South Plains College Common Course Syllabus: MATH 0337 Revised December 2019

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0337

Course Title: Foundations of Mathematical Reasoning

Available Formats: conventional

Campuses: Levelland, Reese, and Lubbock Center

Course Description: This course surveys a variety of mathematical topics needed to prepare students for college level statistics or quantitative reasoning or for algebra-based courses. Topics include: numeracy with an emphasis on estimation and fluency with large numbers; evaluating expressions and formulas; rates, ratios, and proportions; percentages; solving equations; linear models; data interpretations including graphs and tables; verbal, algebraic and graphical representations of functions; exponential models. This course carries institutional credit but will not transfer and will not be used to meet degree requirements. This course will not satisfy graduation requirements.

Prerequisite: Successful completion of NCBM 0105.

Credit: 3 Lecture: 3 Lab: 1

Textbook: None

Supplies: Please see the instructor's course information sheet for specific supplies.

This course partially satisfies a Core Curriculum Requirement: No

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:

- 1. **Numeracy**: Students will develop number sense and the ability to apply concepts of numeracy to investigate and describe quantitative relationships and solve real-world problems in a variety of contexts.
- 2. **Proportional Reasoning**: Students will use proportional reasoning to solve problems that require ratios, rates, proportions, and scaling.
- 3. **Algebraic Competence, Reasoning, and Modeling**: Students will transition from specific and numeric to general and abstract reasoning using the language and structure of algebra to investigate, represent, and solve problems.
- 4. **Assessing Risk (Probabilistic Reasoning):** Students will understand and critically evaluate statements involving risk and arguments based on probability that appear in the popular media, especially in presenting medical information.
- 5. **Personal Finance**: Students will understand, interpret and make decisions based on financial information that is commonly presented to consumers.

6. **Civic Life**: Students will understand that quantitative information presented in the media and by other entities can sometimes be useful and sometimes be misleading.

Student Learning Outcomes Assessment: None

Course Evaluation: There will be a comprehensive departmental final exam 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.

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 activate 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 email cgilster@southplainscollege.edu 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.

MATH 0337 – Foundations of Mathematical Reasoning Spring 2020

Instructor: Jerod Clopton Section: 001

Office: M102 **Class Time:** T/Th 10:00 – 11:45

Email: jclopton@southplainscollege.edu Location: M124

Phone: 806-716-2738

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday	
10:15 - 11:00	9:30 - 10:00	10:15 - 11:00	9:30 - 10:00	10:00 - 12:00	
2:00 - 3:00	2:15 - 3:00	2:00 - 3:00	2:15 - 3:00		
Or by appointment					

Textbook: No textbook is required for the section of Math 0337.

Supplies: Pencils, notebook, lined sheets of notebook paper, scientific calculator. Graphing calculators, calculators on cellphones, or any other electronic devises will not be allowed during in class assignments.

Assignments and Grading: All homework work assignments will be made available to you as a PDF in Blackboard. Homework assignments will not be graded. However, it is essential that you work to complete each homework assignment. Homework is the means for the practice that is required to fully understand each topic and prepare for quizzes and exam. Expect to spend a minimum of 4 to 6 hours each week outside of class working on homework assignments and preparing for quizzes and exams. Quizzes will be administered at any time during the semester and the questions will be similar to the questions from homework assignments. Your quiz average will account for 20% of your final grade, while all exams will count for 80% of your final grade. Expect to have 4 major exams (15% each) throughout the course and a comprehensive final exam (20%) at the end of the course. No make-up exams will be given. The grade from your final exam will replace your lowest exam grade, provided that the grade from the final exam is greater than your lowest exam grade. Your final average in the course will determine the letter grade posted on your transcript. This grade is determined by the following scale: A (90-100%), B (80-89%), C (70-79%), D (60-69%), F (0-59%).

Organization: It is recommended that you keep all course material; syllabus, homework assignments, note, handouts, quizzes, and exams, organized in a 3 ring binder.

Blackboard: Blackboard is the online course management system that will be utilized for this course. The course syllabus, homework assignments, notes and class handouts can be accessed through Blackboard. Login at https://southplainscollege.blackboard.com/. The user name and password should be the same as the MySPC and SPC email.

User name: first initial, last name, and last 4 digits of the Student ID Password: Original CampusConnect Pin No. (found on SPC acceptance letter)

Resources:

- Free tutoring is available in M116 on the Levelland campus. Hours for the tutors will be posted there.
- Exam reviews, exam and quiz solutions, links to additional online resources, will be posted in Blackboard

Use of Electronic Devices: Turn off all electronic devices before class. The use of cell phones, music players, smart watches (other than checking time), pagers, personal computers, tablets, etc., will not be tolerated. If consistent violation of this policy persists then consequences will be administered. If an unsanctioned devise is in use during an exam, then its grade will be zero percent (0%) and removal from the course may be applied.

Disclaimer: The instructor reserves the right to alter any class policies/dates as deemed necessary and will announce any changes in class.

Math0337 Tentative Course Schedule for Spring 2020

Week	Date	Assignment / Topic		
1	Tue, Jan 14	Assignment 1:		
		- Addition/Subtraction of Integers - No calculator		
	Thu, Jan 16	Assignment 2:		
		- Multiplication/Division of Integers and Fractions - No calculator		
		- Addition/Subtraction of Fractions - No calculator		
2	Tue, Jan 21	Assignment 3:		
		- Order of Operations - No calculator		
		- Simplifying Algebraic Expressions - No calculator		
	Thu, Jan 23	Assignment 4:		
		- Solving Linear Equations - May use calculator		
3	Tue, Jan 28	Assignment 4:		
		- Application Problems - May use calculator		
	Thu, Jan 30	Assignment 5:		
		- Slope—No calculator; Graphing - May use calculator		
4	Tue, Feb 04	Assignment 6:		
		- Systems of Equations - May use calculator		
	Thu, Feb 06	Review		
5	Tue, Feb 11	Exam 1		
	Thu, Feb 13	Assignment 7:		
		- Monomials		
		- Scientific Notation		
6	Tue, Feb 18	Assignment 8:		
		- Addition/Subtraction/Multiplication of Polynomials		
	Thu, Feb 20	Assignment 9:		
		- Factoring		
7	Tue, Feb 25	Assignment 10:		
		- Radicals		
	Thu, Feb 27	Assignment 11:		
		- Solving Quadratic Equations		
8	Tue, Mar 3	Review		
	Thu, Mar 5	Exam 2		
9	Tue, Mar 10	Assignment 12:		
		- Units of Measurements and Conversions		
	Thu, Mar 12	Assignment 13:		
		- Introduction to Geometry		
	Tue, Mar 17	No Class (Spring Break)		

	Thu, Mar 19	No Class (Spring Break)	
10	Tue, Mar 24	Assignment 14:	
		- Geometry - 2D	
	Thu, Mar 26	Assignment 15:	
		- Geometry - 3D	
11	Tue, Mar 31	Pythagorean Theorem and Applications	
	Thu, Apr 2	Review	
12	Tue, Apr 7	Exam 3	
	Thu, Apr 9	Assignment 16: Percentages	
13	Tue, Apr 14	Assignment 17:	
		- Statistic Concepts	
	Thu, Apr 16	Assignment 18:	
		- Statistic Graphs	
14	Tue, Apr 21	Assignment 19:	
		- Descriptive Statistics	
	Thu, Apr 23	Assignment 20:	
		- Finance	
15	Tue, Apr 28	Exam 4	
	Tue, Apr 30	Review for the Comprehensive Final Exam	
16	Tue, May 5	Final Exam: 10:15 - 12:15	