

**Office:** FEM 1E**Office HRS:** By Appointment**Phone:** (559) 638-3641 ext. 3744**E-Mail:** doug.gong@reedleycollege.edu**Math 103-56091:** Intermediate Algebra**Class meets:** M-F (11:00-12:50) RM# CCI 201**Text:** Elementary and Intermediate Algebra with Course Compass 3/e, Woodbury**Prerequisite:** Math 201**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.

**Student**

- Follow the class rule – **Be Nice**.
- 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.
- 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

**Important Dates**

March 20, 2013	T	Last day to register for a full-term fall class
March 20, 2013	T	Last day to drop a fall full-term class to avoid a "W"
May 13, 2013	F	<b>Final Exam 11:00-12:50 in CCI 201</b>

**Grading**

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

**Tests 70%**    There will be between 4 and 6 tests plus a final. There are **no make-up tests**. A test may be taken early with prior approval.

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

**Quizzes 5%**    Quizzes may be online or in class. There are **no make-up quizzes**.

\*Test Dates are subject to change.

**Test Policy**

There are no make-ups Tests. A test may be taken early with prior authorization.

No Phone.

Use a pencil.

Bring a scientific calculator.

Use the restroom before beginning your exam.

**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  $k^{\text{th}}$  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