South Plains College Common Course Syllabus: MATH 0332/1332 Revised August 2021

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0332

Course Title: Contemporary Mathematics Support Course

Available Formats: conventional, hybrid, and internet

Campuses: Levelland, Reese, and, Lubbock Center

Course Description: Math0332 is to be taken concurrently with MATH 1332. Background topics which are necessary for a student to successfully complete MATH 1332 will be covered, with an emphasis on integers, percentages, graphing, fractions, exponents, radicals, statistics, and geometry.

MATH 1332 is 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 for MATH 0332: Maximum score of 349 on the TSIA1 without an ABE score, minimum diagnostic score of 3 on the TSIA2, or a successful completion of NCBM 0105.

Credit: 3 Lecture: 3 Lab: 0

Prerequisite for MATH 1332: 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

Textbook: Mathematical Ideas, Miller, Heeren, and Hornsby, 2019, 14th 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 for MATH 0332; Mathematics Foundational Component Area (020) for MATH 1332.

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 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/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.

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.

COVID Syllabus Statement: It is the policy of South Plains College that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the SPC community. There will be no requirement for face coverings at any location on any South Plains College campus or classroom. Faculty, staff, or students may continue to wear a mask voluntarily, but there will be no requirements for face coverings in any circumstance. Students who believe they have been exposed or may be COVID-19 positive, must contact Health Services, DeEtte Edens, BSN, RN at (806) 716-2376 or dedens@southplainscollege.edu.

If you are experiencing any of the following symptoms please do not attend class and either seek medical attention or get tested for COVID-19.

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea
- New loss of taste and smell

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at <u>dedens@southplainscollege.edu</u> or 806-716-2376.

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 <u>activate</u> 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 <u>email rcanon@southplainscollege.edu</u> 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.

COURSE SPECIFIC INFORMATION FOR MATH 0332/1332

Instructor: Phyllis Cormier Email: <u>pcormier@southplainscollege.edu</u> Office: Reese Center, Building 2 Rm 223B Phone: (806)716-2797

Office hours:

Monday	Tuesday	Wednesday	Thursday	Friday
	9:00 – 9:30 AM		9:00 – 9:30 AM	9:00 - 10:30
				AM Virtual
2:20 – 4:50 PM	12:20 – 12:50 PM	2:20 – 4:20 PM	12:20 – 12:50 PM	

Face-to-Face office hours will be in my office, room 223B. Virtual office hours will be through Zoom. The link can be found on Blackboard under Instructor Information – Zoom location for office hours. Appointments may be made to meet face-to-face or virtual. You may make an appointment through email, in person, or by calling. I will respond to emails within 24 hours. If I am in my office, feel free to stop by without an appointment.

Email: All students at South Plains College are assigned an SPC email account. Although personal email addresses will continue to be collected, the assigned SPC email account will be used as the official channel of communication for South Plains College. To access the SPC student email account, login to MySPC and click the SPC Google Mail option under Campus Bookmarks. Students should make it a habit to check their student email account frequently. (Copied from SPC Student Guide.)

Class Structure: The class will meet in person four days a week. If you must miss class for any reason, the notes and videos are provided for you on Blackboard. You may attend virtually if a need arises. You must notify me at least 1 hour before class begins if you need to attend virtually.

Class Attendance: Attendance and effort are the keys to success in this class. 4 missed labs and 11 absences are allowed for the semester. If you exceed this number, you may be dropped from the course.

Assignments & Grading:

<u>Practice Problems</u>: Practice problems will be used as a study guide. Complete all practice problems to the best of your ability before class each day. Practice problems are on Blackboard with the solutions. Time will be given to ask questions each class day. You may turn in all practice problems from the unit for one grade replacement for a missed or low lab score. These may be submitted on the day of the unit exam only. You will receive full credit for the lowest or missed lab for that unit if all work for all practice problem sets is shown in a neat and well-organized manner and all problems are attempted.

<u>Labs</u>: Labs consist of 5 -10 problems that will allow me to assess your understanding of the material. Answers are not provided for the labs. Labs will be completed in class without apps or websites but scientific calculators, notes, and practice problems may be used. Work must be shown to receive credit.

<u>Lab Grades</u>: Each lab is worth 10 points. Questions may be asked about the practice problems before the lab is distributed, but the labs are to be completed without assistance. **Work must be shown to receive credit.** These will be completed during class and cannot be made up. The best 20 lab grades will be used to determine the final points for the lab grade.

<u>Exams</u>: You may use a scientific or graphing calculator on the exams but calculators on cell phones will not be permitted. Cell phones should be out of sight and not touched during exams. The use of any websites or apps during exams is considered cheating. You may bring one 3" X 5" notecard with formulas to use during the exam.

Make-up exams will <u>not</u> be available. If you miss an exam for any reason, the final exam will take the place of the missed exam. If you miss two exams, you may be dropped from the course. If you know you will need to miss an exam, let me know before the exam so an alternate testing time can be arranged **before** the exam is taken in class.

Check Blackboard and your SPC email often for any updates. Additional study aids may also be added.

You are responsible for completing practice problems, labs, and exams on time. Print out the course calendar and keep it with your other course material to help you keep up with deadlines.

There will be 6 exams and a comprehensive final exam.

Determining Grades:

200 pts
50 pts
100 pts
100 pts
100 pts
100 pts
75 pts
75 pts
<u>200 pts</u>
1000 pts

Your accumulated points in the course will determine the letter grade posted on your transcript. The letter grade is determined by the following scale:

Accumulated points	Final Grade
895 and above	А
795 – 894	В
695 – 794	С
595 – 694	D
594 and below	F

To maximize potential for successful completion of this course:

- Attend class prepared to work.
- Print notes provided on Blackboard and fill in examples during class.
- Complete all practice problems to the best of your ability.
- Ask questions on any problems that you had difficulties with.
- Rework the practice problems until you have mastered them.
- Organize all class material in a 3-ring binder.
- Read objectives from each lesson and determine if you have mastered the topic to prepare for the exams.

Supplies:

• The textbook is optional. Practice problems and notes will be provided on Blackboard. If you would like a book for reference, I recommend the following:

Textbook: *Mathematical Ideas*, Miller, Heeren, and Hornsby, 2019, 14th Edition, Prentice Hall/Pearson Education

- scientific calculator (The TI-30X is a good and inexpensive option.)
- pencils, notebook paper, 3-ring binder, 3" x 5" notecards
- Computer or cell phone that you can use to check Blackboard and emails.

Supplementary Course Information & Tutoring: Blackboard is the online course management system that will be utilized for this course. This course syllabus, as well as any class handouts and assignments 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 CampusConnect Pin Number (found on SPC acceptance letter) Questions regarding Blackboard support may be emailed to <u>blackboard@southplainscollege.edu</u> or by telephone 806-716-2180.

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, get to know the tutors, 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 tutor.com link on the left-hand tool bar and grab a session with a tutor. You can access tutor.com tutors during the following times:

Monday – Thursday: 8pm-8am

6pm Friday – 8am Monday morning

Free tutoring is available through the college. Check Blackboard for additional information about tutoring.

Week	Monday	Tuesday	Wednesday	Thursday
1	30 1.1 Prime & Composite Numbers [5.1]	31 1.2 GCF & LCM [5.4]	1 1.3 Real numbers, Order, and Absolute Value [6.1] Lab 1 (1.1 – 1.2) Begin budgeting	2 1.4 Operations, Properties, and Applications of Real Numbers [6.2]
	SEPTEMBER		project	
2	6 Labor Day Holiday	7 1.5 Rational Numbers & Decimal Representations [6.3] Lab 2 (1.3 – 1.4)	8 1.6 Linear Equations [7.1]	9 1.7 Applications of Linear Equations [7.2] Lab 3 (1.5 – 1.6)

Tentative Course Calendar

3	13 1.8 Polynomials – combining like terms and multiplying [7.6]	14 Review Lab 4 (1.7 – 1.8)	15 EXAM 1	16 2.1 Quadratic Equations & Applications [7.6]
4	20 2.2 The Rectangular Coordinate System [8.1]	21 2.3 Lines, Slopes, and Average Rate of Change [8.2] Lab 4 (2.1 – 2.2)	22 2.4 Equations of Lines [8.3]	23 2.5 Linear Functions, Graphs, and Models [8.4] Lab 5 (2.3 – 2.4)
5	27 2.6 Systems of Linear Equations [8.7]	28 2.7 Applications of Linear Systems [8.8] Lab 6 (2.5 – 2. 6)	29 Review 2 Lab 7 (2.7)	30 EXAM 2
6	OCTOBER 4 3.1 Applications of Decimals & Percentages [6.5]	5 3.2 Unit conversions supplement Lab 8 (3.1)	6 3.3 Ratio, Proportion & Variation [7.3]	7 3.4 Properties of Exponents & Scientific Notation [7.5] Lab 9 (3.2 – 3.3)
7	11 3.5 The Time Value of Money [13.1]	12 3.6 The Cost & Advantages of Home Ownership [13.4] Lab 10 (3.4 – 3.5)	13 3.7 Annuities	14 Review 3 Lab 11 (3.6 – 3.7)
8	18 EXAM 3	19 4.1 Curves, Polygons, & Circles [9.2]	20 4.2 The Geometry of Triangles: Congruence, Similarity, and The Pythagorean Theorem [9.3] Lab 12 (4.1)	21 4.2 Continued
9	25 Project- Similar Triangles Lab 13 (4.2)	26 4.3 Perimeter, Area & Circumference [9.4]	27 4.4 Volume and Surface Area [9.5] Project – Remodel a room	28 Lab 14 (4.3 – 4.4)

	NOVEMBER			
10	1 4.5 Trigonometry	2 4.6 Trigonometry Applications Lab 15 (4.5)	3 Review 4 Lab 16 (4.6)	4 EXAM 4
11	8 5.1 Venn Diagrams & Subsets, & Set Operations [2.2 &2.3]	9 5.2 Surveys & Cardinal Numbers [2.4] Lab 17 (5.1)	10 5.3 Counting by Systematic Listing & the Fundamental Counting Principle [10.1& 10.2]	 11 5.4 Permutations & Combinations [10.3] Online registration for Winter Interim & Spring 2022 opens tomorrow at 8:00 AM
12	15 Review 5 Lab 18 (5.2 – 5.3)	16 EXAM 5	17 6.1 Logic	18 6.2 Empirical & Theoretical Probability – Basic Concepts [11.1] Lab 19 (6.1)
13	22 6.3 Events Involving "Not" & "Or" [11.2] Project- Empirical Prob.	23 6.4 Conditional Probability & Events Involving "And" [11.3] Lab 20 (6.2 – 6.3)	24 Thanksgiving	25 Thanksgiving
14	29 6.4 continued Lab 21 (6.4)	30 Review	1 EXAM 6	2 7.1 Visual Display of Data [12.1] Last day to drop Fall semester classes
	DECEMBER			
15	6 7.2 Measure of Central Tendency [12.2] Lab 21 (7.1) Project 5 visual display of data	7 Review for Final	8 Review for Final	9 Review for Final
FINALS	13	14	15 Final Exam Section C201 8:00 AM – 10:00AM Section C202 10:15 AM – 12:15 PM	16