Math-201: College Elementary Algebra REEDLEY COLLEGE

Instructor: Ms. Francilyn O'Brien SUMMER 2016

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Time: MTWTh 8:00-11:35 am

COURSE DESCRIPTION:

This is a first course in elementary algebra which will cover topics such as: algebraic expressions, linear equations and inequalities, linear equations and inequalities in two variables, exponents and polynomials, factoring and rational expressions.

Subject Prerequisites: Math 250, or equivalent

REQUIRED TEXTBOOK: Woodbury George, Elementary and Intermediate Algebra,

Addison Wesley, 4th ed,; MyMathLab ID: Obrien20209

REQUIRED MATERIALS: Notebook, pencils, ¹/₄" graph paper, eraser, ruler

<u>ATTENDANCE:</u> Students are expected to attend all class meetings, be on time, and be in class the <u>entire</u> class session. **STUDENTS LEAVING CLASS BEFORE THE END OF CLASS WILL BE COUNTED AS BEING ABSENT!** Four (4) absences may result in a drop from the course. However, <u>if you decide to drop the course</u>, <u>it is your responsibility to</u>
<u>make the drop official in the Administrations and Records office or possibly receive a grade of</u>
<u>F.</u>

Behavioral Standards: Personal needs (i.e., using the restroom, getting a drink, sharpening a pencil) must be taken care of before class begins. Please turn your phone off when entering the class. You may not use your phone as a calculator. No ipods and other unnecessary electronic gadget are allowed to be used during class. Do not bring guests to class. Loud, not subject-related conversations are not allowed during class.

HOW TO CONTACT ME: As a part-time instructor for Reedley College, I do not have an office and office hours. If you have any important message, please email me.

TARDINESS: Students are expected to be on time. It is distracting, rude and unfair to fellow classmates and to the instructor when a student is late. If you come in late, please see me before leaving or will be counted as absent.

HOMEWORK: All homework must be done on MYMATHLAB and submitted on or before the due date. Your work should be done in a notebook so you can go back any time to review

and for us to help you with your difficulties and errors. You need to get at least 70% before you can proceed to the next homework.

TESTS: Chapter tests are online. Midterm and Finals are in class.

GRADING: Homework/CW 20%; Tests on MyMathLab 20%; Midterm & Final Exam: 60% A 90 - 100; B 80 - 89; C 70 - 79; D 60 - 69; F 0 - 59

SPECIAL NEEDS REQUESTS: If you have a verified need for an academic accommodation or materials in alternate media ((i.e. Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Academic Dishonesty

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references of all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights.

Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

COURSE OUTCOMES:

Upon completion of this course, students will be able to:

a. apply real number operations to simplify and factor algebraic expressions.

- b. solve linear and quadratic equations.
- c. use graphic representation of an equation in two variables to solve appropriate problems.

COURSE OBJECTIVES:

In the process of completing this course, students will:

- d. recognize the real number system, its subsets and how to perform operations on numbers from these subsets.
- e. simplify algebraic expressions and solve linear equations and inequalities
- f. graph linear equations in two variables and solve systems of linear equations.
- g. simplify expressions using the properties of exponents and perform operations with polynomials.
- h. factor algebraic expressions and solve equations of degree greater than one. perform arithmetic operations on rational expressions and solve equations containing rational expressions.

COURSE OUTLINE:

- A. Number Systems and Operations
- 1. The set of real numbers and its subsets
- 2. Addition, subtraction, multiplication and division of real numbers
- B. Linear Equations and Inequalities
- 1. Simplifying expressions
- 2. Solving equations using the addition and multiplication properties of equality
- 3. Applying the addition and multiplication properties to solve formulas
- 4. Applying the addition and multiplication properties to solve inequalities
- 5. Applications
- C. Graphing and Linear Systems
- 1. Graphing ordered pairs
- 2. Finding solutions to linear equations in two variables
- 3. Finding axis intercepts and using them to graph the equation
- 4. Solving systems by graphing, addition, and substitution method
- 5. applications of systems
- D. Exponents and Polynomials
- 1. Multiplication and division with exponents
- 2. Operations with monomials
- 3. Addition, subtractions, multiplication, and division of polynomials
- 4. Special products
- E. Factoring
- 1. Greatest common factor
- 2. Factoring by grouping
- 3. Factoring trinomials
- 4. Special factoring
- 5. Solving equations by factoring
- 6. Applications
- F. Rational Expressions
- 1. Reducing rational expressions
- 2. Multiplication, division, addition, and subtraction of rational expressions
- 3. Solving equations with rational expressions
- 4. Solving proportions
- 5. Applications
- 6. Simplifying complex fractions

Note: This syllabus may be updated anytime as needed.