South Plains College Common Course Syllabus: MATH 1350 Revised January 2021

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1350

Course Title: Fundamentals of Mathematics I

Available Formats: conventional/flex and internet

Campuses: Levelland

Course Description: This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the conceptual development of the following: sets, functions, numeration systems, number theory, and properties of the various number systems with an emphasis on problem solving and critical thinking.

Prerequisite: Successful completion with a grade of 'C' or better in MATH 1314.

Credit: 3 Lecture: 3 Lab: 0

Textbook: A Problem Solving Approach to Mathematics for Elementary School Teachers, Billstien, Libeskind, and Lott, 2018, 13th Edition, 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. Explain and model the arithmetic operations for whole numbers and integers.
- 2. Explain and model computations with fractions, decimals, ratios, and percentages.
- 3. Describe and demonstrate how factors, multiples, and prime numbers are used to solve problems.
- 4. Apply problem-solving skills to numerical applications.
- 5. Represent and describe relationships among sets using the appropriate mathematical terminology and notation.
- 6. Compare and contrast structures of numeration systems.

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 effort are the most important activities for success in this course. The instructor maintains records of the student's engagement throughout the semester. The student will be allowed to miss twenty percent (20%) of class assignments for the semester, *for any reason*. Should this number be exceeded, the instructor has the right to drop the student with a grade of F or an X, depending on the instructor's discretion.

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.

COVID-19 Syllabus Statement: It is the policy of South Plains College for the Spring 2021 semester that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the SPC community. Such behaviors specifically include the requirement that all students properly wear CDC-compliant face coverings while in SPC buildings including in classrooms, labs, hallways, and restrooms. Failure to comply with this policy may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Dean of Students on the Levelland campus or the Dean/Director of external centers for Student Code of Conduct Violation. Students who believe they have been exposed or may be COVID-19 positive, must contact Health Services, DeEtte Edens, BSN, RN at (806) 716-2376 or dedens@southplainscollege.edu.

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, at any point during the semester.

South Plains College Department of Mathematics and Engineering Fundamentals of Math I: 1350.001 Spring 2021 Course Policies

Instructor: Kaylan K Thompson Telephone: (806) 716-4886 Office: M111 Email: <u>kthompson@southplainscollege.edu</u>

Office Hours: As listed or by appointment.

Monday	Tuesday	Wednesday	Thursday	Friday
9:30 am - 10:00 am 1:00 pm - 2:30 pm	10:00 am – 11:30 am (virtual using Zoom, link	9:30 am – 10:00 am (Levelland office M111)	No office hours	10:00 am – 1:00 pm (Levelland office M111
(Levelland office M111)	provided in Blackboard)	12:30 pm – 1:30 pm (Levelland office M111 and		on posted Fridays and virtual using zoom every Friday)
		virtual using Zoom, link provided in Blackboard)		

Virtual Office Hours: Virtual office hours will be held within Zoom. A link for virtual office hours will be provided in Blackboard. If there is more than one student attending virtual office hours at the same time, the students will be assisted in the order in which they arrived.

Required Material:

Textbook/MyMathLab: <u>A Problem Solving Approach to Mathematics for Elementary School Teachers</u>, 13th edition, by Billstein, Libeskind, & Lott. ISBN: 9780135190050

MyMathLab Student Access Kit: This kit is free with the purchase of a new textbook at either SPC bookstore or you may also purchase it online at pearsonmylabandmastering.com in which you will need a credit card or PayPal. I encourage you to purchase this kit immediately. If you have not yet purchased the access code, that opportunity should be provided as you go through the registration process. There is a 2 week free trial that you may use for the first two weeks of class. MML should be accessed through the provided link in Blackboard.

Supplies: Pencils, erasers, 3-ring binder, notebook paper, scientific calculator (when allowed). You will need reliable internet service, a way to print documents, a way to scan and upload documents and a device with the capability to participate in a zoom meeting with video and audio.

Student Responsibilities & Expectations:

- 1. Come to class on time and prepared to learn. (Pencil, book, notebook, calculator, ect.)
- 2. Read the syllabus.
- 3. Check your email!
- 4. Good study habits are essential for success.
- 5. Take notes, participate in class, and complete course assignments early enough to seek help if needed.
- 6. Food and drink are NOT allowed in the classroom with the exception of bottled water.
- Cell phones and any other electronic devices must be silenced and put away before entering the classroom. Use of these devices during class will result in a zero for that day's quiz, homework, or exam.

Grading:	Homework/Quizzes/Activities/Mini Lessons	15%	Grading Scale: A	90-100
	TEKS Invegtigation Project	10%	В	80-89
	Unit Exams	60%	C	70-79
	Final Exam	15%	D	60-69
			F	59 or below

- Homework: Homework will be assigned for each section on MyMathLab (MML). Although the homework is done online, the problems should be worked neatly either in a spiral or notebook paper in pencil. Homework problems given in MML may be reworked as many times as you wish, before the deadline, to get a 100 on the assignment. The homework for lessons taught on Monday will be due on Thursday of that same week and the homework for lessons taught on Wednesday will be due the following Monday.
- Quizzes: Quizzes will also be assigned on MML. Again, the problems should be worked neatly in either a spiral or on notebook paper in pencil. You may submit quizzes two times, and the highest of the two grades will be counted. You will be allowed 80 minutes to complete each quiz.
- Activities: There will be activities on a regular basis. You will receive a grade for your participation in these activities. If you are absent on the day an activity is given, you will receive a zero for that activity.
- Mini Lessons:Each student will be required to prepare and teach mini lessons throughout the
semester. If you are absent on the day you are to teach a lesson, you will receive a zero.

TEKS Investigation Project:

Each student will complete the TEKS Investigation Project. More information will be given in class. A grading rubric will also be provided.

Exams: There are 4 unit exams (15% each) and a comprehensive final exam (15%). Dates for the exams are given on the course calendar. Exams will be paper exams given in class. If the course is moved to an online format, exams will be videoed. Reviews will be provided. If for any reason you are unable to take an exam at the designated time you must contact me prior to class time. Make-up exams will be given at the discretion of the instructor.

Fundamentals of Mathematics I Tentative Course Calendar Spring 2021

This is a tentative schedule. Changes will be announced in class.

MATH 1350.001 - MW 2:30 - 3:45 PM

Wk	Day	Date	Lesson	
1	Monday	January 18	Martin Luther King Holiday (no class)	
	Wednesday	January 20	1-1 Mathematics and Problem Solving	
2	Monday	January 25	1-2 Explorations with Patterns	
	Wednesday	January 27	2-2 Describing Sets	
3	Monday	February 1	2-3 Other Set Operations and Their Properties	
	Wednesday	February 3	3-1 Numeration Systems, Review 1	
4	Monday	February 8	Exam 1—Chapters 1 & 2 and Section 3-1 (15%)	
	Wednesday	February 10	3-2, 3-3 Addition and Subtraction of Whole Numbers	
5	Monday	February 15	3-4, 3-5 Multiplication and Division of Whole Numbers	
	Wednesday	February 17	4-1 Divisibility	
6	Monday	February 22	4-2 Prime and Composite Numbers	
	Wednesday	February 24	4-3 Greatest Common Divisor and Least Common Multiple,	
7	Monday	March 1	Review 2, Begin TEKS Investigation Project	
	Wednesday	March 3	Exam 2—Chapters 3 & 4 (15%)	
			5-1 Integers and the Operations of Addition and Subtraction	
8	Monday	March 8	5-2 Multiplication and Division of Integers	
	Wednesday	March 10	6-1 The Set of Rational Numbers	
9		March 15-19	Spring Break (no classes)	
	Monday	March 22	6-2 Addition, Subtraction, and Estimation with Rational Numbers	
	Wednesday	March 24	6-3 Multiplication and Division of Rational Numbers	
10	Monday	March 29	6-4 Ratios, Proportions, and Proportional Reasoning	
	Wednesday	March 31	Review 3, TEKS Investigation Project Due	
11	Monday	April 5	Exam 3—Chapters 5 & 6 (15%)	
	Wednesday	April 7	7-1 Introduction to Decimals	
12	Monday	April 12	7-2 Operations on Decimals	
			7-3 Nonterminating Decimals	
	Wednesday	April 14	7-4 Percent and Interest	
13	Monday	April 19	7-5 Real Numbers	
	Wednesday	April 21	8-1 Variables 8-2 Equations	
		April 21	· ·	
14	Monday	April 26	8-3 Functions	
	Wednesday	April 28	Review 4	
15	Monday	May 3	Exam 4—Chapters 7 & 8 (15%)	
	Wednesday	May 5	Review for Comprehensive Final Exam	
16	Monday	May 10	Comprehensive Final Exam (15%) (1:00 pm – 3:00 pm)	