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

Math 101-54331: Elementary Algebra

Class meets: MWF (11:00-11:50) RM# CCI 205

Text: Elementary and Intermediate Algebra with Course Compass 2/e, Woodbury

Prerequisite: Math 101

Basic Skills Advisories: Eligibility for English 126.

Description

This course will deal with many algebraic concepts including: equations and inequalities in two variables, rational exponents and roots, quadratic functions, exponential and logarithmic functions, and conic sections.

Expectations / Responsibilities

Instructor

- 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 103.
- Clearly communicate progress being made in a timely fashion.
- Cancelled classes will be posted on Blackboard and the Reedley College website.

Student

- Follow the class rule **Be Nice**.
- Complete assignments on **Course Compass** by the due date.
- Only *enrolled students* may attend class.
- Be in each class on time with *full participation* from *start to finish*.
- Study Algebra daily.
- Learn the material that is taught and *seek additional assistance* when necessary.
- Promptly communicate any class related issues.
- As per Reedley College policy **NO FOOD OR BEVERAGES** in the classroom.
- Students are responsible for officially dropping the class.

Attendance

- Be on time every day.
- If you are tardy, verify that you have been marked present.
- Leaving early may be counted as an absence.
- You may be dropped if you have more than 3 absences.

Important Dates

January 28, 2011	F	Last day to register for a full-term fall class
January 28, 2011	F	Last day to drop a fall full-term class to avoid a "W"
February 11, 2011	F	Last day to change a class to/from Pass/No Pass
March 11, 2011	F	Last day to drop a full-term class to avoid a grade
May 16, 2011	M	Final Exam 11-1 AM in CCI-205

Grading

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

Tests 70% There will be five tests including a final. There are **no make-up tests**.

A test may be taken early with <u>prior approval</u>.

Scheduled Test Dates: 1/24, 2/16, 3/18, 4/15, 5/16

Homework A majority of the homework assignments will be completed on Course

15% Compass. Written assignments will be collected as assigned.

Quizzes 10% Quizzes may be online or in class. There are no make-up quizzes.

Notes Notes will be graded periodically throughout the semester. Notes will

5% be scored based on completeness and neatness.

*Test Dates are subject to change.

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.

COURSE OBJECTIVES

In the process of completing this course, students will:

- A) use function notation and the properties of lines and linear inequalities.
- B) simplify radical expressions and perform operations on radical expressions.
- C) graph parabolas and solve quadratic equations.
- D) use the properties of exponents and logarithmic functions to change the base of a logarithm.
- E) generalize arithmetic and geometric sequences and find the k^h term of a binomial expansion.
- F) manipulate and graph equations of conic sections.

COURSE OUTLINE

- A. Equations and Inequalities in Two Variables
 - 1. Slope of a line
 - 2. The equation of a line
 - 3. Linear inequalities in two variables
 - 4. Algebra using function notation
- B. Rational Exponents and Roots
 - 1. Rational exponents
 - 2. Simplified form for radicals
 - 3. Addition, subtraction, multiplication, and division of radical expressions
 - 4. Equations with radicals
 - 5. Complex numbers
- C. Quadratic Functions
 - 1. Completing the square
 - 2. The quadratic function
 - 3. Graphing Parabolas
 - 4. Quadratic Inequalities
- D Exponential and Logarithmic Functions
 - 1. Exponential Functions
 - 2. The Inverse of a function
 - 3. Logarithms and their properties
 - 4. Exponential equations and change of base
- E. Sequences and Series
 - 1. Arithmetic and geometric sequences
 - 2. Series
 - 3. Binomial Expansion
- F. Conic Sections
 - 1. Circle
 - 2. Ellipses and Hyperbolas
 - 3. Second-degree inequalities and non-linear systems