South Plains College Common Course Syllabus: MATH 0332/1332 Revised July 2023

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0332 & MATH 1332

Course Title: Contemporary Mathematics Support Course (MATH0332) & Contemporary Mathematics

(MATH1332)

Available Formats: conventional/flex and internet

Campuses: Levelland, Plainview, Lubbock Centers, and Dual Credit

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.

MATH1332 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: 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

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: 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 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 cannot 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.

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.

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/.

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.

COURSE SPECIFIC INFORMATION FOR MATH 0332 1332 C602

Class Meeting Time: 1:00 PM – 2:15 PM Monday through Thursday Place: B030 Instructor: Phyllis Cormier Email: pcormier@southplainscollege.edu
Office: Lubbock Downtown Center Rm B016 Phone: (806)716-2797

Office Hours:

| Monday | Tuesday | Wednesday | Thursday | Friday |
|-----------------|----------------|-----------------|----------------|-----------------|
| | | | | 9:00 – 11:00 AM |
| 12:30 – 1:00 PM | 2:30 – 3:00 PM | 12:30 – 1:00 PM | 2:30 – 3:00 PM | |
| 5:00 – 5:30 PM | 4:00 – 5:30 PM | 5:00 – 5:30 PM | 4:00 – 5:30 PM | |

Office hours are times I have set aside to work with students on any questions they have about the class. Please use this time to improve your understanding of the material. Appointments may also be made to meet face-to-face or virtually. 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:

- Navigate to https://office.com and select Sign In
- Username: MySPCusername@southplainscollege.edu
- Password: Your MvSPC/Blackboard password
- Select **Outlook** to check your new SPC email.

Students should make it a habit to check their student email account frequently. (Copied from SPC Student Guide.)

Class Structure: This is a conventional course. 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.

Class Attendance: Attendance and effort are the keys to success in this class. 12 absences are allowed for the semester. If you exceed this number, you may be dropped from the course.

Assignments & Grading:

Notes: Class notes will be provided on Blackboard. It is recommended that you print out the notes and fill them in during class. If you miss class for any reason or need to review a section, videos are provided on Blackboard to help you.

<u>Homework</u>: Assignments are made 4 days a week. Practice problems are on Blackboard and will be due at 10:00 PM on the day following the day the topic is discussed in class. **Work must be shown to receive credit**. The answers are provided so your job is to show that you understand why that is the answer. Practice problems will count 10% of your grade. I will grade practice problems 70% for completion and 30% for correct work. I will grade 3 – 7 problems from each lesson to assess your understanding. Late work will be accepted for a completion score only. Late work will not be accepted after one week from the original due date.

<u>Submitting work</u>: You will need the Gradescope app on your phone or tablet to make a single pdf of your work to submit on Gradescope.

<u>Quizzes</u>: Short in-class quizzes will be given according to the Tentative Course Schedule. These will closely resemble the assigned practice problems. Answers are not provided for the quizzes. Questions may be asked about the practice problems before the quiz is distributed, but the quizzes are to be completed without assistance. Quizzes will be completed in class without apps or websites, but scientific calculators, practice problems, and notes may be used. Notes and practice problems on electronic devices may not be accessed during quizzes. **Quizzes cannot be made up. Work must be shown to receive credit.** Your best 5 quiz grades will be used to determine your quiz average.

<u>Exams</u>: There will be 6 exams and a comprehensive final exam. Exams will be given during class time. You may use a scientific or simple graphing calculator on the exams but calculators on cell phones or other electronic devices will not be permitted. Cell phones should be out of sight and not touched during exams. Earbuds and headphones must be removed during testing. The use of any websites or apps during exams is considered cheating. You may not leave the room during an exam. You may bring two 3-inch by 5-inch notecards with formulas and/or examples to use during the exam. Information must be written directly on the card with no additional information attached to the notecard.

Make-up exams will be available only on rare and well-documented occasions. 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. Comprehensive final exams are required. Students who do not take the final exam will receive a zero for the final exam grade.

To maximize the potential for successful completion of this course:

- Watch the videos while filling in the notes.
- While completing the Practice problems, check your answers with the answer sheet.
- If you miss a problem, try to find the mistake. If you do not find the mistake, email your instructor, or ask about the problem in class.
- Attend class prepared to work. Ask questions if needed.
- Complete all Practice problems scan your work, and submit it as a single pdf on Gradescope
- Organize all class material in a 3-ring binder.

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

Course Evaluation:

| Practice Problems | 10% |
|--------------------------|------------|
| average | |
| Quiz average | 10% |
| Exam 1 | 10% |
| Exam 2 | 10% |
| Exam 3 | 10% |
| Exam 4 | 10% |
| Exam 5 | 10% |
| Exam 6 | 10% |
| Final Exam | <u>20%</u> |
| Total | 100% |

| Grade Average | Final Grade | | |
|---------------|-------------|--|--|
| 90 and above | Α | | |
| 80 – 89 | В | | |
| 70 – 79 | С | | |
| 60 – 69 | D | | |
| 59 and below | F | | |
| | | | |

Supplies:

- The textbook is **not** required. All notes and assignments are provided on Blackboard.
- Scientific calculator or simple graphing calculator (TI-89, TI-Nspire, and calculators on cell phones are not allowed) (TI-30xiis is a good and inexpensive option)
- Computer
- Reliable internet
- Cell phone or tablet that you can use to make a pdf.
- Gradescope app

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 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.

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 username and password should be the same as the Texan Connect and SPC email. Check Blackboard and your SPC email often for any updates in assignments or exams. Additional study aids may also be added.

Tentative Course Calendar MATH0332/1332.C602 Spring 2024

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|-----------|--|--|----------------|--|
| Week | Date Assignment discussed during class | | Assignment due | |
| 1 | Jan 16 | Welcome and strategies | | |
| | Jan 17 | 1.1 Operations with Integers | | |
| | Jan 18 | 1.2 Rational Numbers and Decimal Representations | 1.1 | |
| 2 | Jan 22 | 1.3 Order of operations | 1.2 | |
| | Jan 23 | 1.4 Polynomials | 1.3 | |
| | Jan 24 | 1.5 Solving Linear Equations | 1.4 & Quiz 1 | |
| | Jan 25 | 1.6 Linear Applications | 1.5 | |
| 3 | Jan 29 | Review for Exam 1 | 1.6 | |
| | Jan 30 | Exam 1 | | |
| Jan 31 2. | | 2.1 Quadratic Equations | | |
| | Feb 1 | 2.2 Quadratic Applications | 2.1 | |
| 4 | Feb 5 | 2.3 The Rectangular Coordinate System & Distance & | 2.2 | |
| | | Midpoint | | |
| | Feb 6 | 2.4 Lines, Slope & Average Rate of Change | 2.3 | |
| | Feb 7 | 2.5 Equations of Lines | 2.4 & Quiz 2 | |
| | Feb 8 | 2.6 Solving Systems | 2.5 | |
| 5 | Feb 12 | 2.7 System Applications | 2.6 | |
| | Feb 13 | Review for Exam 2 | 2.7 | |
| | Feb 14 | Review for Exam 2 | | |
| | Feb 15 | Exam 2 | | |
| 6 | Feb 19 | 3.1 Applications of Decimals & Percentages | | |
| | Feb 20 | 3.2 Ratio & Proportion | 3.1 | |
| | Feb 21 | 3.3 Variation | 3.2 | |
| | Feb 22 | 3.4 Time Value of Money | 3.3 | |
| 7 | Feb 26 | 3.5 Cost of Homeownership | 3.4 & Quiz 3 | |
| | Feb 27 | 3.6 Annuities | 3.5 | |
| | Feb 28 | 3.7 Scientific Notation | 3.6 | |
| | Feb 29 | 3.8 Unit Conversions | 3.7 | |
| 8 | Mar 4 | Review for Exam 3 | 3.8 | |
| | Mar 5 | Review for Exam 3 | | |
| | Mar 6 | Exam 3 | | |
| | Mar 7 | 4.1 Angles, Curves, and Polygons | | |
| ** | 11141 | Mar 11 – 15 Spring Break | | |
| 9 | Mar 18 | 4.2 Triangles | 4.1 | |
| | Mar 19 | 4.3 Perimeter, Circumference & Area | 4.2 | |
| | Mar 20 | 4.4 Volume and Surface Area | 4.3 | |
| | Mar 21 | 4.5 Trigonometry | 4.4 & Quiz 4 | |
| 10 | Mar 25 | 4.6 Trig Applications | 4.5 | |
| 10 | Mar 26 | Geometry Projects (These count as Quiz 5) | 4.6 & Quiz 5 | |
| | Mar 27 | Review for Exam 4 | τ.υ ω QuiL 3 | |
| | Mar 28 | Review for Exam 4 | | |
| 11 | | Exam 4 | | |
| 11 | Apr 1 | | | |
| | Apr 2 | 5.1 Venn diagrams, Subsets and Set Operations | 5.1 | |
| | Apr 3 | 5.2 Surveys & Cardinal Numbers | | |
| | Apr 4 | 5.3 Counting Techniques | 5.2 | |

| 12 | Apr 8 | 5.4 The Fundamental Counting Principle | 5.3 |
|-----|--------------------|---|--------------|
| 12 | Apr 9 | 5.5 Permutations and Combinations | 5.4 & Quiz 6 |
| | Apr 10 | 5.6 Counting with "Not" and "Or" | 5.5 |
| | Apr 11 | Review for Exam 5 | 5.6 |
| Fri | Apr 12 | Online Registration opens for Spring Interim, Summer 2024, and Fall 2024 terms at 8:00 AM | |
| 13 | Apr 15 | EXAM 5 | |
| | Apr 16 | 6.1 Empirical & Theoretical Probability | |
| | Apr 17 | 6.2 Probability with "Not" & "Or" | 6.1 |
| | Apr 18 | 6.3 Probability with "And" & Conditional Probability | 6.2 |
| 14 | Apr 22 | 6.4 Expected Value | 6.3 |
| | Apr 23 | 6.5 Visual Display of Data | 6.4 & Quiz 7 |
| | Apr 24 | 6.6 Measures of Central Tendencies | 6.5 |
| | Apr 25 | Review for Exam 6/ Last day to drop | 6.6 |
| 15 | Apr 29 | EXAM 6 | |
| | Apr 30 | Review for Final | |
| | May 1 | Review for Final | |
| | May 2 | Review for Final | |
| 16 | Wednesday May 8 | FINAL EXAM 10:15 AM – 12:15 PM | |