## **SOUTH PLAINS COLLEGE**

MATH 0337.001 – Fundamentals of Mathematical Reasoning MW 1:00 – 2:45 PM AG103 Spring 2019 Course Syllabus

**Instructor:** Rebecca Darby

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Blackboard: https://southplainscollege.blackboard.com

**Office Hours:** As listed below or by appointment.

Monday	Tuesday	Wednesday	Thursday	Friday
2:45 - 3:15	10:00 - 10:45	2:45 - 3:15	10:00 - 10:45	9:00 - 12:00
	1:00 - 2:15		1:00 - 2:15	

## 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. Prerequisite: NCBM0105 or placement by testing. This course will not satisfy graduation requirements.

# Successful Completion:

Successful completion (C or better) of MATH0337 allows the student to become TSI-compliant in mathematics. This successful completion will allow the student to enroll into Contemporary Mathematics (MATH1332) or Statistical Methods (MATH1342). This course does NOT prepare the student for College Algebra (MATH1314) or Math for Business Majors (MATH1324).

### **Learning Outcomes:**

The course has the following learning outcomes.

- 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.
- **Proportional Reasoning**: Students will use proportional reasoning to solve problems that require ratios, rates, proportions, and scaling.
- 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.
- 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.
- **Personal Finance**: Students will understand, interpret and make decisions based on financial information that is commonly presented to consumers.
- **Civic Life**: Students will understand that quantitative information presented in the media and by other entities can sometimes be useful and sometimes be misleading.

### **Core Objectives:**

The course has the following objectives.

- **Communication**: Effectively develop, interpret, and express ideas through written, oral, and visual communication.
- **Problem solving**: Make sense of problems, develop strategies to find solutions, and persevere in solving them.
- **Reasoning**: Reason, model and make decisions with mathematical, statistical, and quantitative information.
- **Evaluation**: Critique and evaluate quantitative arguments that utilize mathematical, statistical, and quantitative information.
- **Technology**: Use appropriate technology in a given context.

### Supplies:

You will need pencils, notebook paper, 3-ring binder, and a basic four-function or scientific calculator. Graphing calculators and calculators on cell phones or other electronic devices are not allowed.

### **Important Dates:**

Classes begin on January 14th. Other important dates are listed below.

- January 21 Martin Luther King holiday. No classes.
- March 11-15 Spring Break. No classes.
- April 22 Easter Break. No classes.
- April 25 Last day to drop spring semester courses.
- **May 8** Final Exam (10:15 AM 12:15 PM)

#### Attendance:

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 being tardy will be considered 1/2 absence. You may be dropped from this course with a grade of X or F if you are absent four consecutive classes or if you exceed five absences (for any reason).

## Homework & Class Work:

Homework will be assigned regularly and each assignment must be submitted at the beginning of class on the day that it is due. Late homework will not be accepted. Classwork will be given and graded as well.

## Quizzes:

Quizzes will be given at the beginning of the class period on Wednesdays. No quizzes will be given during an exam week. Thus, there will be no quiz on the following Wednesdays: February 13, March 6, March 13 (Spring Break), April 8, and May 1. No make up quizzes will be given.

#### 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 going to miss a unit exam, contact your instructor immediately, preferably prior to the exam. Makeup exams are given only under extremely rare and documented circumstances. Once you begin an exam, you cannot leave the room until the exam is submitted for grading.

### **Grading Scheme:**

Your grade in the course will be comprised of scores from the following categories.

- Exams (Each exam will count 15% for a total of 60%)
  The following exam dates are tentative. Any changes to these dates will be announced in class.
  - Exam 1 Wednesday, February 13
  - Exam 2 Wednesday, March 6
  - Exam 3 Wednesday, April 8
  - Exam 4 Monday, April 29
- Quizzes (10%)
- Homework/Classwork (10%)
- Comprehensive Final Exam (20%)

The final exam will take place on Wednesday, May 8 from 10:15 AM - 12:15 PM.

This course and its grade will be recorded on your official transcript. Grades will be posted on Blackboard throughout the semester.

### Where to Get Help:

Math can be challenging occasionally. Here are ways in which you can receive quality assistance.

- I am available during my office hours and by appointment. <u>Please email me or come to</u> see me for assistance if needed.
- **FREE** tutoring is available in M116 (math building) on the Levelland campus and in RC206 (building 2) on the Reese campus.
- **Khan Academy** is a great free online resource for students who need help with math. The website has excellent instructional videos on every math topic.

# Responsibilities & Expectations:

- 1. Attend class regularly, be on time, and be prepared to learn.
- 2. Be attentive, take notes, and fully participate in class.
- 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. Always turn in your homework on time.
- 4. Food, drink, and tobacco products are not allowed in class, with the exception of bottled water.
- 5. Cell phones and any other electronic devices must be silenced and put away while you're in the classroom.
- 6. Be respectful to others in the classroom 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.

### **Equal Opportunity:**

South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability, or age.

## 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 Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

## 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, please refer to the SPC policy at: (http://www.southplainscollege.edu/human\_resources/policy\_procedure/hhc.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.

### **Sexual Misconduct**:

As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help. It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me. Dr. Lynne Cleavinger, the Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach Dr. Cleavinger at 716-2563 or lcleavinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.