South Plains College Common Course Syllabus: MATH 0332 and MATH 1332 Revised December 2019

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0332

Course Title: Contemporary Mathematics Support Course

Available Formats: conventional

Campuses: Levelland, Reese, and, Lubbock Center

MATH 0332 Part of the Course:

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.

Prerequisite: Maximum score of 349 on the TSIA without an ABE score, 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: None

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 Policy: Attendance and effort are the most important activities for success in this course. Records of your attendance are maintained throughout the semester. Five (5) absences, *for any reason*, are allotted to the student for the semester. Tardies count as one-half (1/2) of an absence. Tardies will be applied for consistently being late to class, as deemed by the instructor and leaving class early. If this number is exceeded, the instructor has the right to drop you with a grade of F or an X, depending on their discretion.

MATH 1332 Part of the Course:

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 TSIA, TSI-exempt status, or a successful completion with a grade of 'C' or better in MATH 0337.

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:

- 7. Apply the language and notation of sets.
- 8. Determine the validity of an argument or statement and provide mathematical evidence.
- 9. Solve problems in mathematics of finance.
- 10. Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
- 11. Interpret and analyze various representations of data.
- 12. 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.

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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.

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 cgilster@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.

Course-Specific Contemporary Math Syllabus MATH 0332/1332-C001 Spring 2020

Instructor: Leah Chenault Office: M106 Telephone: (806)716-2740

Email: <u>Ichenault@southplainscollege.edu</u> (preferred method of contact)

Office Hours: As listed below or by appointment. Also, on most days, I am around for a few minutes both before and after class.

Monday	Tuesday	Wednesday	Thursday	Friday
9:30am -10:45am	NA	9:30am - 10:45am	NA	8:30 am–11:30am
1:00 pm – 2:15pm		1:00 pm – 2:15pm		

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 <u>in class</u>.

Showing Work: To receive full credit on an assignment, you must show all work that leads to your answer(s). The work must be legible, make sense and be easy to follow.

Course Supplies:

- Required: Scientific Calculator (with log, ln, sin, cos and tan). Suggested TI-30XIIS. They are inexpensive and user friendly. Graphing calculators are <u>not</u> allowed. There may be some assignments where you are not allowed to use any calculator.
- Required: Large 3-ring binder, dividers, notebook paper, graph paper (available to print on blackboard), hole punch, pencils, and erasers.
- Printed Notes: A blank copy of the notes will be posted on Blackboard and you will be expected to print them and have them in class. You are expected to fill them out during class. If you miss class for any reason, you will need to get a copy of someone else's filled out notes. Your completed notes will be a requirement in the binder check.
- Required Textbook*: Mathematical Ideas,* Miller, Heeren, Hornsby and Heeren, 2020, 14th Edition, Pearson Education. You can purchase either a hard copy or a digital version of the textbook. There may be a 14 day trial for the digital version. Once you use the code, you cannot get a refund.
- Warning: Do not expect your instructor to have supplies for you to borrow.

Homework:

- Homework will be assigned at each class. Work the problems early enough to seek help if needed.
- Homework is due at the beginning of the next class. Late homework will not be accepted. If you are going to be absent, I will accept your homework via email as long as that email is time-stamped <u>before</u> our scheduled class time and you give me a valid reason for your absence. If the email does not have those two things, you will receive a zero on the assignment. Homework will be graded in two ways:
 - 1. Completion (50% of HW grade)
 - 2. I will spot check 3-5 questions (50% of HW grade)
- On all assignments, you are expected to write your full name at the top, give the assignment a title (page number etc) and clearly number the questions.
- To receive full credit on homework problems that are graded, you must show work that is legible and it must make sense.
- At the end of the semester, the lowest 4 daily grades (homework/binder) will be dropped.

Binder:

- All students will keep a binder which will be used as a reference and study guide.
- The binder will be graded randomly by the instructor during the semester.

Binder organization:

- Section 1: Syllabus
- Section 2: Unit 1: By section Notes and Assignment. At the end of the unit you will have a review and an Exam.
- Section 3: Unit 2
- Section 4: Unit 3
- Section 5: Unit 4
- Section 6: Unit 5
- Section 7: Unit 6
- Section 8: Post Unit 6 material and Comprehensive Review These pages will be kept in chronological order.

Note: Being absent does not excuse you from notes or homework. Everything is available on Blackboard and should be printed and completed even if you are not in class.

Exams:

- 6 Unit Exams
- Leaving the class during an exam is not permitted.
- The Final Exam is comprehensive.
- There are no exemptions for the final.
- If you are going to miss an exam contact your instructor immediately (preferably prior to the exam). Make up exams are very rare and only provided under extreme, documented circumstances.
- If your grade on your final exam is higher than one of the unit tests, I will replace that unit test grade with your final exam grade.

• All electronic communication devices (phones, smart watches etc) must be put away during exams. Failure to do so will result in a grade of zero on the exam.

Grading Formula:

Class attendance and a strong work ethic do not guarantee a passing grade. However, these two things are extremely important and 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:

- 6 Unit Tests at 10% each60%
- Homework/Binder.....15%
- Final Exam......25%

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

Attendance Policy: Class attendance is expected, not optional. Class attendance may be taken at any time during the class period, so please do not be late or leave early. Leaving early and/or being tardy will be considered ½ absence. You may be dropped from this course with a grade of X or F if you have more than 10 absences for any reason. These ten total absences include five absences for MATH 0332 and five absences for MATH 1332. If you exceed the maximum number of absences after the last day to drop, you will receive a grade of F for the course.

Classroom Etiquette:

- Preparation for class (including homework) is to be completed before not during the lecture.
- Chronic tardiness is unacceptable. We will begin promptly at the scheduled time for the class. A tardy counts as half an absence.
- Students are expected to be respectful of their fellow classmates and maintain a classroom environment that is conducive to learning. Refrain from using offensive language, talking loudly or off-topic, working on outside assignments, or otherwise being disruptive in class.
- NO tobacco use of any form is allowed in the classroom.
- Discussion of course material among students is encouraged during class, but habitually disruptive students will be asked to leave.
- All electronic communication devices are to be silenced and put away during class unless you are specifically told otherwise by your instructor. You will be given one verbal warning, after which you will be asked to leave.
- If I have to ask you to leave class for any reason (class disruption, cell phone usage etc), you will receive a zero for the day's assignment.
- If you sleep during class, you will be counted absent and receive a zero for that day's assignment.
- Food and/or drinks are NOT allowed in the classroom.
- <u>All electronic communication with the instructor should take place via your SPC email account. You are expected to check this email account often for any class announcements that I did not get a chance to mention in class. Please consider that it is hard to read tone from email so let's give each other the benefit of the doubt.</u>

Resources:

- Blackboard! The course syllabus, calendar, gradebook, notes, and homework will be available on Blackboard. Be sure to check Blackboard regularly. There may also be times where I post videos that may supplement/reinforce what we have done in class.
- Free tutoring is available in M116 on the Levelland campus. You will need your student ID to check in for tutoring.
- I am available to help you! Feel free to come by during my office hours or email me at lchenault@southplainscollege.edu.
- Free tutorial videos are available at the following sites: http://patrickjmt.com/, http://www.mathtv.com/, and http://www.khanacademy.org/.
- Online one-on-one tutoring via the TutorMe service. A link should be posted on Blackboard.

Succeeding in a Math Class:

- Attend class every class period.
- Be mentally present! Take notes, pay attention and ask questions during class.
- Do all homework when it is assigned. Work on it early enough so that you can seek help if you need it.
- For every hour spent in class, you should expect to spend 2-3 hours outside of class working on this course. This includes time spent on homework and studying for quizzes and exams.
- Get to know at least one other person in class and exchange contact information. Study groups are encouraged.
- Get help as soon as you feel yourself falling behind! Don't wait!
- 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.

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 (4 consecutive or 5 total) 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, April 23, 2020.**

Contemporary Mathematics Tentative Course Outline – Fall 2019 Math 0332.C001 and Math 1332.C001 (M/T/W/Th 11:00 a.m. – 12:15 p.m.)

Week	Date	Day	Lesson/Assignment
1	Jan 13 th	Mon	Syllabus, 6.2 Order of Operations
	Jan 14 th	Tues	6.3 – Rational Numbers and Decimal Representations
	Jan 15 th	Wed	7.1 – Solving Linear Equations
	Jan 16 th	Thurs	No Class – MLK Holiday
2	Jan 20 th	Mon	7.1 – Solving Linear Equations
	Jan 21 st	Tues	7.2 – Applications of Linear Equations
	Jan 22 nd	Wed	7.6 – Polynomials Operations
	Jan 23 rd	Thurs	7.7 – Solving Quadratic Equations (with Square Roots and the
			Quadratic Formula)
3	Jan 27 th	Mon	Review for Exam 1
	Jan 28 th	Tues	Exam 1
	Jan 29 th	Wed	8.1 – Rectangular Coordinate System, Distance and Midpoint
	Jan 30 th	Thurs	8.2 – Lines, Slope and Average Rate of Change
4	Feb 3 rd	Mon	8.3 – Equations of Lines
	Feb 4 th	Tues	8.3 – Equations of Lines
	Feb 5 th	Wed	8.4 – Linear Functions, Graphs and Models
	Feb 6 th	Thurs	8.7 – Solving Systems of Linear Equations
5	Feb 10 th	Mon	8.8 – Applications of Linear Systems
	Feb 11 th	Tues	Review for Exam 2
	Feb 12 th	Wed	Exam 2
	Feb 13 th	Thurs	6.5 - Applications of Decimals and Percents
6	Feb 17 th	Mon	Conversions
	Feb 18 th	Tues	7.3 – Ratio, Proportion and Variation
	Feb 19 th	Wed	7.5 – Scientific Notation
	Feb 20 th	Thurs	13.1 – The Time Value of Money
7	Feb 24 th	Mon	13.4 – The Costs and Advantages of Home Ownership
	Feb 25 th	Tues	13.5 - Annuities
	Feb 26 th	Wed	Budgeting
	Feb 27 th	Thurs	Budgeting
8	Mar 2 nd	Mon	Review for Exam 3
	Mar 3 rd	Tues	Exam 3
	Mar 4 th	Wed	9.2 – Polygons, Angles in a Triangle, Classifying Triangles
	Mar 5 th	Thurs	9.3 – Geometry of Triangles: Congruence, Similarity and the
			Pythagorean Theorem
9	Mar 9 th	Mon	9.4 – Perimeter, Area and Circumference
	Mar 10 th	Tues	9.5 – Volume and Surface Area
	Mar 11 th	Wed	Right Triangle Trigonometry
10	Mar 12 th	Thurs	Right Triangle Trigonometry
10	Mar 23 rd	Mon	Review for Exam 4
	Mar 24 th	Tues	Exam 4
	Mar 25 th	Wed	2.2 – Venn Diagrams and Subsets
	Mar 26 th	Thurs	2.3 – Set Operations
11	Mar 30 th	Mon	2.4 – Surveys and Cardinal Numbers
	Mar 31 st	Tues	10.1 – Counting by Systematic Listing
	Apr 1 st	Wed	10.2 – Using the Fundamental Counting Principle
10	Apr 2 nd	Thurs	10.5 - Counting Problems Involving "Not" and "Or"
12	Apr 6 th	Mon	Review for Exam 5

	Apr 7 th	Tues	Exam 5	
	Apr 8 th	Wed	11.1 – Basic Probability	
	Apr 9 th	Thurs	11.2 – Events Involving "Not" and "Or"	
13	Apr 13 th	Mon	No Class - Easter Break	
	Apr 14 th	Tues	11.3 – Events Involving "And"	
	Apr 15 th	Wed	11.5 – Expected Value	
	Apr 16 th	Thurs	12.1 – Visual Displays of Data	
14	Apr 20 th	Mon	12.1 – Visual Displays of Data	
	Apr 21 st	Tues	12.2 – Measures of Central Tendency	
	Apr 22 nd	Wed	Review for Exam 6	
	Apr 23 rd	Thurs	Exam 6	
15	Apr 27 th	Mon	Final Review	
	Apr 28 th	Tues	Final Review	
	Apr 29 th	Wed	Final Review	
	Apr 30 th	Thurs	Final Review	
16	May 4 th -7 th		Final Exam Week: Tentative Exam Time: Monday, May 4 th from 10:15-12:15	

Note: This schedule is tentative and may be altered as deemed necessary by the instructor. If there are any changes, they will be announced **in class**.