South Plains College Common Course Syllabus: MATH 1332 and Math 0332 Revised December 2022

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1332/0332

Course Title: Contemporary Mathematics with Support

Available Formats: conventional, hybrid, and internet

Campuses: Levelland, Reese, Plainview, Lubbock Center and Dual Credit

Course Description: (Math 1332) 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.

Course Description: (Math 0332) 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.

Prerequisite: 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.

(Math 1332) Credit: 3 Lecture: 3 Lab: 0 (Math 0332) Credit: 3 Lecture: 3 Lab: 0

Textbook: (for reference only, not required) *Mathematical Ideas*, Miller, Heeren, and Hornsby, 2019, 14th Edition, Prentice Hall/PearsonEducation

This course partially satisfies a Core Curriculum Requirement: Mathematics FoundationalComponent Area (020) The support course does not satisfy a Core Curriculum Requirement.

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 orobservable facts resulting in informed conclusions

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, thestudent 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 solveproblems.
- 5. Interpret and analyze various representations of data.
- 6. Demonstrate the ability to choose and analyze mathematical models to solve problems fromreal-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 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 <u>may</u> 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, anonline term paper site, or a mail order term paper mill;
- 2. Cutting and pasting together information from books, articles, other papers, or online siteswithout 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 originalstudent's;
- 9. Taking pictures of a test, test answers, or someone else's paper.

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.

South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: https://www.southplainscollege.edu/syllabusstatements/.

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 SouthPlains 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 acopy 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 arenot 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 publishersites, 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.

Instructor Information – Spring 2023 Contemporary Mathematics Math 0332.C601 MW 9:30 – 10:45 DC B004 Math 1332.C601 TH 9:30 – 10:45 DC B004

Instructor:Gina Becker, BSE, M EdPhone:806.716.4684Email:gbecker@southplainscollege.eduOffice:Downtown Center B018

Office hours:

Monday*	Tuesday*	Wednesday*	Thursday*	Friday*	
8:15 – 9:30	8:15 - 9:30	8:15 - 9:30	8:15 - 9:30	8:15 – 9:30	
10:45 – 11:00	10:45 – 11:00	10:45 – 11:00	10:45 – 11:00		
	12:45 – 1:00		12:45 – 1:00		
	2:15 - 2:30		*or by a	y appointment	

Class Structure:

The class will meet in person four times each week. If you must miss class for any reason, the notes and videos may be found on Blackboard.

Class Attendance:

Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of all student's attendance and submission of assignments throughout the semester. Students are expected to attend at least eighty percent (80%) of the **total** class meetings (no more than 6 absences) **and** submit at least eighty percent (80%) of the **total** class assignments (no more than 8 zeroes) to have the best chance of success. If a student fails to meet these minimum requirements, the instructor <u>may</u> remove the student from the class with an X. Arriving more than 10 minutes late or leaving for part of the class will be counted as an absence.

Assignments & Grading (All assignments will be graded within one week of submission):

Math 1332

Homework assignments will be assigned each class day and will be due on the following class day. You will upload your completed homework into Gradescope on or before the due date/time. Late homework assignments are not accepted. Each homework assignment is worth 0.3 points.

Quizzes will be given weekly on non-exam weeks and **no makeup quizzes will be offered**. To receive credit, all work for each problem must be shown. Each quiz is worth 4 points. Missing a quiz will result in 0 points for that quiz.

Exams will cover material from previous units. **Four exams** will be worth **10 points** each and the comprehensive final exam will be worth 20 points. **There are no makeup exams**. If you miss an exam, your final exam grade may be used to replace a missed exam. The final exam is mandatory to complete the course. Your final point value will determine your letter grade for this class and will be determined by the following scale:

A - 90-100	Homework	8
B - 80-89	Quizzes	32
C - 70-79	Exams	40
D - 60-69	Final Exam	20
F - 0-59	Total	100 points

Math 0332 (All assignments will be graded within one week of submission.) Class Design

In this corequisite course, you will receive an assignment each Monday/Wednesday. This assignment is designed to give you background information for the topics in the Contemporary Mathematics course.

Homework assignments will be due the following class day. You will upload your completed homework into Gradescope on or before the due date. Each homework assignment is worth 0.4 points.

Quizzes will be given weekly and **no makeup quizzes will be offered**. To receive credit, all work for each problem must be shown. The quiz will be given at the end of class on Wednesday, covering the material from the previous week. Each quiz is worth **6 points**. Missing a quiz will result in 0 points for that quiz.

Final Exam: The final comprehensive exam taken in the Math 1332 course will be worth **20** points.

Grade

Your final point value will determine your letter grade for this class and will be determined by the following scale:

P – 70 - 100	Homework	8
F – 0 - 69	Quizzes	72
	Final Exam	20
	Total	100 points

To maximize potential for successfully completing this course:

- Print notes provided on Blackboard and fill in examples during class.
- Attend class prepared to complete notes and ask questions.
- Cell phones provide the opportunity for distraction. You should choose to refrain from checking during class.
- Complete homework assignment on the day it is assigned. If you have difficulty working a problem, come to office hours before class or contact the academic coach.
- Check Blackboard and your SPC email often for any updates.
- Be prepared for Quizzes and Exams. Makeups are not available.

- A textbook is not required for this course. If you prefer to have a supplemental text for your own reference, use: *Mathematical Ideas*, Miller, Heeren, and Hornsby, 2019, 14th Edition, PrenticeHall/Pearson Education. ISBN 9780134995588
- Homework and notes will be provided on Blackboard.
- Scientific Calculator (TI-30X2 is a good and inexpensive option.)
- pencils, notebook paper, 3" x 5" notecards
- Computer or cell phone that you can use to check Blackboard and emails and to upload your homework to Gradescope.

Communication:

Any questions or comments should be sent using SPC email. The instructor will do her best to respond to your email within 24 hours of receipt. Any email sent on a weekend may not be answered until Monday.

Blackboard:

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 <u>http://southplainscollege.blackboard.com</u>.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

blackboard@southplainscollege.edu or bytelephone 806-716-2180.

SPC Tutoring Options:

In Person: 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 asession with a tutor. You can access tutor.com tutors during the following times:

Monday – Thursday: 8 pm-8 am Friday 6 pm –Monday morning 8am Free tutoring is available through the college. Check Blackboard for additional information about tutoring.

Withdrawal from course:

Fill out the Student Initiated Drop Form found at

<u>https://www.southplainscollege.edu/admission-aid/apply/schedulechanges.php</u>. SPC might not permit an undergraduate student to drop a total of more than six courses (including any course a transfer student has dropped at another institution of higher education.)

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.



Tentative Course Schedule

Week	Monday	Tuesday	Wednesday	Thursday
1	January 16 No Class	January 17 Course Introduction	January 18 Assignment 1 Order of Operations and Exponents	January 19 1.1 Order of Operations, Exponents
2	January 23 Assignment 2 Solving Linear Equations	January 24 1.2 Solving Linear Equations	January 25 Assignment 3 Applications of Linear Equations Quiz 1	January 26 1.3 Applications of Linear Equations Quiz 1
3	January 30 Assignment 4 Distance and Midpoint, Lines and Slope	January 31 1.4 The Rectangular Coordinate System, Distance and Midpoint and Introduction to Lines and Slope	February 1 Assignment 5 Equations of Lines and Functions; Graphs and Models Quiz 2	February 2 1.5 Equations of Lines and Functions, Graphs and Models Quiz 2
4	February 6 Assignment 6 Systems of Linear Equations and Applications	February 7 1.6 Systems of Linear Equations and Applications	February 8 Assignment 7 Introduction to Polynomials and Solving Quadratic Equations Quiz 3	February 9 1.7 Introduction to Polynomials and Solving Quadratic Equations 1.8 Unit 1 Review Quiz 3
5	February 13 Assignment 8 Decimals and Percent and Scientific Notation	February 14 2.1 Decimals and Percent and Scientific Notation	February 15 Review for Exam Quiz 4	February 16 Unit 1 Exam
6	February 20 Assignment 9 Ratios and Proportions and Variation	February 21 2.2 Ratios and Proportions and Variation	February 22 Assignment 10 Simple and Compound Interest Quiz 5	February 23 2.3 Simple and Compound Interest Quiz 4
7	February 27 Assignment 11 Loan Amortization	February 28 2.4 Loan Amortization; The Cost and Advantages of Home Ownership	March 1 Assignment 12 Financial Investments Quiz 6	March 2 2.5 Financial Investments 2.6 Unit 2 Review Quiz 5
8	March 6 Assignment 13 Measurement and Conversions	March 7 3.1 Measurement and Conversions	March 8 Review for Exam Quiz 7	March 9 Exam 2

	March 20	March 21	March 22	March 23
		3.2 Triangles		3.3 Perimeter,
	Assignment 14	5.2 mangles	Assignment 15	Circumference and
9	Triangles		Perimeter,	Area
			Circumference and	Quiz 6
			Area	Quiz 0
	Manah 07	Manah 00	Quiz 8	Manah 00
	March 27 Assignment 16	March 28	March 29	March 30
10	3-D Shapes, Surface	3.4 3-D Shapes, Surface Area and	Assignment 17	3.5 Right Triangle Trigonometry
10	Area and Volume	Volume	Right Triangle	Quiz 7
		volume	Trigonometry	
	April 2	April 4	Quiz 9 April 5	April 6
	April 3 Assignment 18	3.6 Unit 3 Review	Review for Exam	Unit 3 Exam
11	Polygons, Curves and		Quiz 10	
	Angles			
	0			
	April 10	April 11	April 12	April 13
	Assignment 19 Sets,	4.1 Sets, Subsets,	Assignment 20	4.2 Counting by
	Subsets, and Venn	and Venn Diagrams,	Counting by	Systematic Listing,
12	Diagrams, Cardinal	Cardinal	Systematic Listing,	Using the
	Numbers	Numbers and	Using the	Fundamental Counting
	and Surveys	Surveys	Fundamental Counting Principle Quiz 11	Principle Quiz 8
	A			-
	April 17 Assignment 21	April 18	April 19	April 20
	Counting Problems	4.3 Counting Problems Involving "Not" and	Assignment 22 Probability Events	4.4 Probability Events Involving Not and Or
13	Involving "Not" and	"Or" and Basic	Involving Not and Or	and Conditional
	"Or" and Basic	Probability	and Conditional	Probability and Events
	Probability		Probability and Events	Involving And
	-		Involving And Quiz 12	Quiz 9
	April 24	April 25	April 26	April 27
14	Assignment 23	4.5 Unit 4 Review	Review for Exam	Unit 4 Exam
	Visual Displays of			Last Day to Drop
	Data May 1	Mov 2	Mov 2	Mov 4
	May 1 Assignment 24	May 2	May 3 Final Exam Review	May 4 Final Exam Review
15	Measures of Central	4.6 Visual Displays of Data and		
15	Tendency	Measures of Central		
		Tendency		
			May 10	
Finals			Final Exam	
Week			8:00 – 10:00	