RANGER COLLEGE STEPHENVILLE, TEXAS

COURSE SYLLABUS

College Algebra

MATH 1314

3 credit hours

INSTRUCTOR:

Courtney Bozeman

Newcastle ISD

MATH 1314

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EMAIL: cbozeman@rangercollege.edu

OFFICE: Newcastle ISD

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

Study of quadratics; polynomial, rational, exponential, and logarithmic functions; systems of equations; progressions; sequences and series; conic sections; and, matrices and determinants.

3. Required Background or Prerequisites

Two years of high school algebra or a C or better in DMAT 0323 or equivalent.

4. Required Textbook and Course Materials

College Algebra: Lial, Hornsby, Schneider - provide for by Newcastle ISD

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). Demonstrate and apply knowledge of properties of functions,

Including domain and range, operations, compositions, and Inverses.

2). Recognize and apply polynomial, rational, radical, exponential

and logarithmic functions and solve related equations.

3). Apply graphing techniques.

4). Evaluate all roots of higher degree polynomial and rational functions.

5). Recognize, solve, and apply systems of linear equations using matrices.

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, know-

ledge 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 face to face class. New material and assignments will be given every Monday, Wednesday and Friday unless otherwise noted on the outline. Tuesday and Thursday will be designated work days for students to complete assignments and ask questions for clarification.

9. Methods of Assessment

There will be five unit exams and a cumulative final exam. The grade will be determined by the average of these six test scores. The final exam may replace the lowest unit exam if the final exam score is higher than the lowest unit exam. Everyone must take the final exam or be given a zero for the final exam grade.

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 from the class with a grade of F (Ranger College General 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 dropped from the course. NOTE Students are not permitted to exit and reenter class without the professor's prior approval. Any student misconduct will be reported to the Dean of Student Services (See 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 anywhere on campus.

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. 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 immed- iately after the semester begins.