Contemporary Mathematics ~ MATH 1332-451 Dual Credit Online Spring 2023 Course Syllabus

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Blackboard:	https://southplainscollege.blackboard.com

Office Hours:

As listed below or by appointment.

	Monday	Tuesday	Wednesday	Thursday	Friday
Levelland Campus (M109)	10:45 - 12:00	10:45 - 12:00	10:45 - 12:00	10:45 - 12:00	
Virtual					9:00 - 12:00

Course Modality: Fully Online ~ This course is asynchronous online. This means that course content is not being delivered in person or in real time. Rather, all course materials are available on Blackboard and students will watch lectures and submit assignments according to a weekly schedule. Students have the flexibility to choose the best time to complete course work within that weekly time frame.

- Textbook: NO TEXTBOOK IS REQUIRED FOR THIS COURSE!! All resources for the course, including notes, assignments, etc., are available on Blackboard. However, if you'd like to purchase a textbook to have as an additional resource, the adopted textbook for the course is specified on Page 3 of this syllabus.
- Supplies: You will need pencils, notebook paper, a calculator, and a folder or binder. A graphing calculator is allowed but not necessary. I recommend a scientific calculator such as a TI-30XIIS. Calculators on cell phones or other electronic devices are not allowed

You will need to have access to a working computer with reliable internet access. <u>All</u> <u>homework will be submitted on Blackboard</u>. It is permissible to submit photos of your work but creating pdfs of your homework and uploading those is the best way to ensure a clear, easy to read/grade document. There are several methods/apps for doing this. A couple of popular apps are CamScanner and Genius Scan.

Blackboard: Since this course is fully online, Blackboard is the hub of the course. All information and resources needed for this course are available on Blackboard. The syllabus, instructor contact information, and all course resources including notes, assignment documents, and lecture videos are stored there. Assignments due dates and exam dates are posted on the Blackboard calendar. I'll be posting your grades in the gradebook on Blackboard so that is where you can see what your grade is in the course at any time. You should get into the habit of checking Blackboard daily for pertinent information.

Important Dates: Classes begin on January 17th. Other important dates are listed below.

- March 13-17
 April 7
 April 27
 May 9
 Spring Break
 Easter Break
 Last day to drop Spring semester courses
 Final Exam
- **Homework:** Homework will be assigned regularly and each assignment must be submitted on the day that it is due prior to 11:59 PM. <u>Homework will be submitted on Blackboard</u>. A penalty will be assessed for late homework.

Exams: There will be four unit exams given during the semester and a comprehensive, departmental final exam given at the end of the semester. There are no exemptions for the final exam. If you are unable to take a scheduled exam during the specified time period, email your instructor immediately, preferably prior to the exam. Makeup exams are given only under extremely rare and documented circumstances.

Grading Scheme: Your grade in the course will be comprised of scores from the following categories. This course and its grade will be recorded on your official transcript. Grades will be posted on Blackboard throughout the semester.

- Exams (Each exam will count 16% for a total of 64%). The following exam dates are tentative. Any changes to these dates will be announced in class.
 - Exam 1 ~ Friday, February 10
 - Exam 2 ~ Friday, March 3
 - Exam 3 ~ Tuesday, April 4
 - Exam 4 ~ Tuesday, May 2
- Homework (16%)
- Comprehensive Final Exam (20%) ~ Tuesday, May 9

Where to Get Help: Math can be challenging occasionally. Here are some ways in which you can receive quality assistance.

- As your instructor, I am the best resource for providing assistance. I am available during my office hours (both virtual and walk-in) and by appointment. Twice a week, homework review sessions will be held via Collaborate. These sessions will give you an opportunity to ask questions on the homework before having to submit it.
- SPC Tutors ~ Tutoring is <u>FREE</u> 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 <u>180 FREE minutes</u> 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, click on the tools option from the left-hand menu bar. Then, click on the Tutor.com link and you will automatically be logged in for free tutoring. You can access tutor.com tutors during the following times:
 - Monday Thursday: 8pm-8am
 - o 6pm Friday 8am Monday morning

Responsibilities & Expectations:

- 1. Keep up with the pace of the scheduled coursework.
- 2. When watching lectures, take notes and work through the example problems in the lectures.
- 3. **DO ALL HOMEWORK.** Fully invest yourself in the homework process so that you can maximize your potential to be successful in the course. Do your own work, show all work, and complete the homework early enough that you can seek help if needed. <u>Always turn in your homework on time</u>.
- 4. Attend the Homework Review Collaborate Sessions held on Monday and Thursday evenings. In those sessions, you'll have the opportunity to ask questions on the homework before having to submit it.
- 5. Be respectful to others in the course and assist in maintaining an optimum learning environment for all. Any student who disrupts the learning environment will be asked to leave and may be dropped from the course.

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: *Mathematical Ideas*, Miller, Heeren, and Hornsby, 2019, 14th Edition, Prentice Hall/Pearson Education \rightarrow **Please note, this textbook is NOT REQUIRED for this course!!** However, you have the option of purchasing this textbook as an additional resource for the course if you'd like to have one.

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 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 <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, 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 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.

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

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/

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.

MATH-1332-451 Contemporary Mathematics ~ <u>Online Dual Credit</u> Schedule of Topics ~ Spring 2023

Week	Dates	Lecture Topic	Homework Due Dates
1 1/16 - 1/20	Topic 1.1 ~ Order of Operations	HW 1.1 due Tue, 1/17	
		Topic 1.2 ~ Linear Equations	HW 1.2 due Fri, 1/20
2 1/23 – 1/27	Topic 1.3 ~ Applications of Linear Equations	HW 1.3 due Tue, 1/24	
	Topic 1.4 ~ The Rectangular Coordinate System, Midpoint and Distance Formulas	HW 1.4 due Fri, 1/27	
3 1/30 – 2/3	Topic 1.5 ~ Lines, Slope, and Average Rates of Change	HW 1.5 due Tue, 1/31	
	Topic 1.6 ~ Equations of Lines	HW 1.6 due Fri, 2/3	
4 2/6 - 2/10	Topic 1.7 ~ Solving Systems of Equations and Applications	HW 1.7 due Tue, 2/7	
	Exam 1 ~ Friday, 2/10		
5 2/13 – 2/17	Topic 2.1 ~ Ratios, Proportion, & Scientific Notation	HW 2.1 due Tue, 2/14	
	Topic 2.2 ~ Variation	HW 2.2 due Fri, 2/17	
6 2/20 – 2/24	Topic 2.3 ~ Polynomial Operations Topic 2.4 ~ Quadratic Equations	HW 2.3/2.4 due Tue, 2/21	
	Topic 2.5 ~ Decimals and Percent	HW 2.5 due Fri, 2/24	
7 2/27 – 3/3	Topic 2.6 ~ The Time Value of Money	HW 2.6 due Tue, 2/28	
	Exam 2 ~ Friday, 3/3		
8	3/6 - 3/10	Topic 3.1 ~ Measurements and Conversions	HW 3.1 due Tue, 3/7
	Topic 3.2 ~ Angles, Curves, Polygons	HW 3.2 due Fri, 3/10	
	3/13 - 3/17	Spring Break	
9 3/20 - 3/24	Topic 3.3 ~ Triangles: Similarity and The Pythagorean Theorem	HW 3.3 due Tues, 3/21	
	Topic 3.4 ~ Geometry: 2D Topic 3.5 ~ Geometry: 3D	HW 3.4/3.5 due Fri, 3/24	
10 3/27 – 3/31	Topic 3.6 ~ Trigonometry & Applications ~ Part 1	HW 3.6_P1 due Tue, 3/28	
		Topic 3.6 ~ Trigonometry & Applications ~ Part 2	HW 3.6_P2 due Fri, 3/31
11 4/3 - 4/7	Exam 3 ~ Tuesday, 4/4		
		Topic 4.1 ~ Sets, Subsets, Venn Diagrams	HW 4.1 due Fri, 4/7
12 4/10	4/10-4/14	Topic 4.2 ~ Set Operations, Cardinal Numbers, Surveys	HW 4.2 due Tue, 4/11
		Topic 4.3 ~ Counting	HW 4.3 due Fri, 4/14
13	4/17 – 4/21	Topic 4.4 ~ Basic Probability	HW 4.4 due Tue, 4/18
		Topic 4.5 ~ Events Involving "Not" and "Or" Topic 4.6 ~ Conditional Probability and Events Involving "And"	HW 4.5/4.6 due Fri, 4/21
14	4/24 – 4/28	Topic 4.7 ~ Visual Displays of Data	HW 4.7 due Tue, 4/25
		Topic 4.8 ~ Measures of Central Tendency	HW 4.8 due Fri, 4/28
15	5/1 – 5/5	Exam 4 ~ Tuesday, 5/2	
		Review for the Comprehensive Final Exam	
16	5/8 – 5/12	FINAL EXAM ~ Tuesday, 5/9	