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

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1332

Course Title: Contemporary Mathematics

Available Formats: conventional, hybrid, and internet

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

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

Textbook: No textbook is required for this course. All materials are available on Blackboard.

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 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.

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 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 Contemporary Math Syllabus Math 1332.601 Summer I 2023

Instructor: Dr. Sheyleah Harris-Plant (Dr. HP) Office: M120A Telephone: (806)716-2665

Email: sharris@southplainscollege.edu (preferred method of contact, when not in class)

Office Hours and Contact Info: Since this is a summer class, office hours are held in the classroom where the class meets. Office Hours on Mondays and Thursdays are from noon until 1:00pm. Office Hours on Tuesdays and Wednesdays are from 9:00 am until 10:00 am.

Email Correspondence: All email correspondence should come from your SPC email address. Please give me up to 24 hours to respond via email. If you email about a specific math question, please attach a picture of the question and the work that you have tried. If you need/want to set up a virtual meeting because you don't feel your question can be answered adequately via email, please use the link: https://outlook.office365.com/owa/calendar/DrHP@southplainscollege.edu/bookings/

Disclaimer: The instructor reserves the right to alter any class policies/dates as deemed necessary by the instructor. If there are any changes, they will be announced **over Blackboard and via your SPC email.**

Showing Work: To receive full credit on practice problems and exams, you must show all work that leads to your answers. The work must be legible, make sense and be easy to follow. All work and answers should be handwritten.

Practice Problem and Exam Submissions: All practice problems and exams will need to be submitted as a PDF file over Blackboard or Gradescope by the due date and time.

Course Supplies:

- Required: Scientific Calculator. The calculator must have the functions log, ln, sin, cos and tan. Suggested TI-30XIIS. They are inexpensive and user friendly. A graphing calculator is not allowed.
- Required: Notebook paper on which to complete your assignments
- Required: Printed Notes. A blank copy of the notes will be posted on Blackboard. You should
 print them off and fill them out as we go through the notes in class. Please note that the SPC
 campus computer labs are available if you want to print your notes off there. You could also
 print them off at most public libraries, but please note that usually requires you to pay a small
 fee per page. I recommended keeping all of your notes in order in a notebook so they easily
 accessible.
- Recommended: Graph paper (available to print on blackboard)
- Recommended: 3 inch by 5 inch notecards. I allow you to handwrite whatever you want on one side of a 3 inch by 5 inch notecard that you may have out during each exam.
- Recommended: Large 3 ring binder with dividers to keep all notes and homework organized.

Attendance: Course attendance will be taken. Per South Plains College math department policy, you will be administratively dropped from the course if your number of missed submissions goes over 20% of all submissions.

Assignment Problems Submissions

- Multiple sections of assignment problems will be due at the end of the week. All of those sections should be submitted as one PDF file.
- Assignment problems submissions are due at the date and time specified. Late submissions
 will not be accepted. If you are wondering if your notes were submitted, check your SPC email.

You should receive a submission confirmation with the date and time the notes were submitted. If you don't get a submission confirmation, then I did not get your practice problems submission.

- Late assignment problems submissions are not accepted under any circumstances. If a practice problems submission is turned in late, it will be a zero.
- If the assignment problems are completely filled out where you have <u>at least</u> attempted each question, then you will receive a 100% for that assignment problems submission grade.

Exams:

- There will be four unit exams (Unit 1 Exam, Unit 2 Exam, Unit 3 Exam, Unit 4 Exam).
- Exams will be given and taken in class.
- You should do all of your work for the exam on the exam.
- You must show all work to receive credit for each individual exam problem.
- If you miss an exam, contact your instructor immediately (preferably before the exam). Makeup exams are very rare and only provided under extreme, documented circumstances.

Reviewing Grades on Blackboard: After I grade your practice problem submissions and exams, you should be able to log into Blackboard to see your grade.

Grading Formula:

A summer math course can be difficult because of the compact schedule. Completing all submissions and having a strong work ethic are important but do not guarantee a passing grade. However, these two things do increase the likelihood of passing. The final responsibility for learning lies with the student. The final letter grade for this course will be based on the following:

- Assignment Problems (Extra Credit) at $\frac{1}{3}$ a point for each section......10 points

Final Grade Determination: A 90-100 B 80-89 C 70-79 D 60-69 F 59 or below

Academic Dishonesty:

Academic dishonesty will not be tolerated. Please see the list of things that constitute plagiarism and cheating in the general 1332 syllabus above. If you violate anything on those lists, you will receive a zero on the assignment/exam and could be subject to other actions outlined in the South Plains College Student Code of Conduct. Please note that these actions could include failing the course and being expelled from the college.

Resources:

- Blackboard! The course syllabus, calendar, gradebook, notes handouts, and assignments will be available on Blackboard.
- I am available to help you! Feel free to email me at sharris@southplainscollege.edu. When you email me, please give me up to 24 hours to respond. If you email about a specific math question, please attach a picture of the question and the work that you have tried.
- Peer tutoring is available via SPC. This tutoring can be somewhat limited during the summer and tutor hours will vary. Visit the link below to learn more about SPC tutoring: http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php
- 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
 - o 6pm Friday 8am Monday morning
- Free tutorial videos are available at the following sites: https://www.mathtv.com/ and <a hr

Withdrawal Policy: As required by Texas Education Code Section 51.907, all new students who enroll in a Texas public institution of higher education for the first time beginning with the 2007 fall semester and thereafter, are limited to six course drops throughout their entire undergraduate career. All course drops, including those initiated by students or faculty and any course a transfer student has dropped at another institution, automatically count toward the limit. After six grades of W are received, students must receive grades of A, B, C, D, or F in all courses. There are other exemptions from the six-drop limit and students should consult with a Counselor/Educational Planner before they drop courses to determine these exemptions. Students receiving financial aid must get in touch with the Financial Aid Office before withdrawing from a course. It is the student's responsibility to drop. Excessive absences will result in an administrative withdrawal with a Grade of X or F. If you plan to withdraw, please consult with the instructor immediately. Note: The last day to drop with a grade of W is Thursday, 29 June 2023.

Succeeding in a Math Class:

- Check your SPC email and Blackboard at least once per day. These are the primary forms of communication for the course.
- Be mentally present! Pay attention and ask questions in class.
- Plan ahead. Do notes and practice problems early enough before the due date that you will have time to ask questions or seek help if you need it.
- Don't wait until the last minute to submit. If a Blackboard submission is due by 6:00 p.m., as soon the clock strikes 6:00 p.m., you will no longer be able to submit on Blackboard. I will not take late submissions.
- The amount of time spent in class for a normal summer class is two hours a day for four days a week. For every hour spent "in class", you should expect to spend an extra 2-3 hours working on this course. This includes time spent on practice problems and studying for exams. Therefore, you should expect to spend 24+ hours a week on this class. The compact nature of a summer class makes it a huge time commitment on your part so make sure that you are able to make that commitment.
- Get help as soon as you feel yourself falling behind! Don't wait!
- All notes printouts and practice problems for the course are posted on Blackboard. If you want to get ahead, that is encouraged. Time management is crucial.
- I have found that the best way for a student to study for a math exam is to practice working problems over and over.
- Everyone learns and studies differently. I encourage you to seek out and find what works best for you.

Date	Topic	Assignments
Monday, 5 June 2023	Introduction	Syllabus Receipt
	Outline for Unit 1 – Algebra	
	1.1: Exponents, Order of Operations; Sets, Types of Numbers	#1-24 all
	1.2: Solving Linear Equations	#1-22 all
Tuesday, 6 June 2023	1.3: Applications of Linear Equations	#1-29 all
	1.4: Introduction to Polynomials	#1-15 all
Wednesday, 7 June 2023	1.5: Solving Quadratic Equations	#1-13 all
	1.6: Rectangular Coordinate System, Distance, Midpoint	#1-16 all
Thursday, 8 June 2023	1.7: Introduction to Lines and Slope	#1-25 all
	1.8: Equations of Lines	#1-23 all
	1.9: Functions, Graphs, and Models	#1-11 all
Monday, 12 June 2023	1.10: Solving Systems of Linear Equations	#1-11 all
	1.11: Applications of Linear Systems	#1-7 all
Tuesday, 13 June 2023	Unit 1 Exam (25 points)	
Outline for Unit 2 – Consumer Math		
Wednesday, 14 June 2023	2.1: Measurements and Conversions	#1-22 all
	2.2: Ratios and Proportions	#1-18 all
Thursday, 15 June 2023	2.3: Variation	#1-13 all
	2.4: Simple and Compound Interest	#1-16 all
Monday, 19 June 2023	Unit 2 Exam (25 points)	
Outline for Unit 3 – Geometry		
Tuesday, 20 June 2023	3.1: Angles, Curves, and Polygons	#1-53 all
	3.2: Triangles: Similarity and Pythagorean Theorem	#1-25 all
Wednesday, 21 June 2023	3.3: Perimeter, Circumference, and Area	#1-25 all
	3.4: 3-D Shapes, Surface Area, and Volume	#1-18 all
Thursday, 22 June 2023	3.5: Right Triangle Trigonometry	#1-20 all
Monday, 26 June 2023	Unit 3 Exam (25 points)	
Outline for Unit 4 – Probability and Statistics		
Tuesday, 27 June 2023	4.1: Sets, Subsets, Venn Diagrams, and Set Operations	#1-37 all
	4.2: Surveys and Cardinal Numbers	#1-14 all
Wednesday, 28 June 2023	4.3: Counting by Systematic Listing	#1-21 all
	4.4: Using the Fundamental Counting Principle	#1-20 all
Thursday, 29 June 2023	4.5: Counting Problems Involving "Not" and "Or"	#1-8 all
	4.6: Basic Probability Concepts	#1-22 all
Monday, 3 July 2023	4.7: Probability of Events Involving "Not" and "Or"	#1-19 all
	4.8: Conditional Probability and Events Involving "And"	#1-32 all
Tuesday, 4 July 2023	No Class	
Wednesday, 5 July 2023	4.10: Visual Displays of Data	#1-12 all
	4.11: Measures of Central Tendency	#1-16 all
Thursday, 6 July 2023	Unit 4 Exam (25 points)	