in a quiet and distraction-free setting
- Silence your cellphone
- Close all other tabs and windows on your computer
- Disconnect from any social media while watching the lecture videos
- Have class notes or notebook and writing device for taking notes
- Use a set of headphones to watch to videos, in order to cancel all ambient noise

Note-Taking Tips

- Take careful notes from the videos
- Draw appropriate diagrams and charts in your notes
- Frequently pause the video to take notes
- "Rewind" the video when you don't understand things
- When the instructor tells you to solve a problem or write something down, do it
- Write down questions in your notes from the lecture video when you don't understand something

How to Prepare for Assessments

- Contact the instructor with your questions and ask the instructor for help and clarification
- Work with your classmates
- Offer to help your classmates with things you understand
- Ask for help from your classmates when they understand more than you
- Take any opportunity to review current and previous material
- Review graded assessments and seek to understand any errors made in your work

Tentative Course Calendar: Contemporary Mathematics (TT 11:00) Spring 2024

Week	Date	Topic	Assignment Due Date
			• All homework assignments are due by the end of class
1	Tue, Jan 16	MLK Holiday	
	Thur, Jan 18	Course Introduction	
		1.1: Exponents, Order of Operations, Scientific Notation	
2	Tue, Jan 23	1.2: Solving Linear Equations	HW 1.1
		1.3: Applications of Linear Equations	
	Thur, Jan 25	1.4: Introduction to Polynomials	HW 1.2 and 1.3
		1.5: Solving Quadratic Equations	
3	Tue, Jan 30	1.6: The Coordinate System, Distance and Midpoint	HW 1.4 and 1.5
		1.7: Intro to Lines and Slopes	
	Thur, Feb 1	1.8: Equations of Lines	HW 1.6 and 1.7
		1.9: Functions, Graphs and Models	
4	Tue, Feb 6	1.10: Systems of Linear Equations	HW 1.8 and 1.9
		1.11: Applications of Linear Systems	
	Thur, Feb 8	1.12: Review over Unit 1	HW 1.10 and 1.11
5	Tue, Feb 11	Exam 1 – Algebra	
	Thur, Feb 13	2.1: Measurement and Conversions	
		2.2: Ratios and Proportions	
6	Tue, Feb 20	2.3: Variations	HW 2.1 and 2.2
		2.4: Simple and Compound Interest	
	Thur, Feb 22	2.5: Loan Amortization and the Costs and Advantages of	HW 2.3 and 2.4
		Home Ownership	
		2.6: Financial Investments	
7	Tue, Feb 27	2.7: Review over Unit 2	HW 2.5 and 2.6
	Thur, Feb 29	Exam 2 – Consumer Math	
8	Tue, Mar 5	3.1: Angles, Curves and Polygons	
		3.2: Triangles: Similarity and the Pythagorean Theorem	
	Thur, Mar 7	3.3: Perimeter, Circumference and Area	HW 3.1 and 3.2
		3.4: 3-D Shapes, Surface Area and Volume	
Spring	Break (March 11	-15)	1
9	Tue, Mar 20	3.5: Right Triangle Trigonometry	HW 3.3 and 3.4

Thur, Mar 21	3.6: Review over Unit 3	HW 3.5
Tue, Mar 26	Exam 3 – Geometry	
Thur, Mar 28	4.1: Sets, Subsets, Set Operations and Venn Diagrams	
	4.2: Surveys and Cardinal Numbers	
Fri, March 29	Easter Break	
Tue, Apr 2	4.3: Counting by Systematic Listing	HW 4.1 and 4.2
	4.4: Using the Fundamental Counting Principle	
Thur, Apr 4	4.5: Counting Problems Involving "Not" and "Or"	HW 4.3 and 4.4
	4.6: Basic Probability Concepts	
Tue, Apr 9	4.7: Probability Events Involving "Not" and "Or"	HW 4.5 and 4.6
	4.8: Conditional Probability and Events Involving "And"	
Thur, Apr 11	4.9: Mathematical Expectation	HW 4.7 and 4.8
	4.10: Visual Displays of Data	
Fri, Apr 12	Online Registration opens for Spring Interim, Summer	
	2024 terms, and Fall 2024 terms at 8:00 a.m.	
Tue, Apr 16	4.11: Measures of Central Tendency	HW 4.9 and 4.10
Thur, Apr 18	4.12: Review over Unit 4	HW 4.11
Tue, Apr 23	Exam 4 – Probability and Statistics	
Thur, Apr 25		
Thur, Apr 25	Last day to drop a Spring course	
Tue, Apr 30	Review for Comprehensive Final	
Wed, May 2	Review for Comprehensive Final	
Tue, May 7	Final Exam from 10:10am-12:15pm	
	Tue, Mar 26 Thur, Mar 28 Fri, March 29 Tue, Apr 2 Thur, Apr 4 Tue, Apr 9 Thur, Apr 11 Fri, Apr 12 Tue, Apr 16 Thur, Apr 18 Tue, Apr 23 Thur, Apr 25 Thur, Apr 25 Thur, Apr 30 Wed, May 2	Tue, Mar 26 Exam 3 – Geometry Thur, Mar 28 4.1: Sets, Subsets, Set Operations and Venn Diagrams 4.2: Surveys and Cardinal Numbers Fri, March 29 Easter Break Tue, Apr 2 4.3: Counting by Systematic Listing 4.4: Using the Fundamental Counting Principle Thur, Apr 4 4.5: Counting Problems Involving "Not" and "Or" 4.6: Basic Probability Concepts Tue, Apr 9 4.7: Probability Events Involving "Not" and "Or" 4.8: Conditional Probability and Events Involving "And" Thur, Apr 11 4.9: Mathematical Expectation 4.10: Visual Displays of Data Fri, Apr 12 Online Registration opens for Spring Interim, Summer 2024 terms, and Fall 2024 terms at 8:00 a.m. Tue, Apr 16 4.11: Measures of Central Tendency Thur, Apr 18 4.12: Review over Unit 4 Tue, Apr 23 Exam 4 – Probability and Statistics Thur, Apr 25 Thur, Apr 25 Thur, Apr 25 Thur, Apr 26 Review for Comprehensive Final Wed, May 2 Review for Comprehensive Final