



RANGER COLLEGE

COURSE SYLLABUS

Elementary Statistics

MATH 1342

3 credit hours

[Semester]

INSTRUCTOR:

Rebecca Plowman

Math 1342– [Semester]

INSTRUCTOR: Rebecca Plowman

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HOURS: TBA

1. Texas Core Curriculum Statement of Purpose

Students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

2. Course Description

Presentation and interpretation of data, probability, sampling, correlation and regression, analysis of variance, and the use of statistical software.

3. Required Background or Prerequisites

There are no stated prerequisites for this course. Successful completion of DMAT 0323 or equivalent is highly desired. (Must be TSI complete in mathematics)

4. Required Textbook and Material

Neil A Weiss, Elementary Statistics, 9 th Edition, Pearson Publishing

ISBN 13: 9780321989390

MyStatLab Access Code, hand-held scientific calculator (TI-30 or equivalent recommended) program, there is no MyStatLab access code kit with the book. You MUST purchase the access code kit separately.

5. Course Purpose

This course focuses on quantitative literacy in logic, patterns, and

relationships. The course involves the understanding of key mathematical concepts and the application of appropriate quantitative

tools to everyday experiences.

6. Learning Outcomes

Upon successful completion of this course, the student will:

- 1). Explain the use of data collection and statistics as tools to reach reasonable conclusions.
- 2). Recognize, examine and interpret the basic principles of describing and presenting data.
- 3). Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
- 4). Explain the role of probability in statistics.
- 5). Examine, analyze and compare various sampling distributions for both discrete and continuous random variables.
- 6). Describe and compute confidence intervals.
- 7). Solve linear regression and correlation problems.
- 8). Perform hypothesis testing using statistical methods.

7. Core Objectives

This course meets the following of the six Core Objectives established by Texas:

- Critical Thinking Skills (CT)** – Creative thinking, innovation, inquiry, and analysis; evaluation and synthesis of information
- Communication Skills (COM)** – effective development, interpretation and expression of ideas through written, oral, and visual communication
- Empirical and Quantitative Skills (EQS)** – The manipulation and analysis of numerical data or observable facts resulting in informed conclusions
- Teamwork (TW)** – The ability to consider different points of view and to work effectively with others to support a shared purpose or goal

- Social Responsibility (SR)** – Intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
- Personal Responsibility (PR)** – The ability to connect choices, actions, and consequences to ethical decision-making

8. Methods of Instruction

This is a multimedia class. Media/methods include informal lectures, discussion, computer managed homework, computer delivered tutorials, and distance delivery via MyMathLab.

9. Methods of Assessment

In order to be successful in Statistics, a student must achieve a 70% or better for an overall grade, with the final exam accounting for 25% of the overall grade, OR successfully pass the TSI Math assessment. Failure to obtain either academic stipulation will result in repeating the course.

Grading scale: A = 90-100% B = 80-89 C = 70-79 D = 60-69 F = Below 60

- **Mini-Projects (20%) (CT, COM, EQS, PR)**-There will be 3 – 5 take home mini-projects which usually include verbal response items as well as typical numerical and algebraic problems. This projects involve data analysis and interpretation.
- **Homework (15%) (CT, COM, EQS, PR)**- MyMathLab is an online homework system. Assignments will be assigned after material is covered in class. The overall grade you receive on the homework will be your homework grade. This will require you to purchase a code through the bookstore or through Pearson when creating an account. (Codes can be purchased cheaper through Amazon or other sites, however you must be careful and see that you order the correct code. Some students have discovered cheaper apps as well.) To create your MyMathLab account, you must access MyMathLab through your course on Blackboard.
- **Major Exams (40%) (CT, COM, EQS, PR)**-There will be 2 class period length exams, each covering multiple chapters from the textbook. If you are absent the day of a exam, you have only one week to come in and take the exam.
- **Final Exam (25%) (CT, COM, EQS, PR)**-This exam will be comprehensive departmental final over the entire course content.

10. Course/Classroom Policies

Class participation is strongly encouraged for optimal learning.

Academic Dishonesty - A student found to be cheating or copying on an exam or quiz will be given a grade of "0". Repeated acts of cheating may result in being dropped from class with a grade of "F".

Student Behavior - Students will behave as mature adults and exhibit proper classroom decorum. Students will not cause any distractions that might prevent other students from learning. Students that deviate from this policy will not be permitted to remain in class.

Available Support Services - the Learning Resource Center has books, videos, and computer software that may be used as a supplement for this class. Tutors are also available (see counselor).

Passing the Math portion of the TSI - Students who pass the TSI during the semester will have the option of dropping the class with a "W" or negotiating with the instructor a grade in class. The class may not be dropped if the student has not completed all portions of the TSI and the student is not enrolled in another developmental class.

11. Course Outline/Schedule

Weeks 1 and 3 :	Chapters 1 - 2
Weeks 4 and 6	Chapters 3 - 4
Weeks 5 and 7	Chapters 5 - 6
Weeks 8 and 10	Chapters 7 – 8
Weeks 11 and 14	Chapter 9
Week 15	Final Exam

XII. Non-Discrimination Statement

Admissions, employment, and program policies of Ranger College are nondiscriminatory in regard to race, creed, color, sex, age, disability, and national origin.

XIII. ADA Statement

Ranger College provides a variety of services for students with learning and/or physical disabilities. Students are responsible for making initial contact with the Ranger College Counselor, Gabe Lewis (glewis@rangercollege.edu). It is advisable to make this contact before or immediately after the semester.

14. Revision of Syllabus

The content in this syllabus is subject to change based upon the needs of a particular class. Any revisions will be distributed in writing.

