



RANGER COLLEGE
STEPHENVILLE, TEXAS

COURSE SYLLABUS

Contemporary Mathematics

MATH 1332

3 credit hours

INSTRUCTOR:

Isaac Voegtle

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EMAIL: ivoegtle@rangercollege.edu
OFFICE: Ranger: Connected to Room 3 in Gladwell/Science Building
Erath: Across the hall from the Cosmetology entrance
HOURS: MW, Erath, 10:00-10:30, 12:00-13:30
TR, Ranger, 10:30-11:00, 12:25-13:40

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

Topics may include introductory treatments of sets, logic, number systems, number theory, relations, functions, probability, and statistics.

3. Required Background or Prerequisites

Two years of high school algebra and one year of high school geometry or a grade of B or better in DMAT 0323 or equivalent. This course does not satisfy the math requirement for the Associate of Science degree.

4. Required Textbook and Course Material

Miller, Heeren, Hornsby, Heeren Mathematical Ideas, Thirteenth Edition:
ISBN 13: 9780321977076, scientific calculator (TI-30 recommended)
MyMathLab Access Code, Pearson Publishing

Note: If you acquired your book through the “included” program there is no MyMathLab 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) Apply the language and notation of sets.
- 2) Determine the validity of an argument or statement and provide mathematical evidence.
- 3) Solve problems in mathematics of finance.
- 4) Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
- 5) Interpret and analyze various representations of data.

- 6) Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to personal finance, health literacy, and civic engagement.

7. Core Objectives

This course directly meets the following of the six Core Objectives:

- 1) **Critical Thinking Skills (CT)** – Creative thinking, innovation, inquiry, and analysis; evaluation and synthesis of information.
- 2) **Communication Skills (COM)** – Effective development, interpretation and expression of ideas through written, oral, and visual communication.
- 3) **Empirical and Quantitative Skills (EQS)** – The manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
- 4) **Teamwork (TW)** – The ability to consider different points of view and to work effectively with others to support a shared purpose or goal.
- 5) **Social Responsibility (SR)** – Intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.
- 6) **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 may include informal lectures, discussion, PowerPoints, computer managed homework, computer delivered tutorials, limited self – pacing, instructional television, and distance delivery via Blackboard. 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 gather two and three dimensional objects and determine which contain dimensions forming the “Golden Ratio.”

9. Methods of Assessment

- 1) **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 and algebraic problems
- 2) **MyMathLab (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.
- 3) **Major Exams (35%) (CT, COM, EQS, PR)**-There will be 2 – 5 class period length exams, each covering multiple chapters from the textbook.
- 4) **Final Exam (25%) (CT, COM, EQS, PR)**-This exam will be comprehensive over the entire course content.

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

10. Classroom Policies/procedures

- 1) Regular and punctual attendance in all classes is considered essential for optimum academic success.

- 2) Students are expected to be seated by the beginning of the class.
- 3) If a student has the equivalence of three weeks of unofficial absences the student may be dropped from the class with a grade of F (Ranger College General Catalog).
- 4) Excessive tardiness (6) may be considered as an absence.
- 5) 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.
- 6) Any student who is disruptive to the class will be dismissed from the class and may be dropped from the course. Any student misconduct will be reported to the Dean of Student Services (See Student Handbook.)
- 7) 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.
- 8) 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.
- 9) No use of tobacco products is permitted in any campus buildings.

11. Course Outline/Schedule

Weeks 1 – 2	Chapter 2
Weeks 3 – 5	Chapters 4-5
Weeks 6 – 7	Chapter 3
Weeks 8 – 9	Chapter 9
Week 10	Chapter 10
Week 11	Chapter 11
Weeks 12 – 13	Chapter 12
Week 14	Chapter 13
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. Students are responsible for making initial contact with the Ranger College Counselor, Gabe Lewis (glewis@rangercollege.edu). It is advisable to make contact 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 to class members in writing.