RANGER COLLEGE
STEPHENVILLE, TEXAS

COURSE SYLLABUS

Elementary Statistics

MATH 1342

3 credit hours

INSTRUCTOR:

Dr. Norman Fletcher

Math 1342

INSTRUCTOR: Dr. Norman Fletcher
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OFFICE: Science No. 1, RC
PHONE: 254 – 647 – 3234, ext. 7031
HOURS: Monday – Wednesday 2:00 – 3:30
Tuesday – Thursday   10:00 – 12:00 and 1:00 – 3:00

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.

4.   **Required Textbook and Course Material**
Neil A Weiss, Elementary Statistics, 9th Edition, Pearson Publishing
ISBN 13: 9780321989390
MyStatLab Access Code, hand-held scientific calculator
(TI-30 or equivalent recommended)
Note: If you acquired your book through the "includED" program, there is no MyStatLab access code kit with the book. You <u>MUST </u>purchase the access code kit separtately.

5.   **Course Purpose**
This course focuses on quantitative literacy in logic, patterns, and relationships. The course involves the understanding of key mathe-

matical 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 describe-ing 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 directly meets the following of the six Core Objectives:

⊗   **Critical Thinking Skills (CT) –** Creative thinking, innovation, inquiry, and analysis; evaluation and synthesis of information.

⊗   **Communication Skills (COM) –** Effective development, inter-pretation 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 may include informal lecture/demonstration, computer delivered homework and tutorials, Power Point units, and classroom manipulatives. At least one assignment will be conducted in which students will work in three or four member teams to accomplish specific objectives. An example could be for teams to be assigned a specific population and variable, to gather a sample from that population, to compute the mean and standard deviation of the sample, and to deliver a summary report to the entire class.

9. **Methods of Assessment**
   · **Quizzes (20%) (CT, COM, EQS, PR) –** There will be 3 – 5 short in-class quizzes which usually include verbal response items as well as typical numerical/statistical problems.
   · **MyStatLab (20%) (CT, COM, EQS, PR) –** This grade component will be determined by combining the percent completion of all assignments with the composite average of the assignments completed.
   · **Major Exams (35%) (CT, COM, EQS, PR) –** There will be 2 -5 class period length exams, each covering multiple chapters from the textbook.
   · **Final Exam (25%) (CT, COM, EQS, PR) –** This is a comprehensive exam covering the entire content of the course.
     Grading Scale: A=90-100% B=80-89% C=70-79% D=60-69% F<60%

10.   Classroom Policies/procedures

- Regular and punctual attendance in all classes is considered essential for optimum academic success.
- Students are expected to be seated by the beginning of the class
- If a student has the equivalence of three weeks of unexcused absences, the student may be dropped with a grade of F (Ranger College Catalog).
- Excessive tardiness (3) may be considered as an absence.
- It is the responsibility of the student to inform the instructor of an excused absence. An absence may be excused by the Dean for participation in an authorized college activity or for a valid medical reason.
- Any student who is disruptive to the class will be dismissed from the class and may be dropped from the course. **NOTE** Students are not permitted to exit and reenter class without the professor's prior approval. Any disruptive classroom behavior will be reported to the Dean of Student Services (Student Handbook).
- Any student found with unauthorized material(s) such as cheat sheets, electronic devices, etc. during a quiz/exam or copying from another student's work will be subject to disciplinary action.
- Please do not bring cell phones, ipods, or other electronic devices to class or be sure they are turned off. Computers (lap tops) may be used with special permission and only for math class material.
- No use of tobacco products is permitted in any campus buildings.

11.   Course Outline/Schedule
Weeks 1 – 3   Chapters 1 - 2
Weeks 4 – 6   Chapters 3 - 4
Weeks 7 – 8   Chapters 5 - 6
Weeks 9 – 10   Chapters 7 – 8
Weeks 11 – 14   Chapter 9
Week 15   Final Exam

12. **Non-Discrimination Statement**
Admission, employment, and program policies of Ranger College are non-discriminatory with regard to race, creed, color, sex, age, disability, and national origin.

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

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.