Office: FEM 1E Office HRS: MTW 10:00-11:00, or by appt. Phone: (559) 638-3641 ext. 3744 E-Mail: doug.gong@reedleycollege.edu

Math 201-59900: Elementary Algebra

Class meets: Daily (11:00-11:50) RM: FEM 4

Text: Elementary and Intermediate Algebra with MyLab 3/e, Woodbury

**Prerequisite**: Math 250 or 256 or its equivalent. **Basic Skills Advisories**: Eligibility for English 126.

## Description

Math 201 is a first course in elementary algebra including: algebraic expressions, linear equations and inequalities, linear equations and inequalities in two variables, exponents and polynomials, factoring and rational expressions.

## **Expectations / Responsibilities**

### Instructor

- Motivate and inspire student success.
- Provide a classroom climate in which the student takes responsibility for learning.
- Provide the necessary instruction and model the quality of work to be successful in Math 201.
- Clearly communicate progress being made in a timely fashion.

# Student

- Follow the class rule **Be Nice**.
- Be in each class on time with *full participation* from *start to finish*.
- Stay off of your phone while in class.
- Study Algebra daily.
- Learn the material that is taught and *seek additional assistance* when necessary.
- All written work must be neat, complete, concise and accurate to receive full credit.
- Promptly communicate any class related issues.
- If you miss any class time it may be counted as an absence.
- If you have more than 3 absences, you may be dropped.
- If you do not have *PAID ACCESS* to MyLAB for this course by 8/29, you may be dropped.
- If your *HOMEWORK AVERAGE* is below 90% on 10/10, you may be dropped.
- If your **TEST AVERAGE** is below 60% on 10/10, you may be dropped.

## **Grading**

Scale A 90-100% B 80-89% C 70-79% D 60-69%

**Tests 75%** There will be 4 tests and a comprehensive final. There are **no make-up tests**. A test may be taken early with prior approval.

Homework A majority of the homework assignments will be completed on Course
25% Compass. Written assignments will be collected as assigned. No late homework is accepted.

### **Academic Dishonesty**

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, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying 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 for 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 the 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.

**NOTE**: 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 or section 504 of the Rehabilitation act please contact me as soon as possible.

Please refer to SCCCD policies for guidance on all matters relating to this course.

## **Objectives**

In the process of completing this course, students will:

- A. recognize the real number system, its subsets and how to perform operations on numbers from these subsets
- B. simplify algebraic expressions and solve linear equations and inequalities
- C. graph linear equations in two variables and solve systems of linear equations
- D. simplify expressions using the properties of exponents and perform operations with polynomials
- E. factor algebraic expressions and solve equations of degree greater than one
- F. 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