South Plains College Department of Mathematics & Engineering MATH 0337 – Foundations of Mathematical Reasoning Course Syllabus – Fall 2019

Instructor: Jerod Clopton

Office: M102

Email: jclopton@southplainscollege.edu

Phone: 806-716-2738

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
10:15 - 11:00	8:15 - 9:00	10:15 - 11:00	8:15 - 9:00	10:00 - 12:00
1:45 - 2:30	1:45 - 2:30	1:45 - 2:30	1:45 - 2:30	
	(Or by appointment		

Course Description: MATH 0337 – (3:3:1): This is a literacy-based course designed to provide students with the skills and conceptual understanding to succeed in a college-level statistics (Math1342) or quantitative literacy course (Math1332). This course includes applications of fundamental algebra, geometry, and statistics. This developmental math course is not designed for those students who need to take Math1314 or Math1324 as part of their degree plan. Students with undeclared majors should take Math0315 or Math0320, depending on the placement score. This course will not satisfy graduation requirements. Semester Hours: 3 Lecture Hours: 3 Lab Hours: 1

Learning Outcomes:

- 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.

Learning Goals: This course is a quantitative reasoning course. This means you will learn to use, understand, and communicate about quantitative information. The course has five goals:

- 1. Communication goal: You will interpret and communicate quantitative information and mathematical and statistical concepts using language appropriate to the context and intended audience.
- **2. Problem solving goal:** You will make sense of problems, develop strategies to find solutions, and persevere in solving them.
- **3. Reasoning goal:** You will reason, model and make decisions with mathematical, statistical, and quantitative information.

- **4. Evaluation goal:** You will critique and evaluate quantitative arguments that utilize mathematical, statistical, and quantitative information.
- **5. Technology goal:** You will use appropriate technology in a given context.

Completion Requirements: Students need to pass MATH 0337 with a C or better to become TSI-compliant in mathematics. Only upon successful completion will the student be allowed to enroll in Contemporary Mathematics (MATH 1332) or Statistical Methods (MATH 1342). This course does NOT prepare the student to take College Algebra (MATH 1314) or Math for Business Majors (MATH 1324).

Supplies: You will need pencils, notebook, notebook paper, graph paper, straightedge, and a basic four-function or scientific calculator. Graphing calculators and calculators on cell phones or other electronic devices are **NOT** allowed during tests or in-class assignments. Calculators may not be allowed on certain assignments and/or portions of exams. **No textbook is required for MATH 0337.**

Attendance: Attendance will be taken every class period. Students who arrive late, leave early, sleep during class, or fail to sign the attendance sheet may be counted absent. Whenever absences become excessive and, in the instructor's opinion, minimum course objectives cannot be met due to absences, the student will be withdrawn from the course. Any student who misses 3 consecutive classes or exceeds 5 absences throughout the semester will be administratively dropped and receive a grade of X or F. Students wishing to drop this class must see the registrar by Thursday, November 14, 2019 to officially withdraw and receive a grade of W.

Homework and Quizzes: Homework assignments will be assigned at each class meeting. Homework assignments are due on the assigned due date. No late homework will be accepted. If you are absent from class, you can find the assignment on Blackboard and it will be your responsibility to get it turned in by the due date. All assignments should be done on separated sheets of paper in an organized manner; which includes writing down the problem, showing all work, and clearly indicating your answer. Periodic quizzes will be given at any undisclosed time during the semester. To do well on the quizzes, you need to be consistently completing the homework. Focus your effort on being able to complete the problems on a quiz/exam without any outside resources. There is NO makeup for in-class quizzes and a grade of zero will be assigned. The average of homework and quiz grades will account for 20% of your final grade.

Exams: There will be four unit exams though out the semester and a comprehensive final exam at the end of the semester. Each unit exams will account for 15% of your final grade. Make up exams are very rare and are only given at the discretion of the instructor. If you know that you are going to miss an exam you should notify the instructor before the date of the exam. The final comprehensive exam is required and will account for 20% of your final grade. There is no make up or early testing opportunity for the final exam.

Grading Formula: Enrollment in this course does not guarantee advancement to the next course level. The final responsibility for learning lies with the student. The final letter grade for this course will be based on the following:

Homework	20%
4 Tests 15% each	60%
Final Fxam	20%

Final Grade Determination: A (90-100%), B (80-89%), C (70-79%), D (60-69%), F (0-59)

Resources:

- Blackboard! The course syllabus, handouts for notes, homework, quiz keys, and reviews will be available on Blackboard.
- TutorMe instant online tutoring made available through Blackboard.
- Free tutoring is available in M116 on the Levelland campus. Hours for the tutors will be posted by there.

Student Conduct: You are expected to be respectful to others in the classroom. Please assist in maintaining a classroom environment conducive to learning. Any student disrupting the learning environment will be asked to leave and may be dropped from the course.

Use of Student Email: The College provides a free, official email account to all students to ensure efficient and secure communications between you and the College and your instructors. Students will be required to use their college-issued email address to communicate with their instructors and all other college personnel, so it is easy to distinguish a student's email from spam. The College expects that students will utilize their college email addresses to send and receive communications with college personnel and will read email on a frequent and consistent basis.

Disabilities 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.

Non-Discrimination Statement

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.

Campus Concealed Carry Statement

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: https://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.

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

Math 0337 Tentative Course Schedule Fall 2019

Week	Date	Assignment		
1	Tue, Aug 27	Addition/Subtraction of Integers—No calculator		
	Thu, Aug 29	Multiplication/Division of Integers and Fractions—No calculator		
		Addition/Subtraction of Fractions—No calculator		
2	Tue, Sep 3	Order of Operations—No calculator		
		Simplifying Algebraic Expressions—No calculator		
	Thu, Sep 5	Solving Linear Equations—May use calculator		
3	Tue, Sep 10	Application Problems—May use calculator		
	Thu, Sep 12	Slope—No calculator; Graphing—May use calculator		
4	Tue, Sep 17	Systems of Equations—May use calculator		
	Thu, Sep 19	Review		
5	Tue, Sep 24	Exam 1		
	Thu, Sep 26	Monomials		
		Scientific Notation		
6	Tue, Oct 1	Addition/Subtraction/Multiplication of Polynomials		
	Thu, Oct 3	Factoring		
7	Tue, Oct 8	Radicals		
	Thu, Oct 10	Radicals continued		
		Solving Quadratic Equations		
8	Tue, Oct 15	Review		
	Thu, Oct 17	Exam 2		
9	Tue, Oct 22	Units of Measurements and Conversions		
	Thu, Oct 24	Unit Conversions continued		
		Introduction to Geometry		
10	Tue, Oct 29	Geometry—2D		
	Thu, Oct 31	Geometry—3D		
11	Tue, Nov 5	Pythagorean Theorem and Application		
	Thu, Nov 7	Review		
12	Tue, Nov 12	Exam 3		
	Thu, Nov 14	Percentages		
13	Tue, Nov 19	Statistic Concepts		
	Thu, Nov 21	Statistic Graphs		
14	Tue, Nov 26	Descriptive Statistics		
		Review		
	Thu, Nov 28	Thanksgiving Break		
15	Tue, Dec 3	Exam 4		
	Thu, Dec 5	Review for the Comprehensive Final Exam		
16	Thu, Dec 12	Final Exam: 8:00 - 10:00		