

**Math 103-52989**

Mr. Jim Gilmore

**Office:** FEM-1M

**Office Hours:** M, T, W 10:00-10:50

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**Intermediate Algebra WEB**

**REEDLEY COLLEGE**

Fall 2012

**Meeting Room: FEM 4 and FEM 8**

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**Course 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.

**Basic Skills Advisories:** Eligibility for ENGL 126

**Subject Prerequisites:** Math 201(formally known as 101) or Equivalent

**TEXT:** (Optional) George Woodbury, Elementary and Intermediate Algebra, Pearson/Addison Wesley, 3<sup>rd</sup> Edition, 2012.

**Notes:** Notes for this class will be available on Blackboard or can be bought in the bookstore.

**Required Web Access:** Course Compass can be purchased from the bookstore with text or from [www.coursecompass.com](http://www.coursecompass.com) .

**Course Compass** Class code is: **gilmore96737**

**ATTENDANCE:** Students are expected to attend all class meetings, be on time, and be in class the entire class session. Calling me to tell me you will be absent **does not** excuse you. If you decide to drop the course, it is **your** responsibility to make the drop official in the Administrations and Records office or else possibly receive a grade of **F**.

**Behavioral Standards:** Your classmates and I would greatly appreciate that students in the class take care of any personal needs (i.e., using the restroom, getting a drink, sharpening a pencil) before class begins. Please turn your phone off when entering the class. You may **not** use your phone as a calculator. I would appreciate that you not bring guests to class.

**NOTE:** The drop deadline is **October 12, 2012**.

**HOMEWORK:** Homework is done using CourseCompass on the computer. **NO LATE HOMEWORK WILL BE ACCEPTED!** Students must be enrolled and satisfactorily completing homework by the end of the first week or they will be dropped. When a student has not satisfactorily completed 3 homework assignments they will be dropped. You are required to get 85% on an assignment before moving to the next assignment. Any assignment that is not done on time will receive a grade of 0%.

**TESTS:** There are no makeup exams for missed tests.

**GRADING:**

- *Homework:* All of your homework scores will be worth the same percentage. So homework worth 10 points and homework worth 15 points will count the same. Your Homework is worth 20% of your overall grade
- *Online Tests:* All of your online test percentages will be averaged. The online tests are worth 5% of your overall grade.
- *In Class Tests:* All of your in class test percentages will be averaged. Your in class Tests are worth 75% of the overall grade.

<u>Percent of Total Points</u>	<u>Grade</u>
89-100	A
78-88	B
65-77	C
55-64	D
0-54	F

**WHERE TO FIND YOUR GRADE:**

- Available at <http://sc.webgrade.classmanager.com/ReedleyCollege/> Your class will be identified by schedule number. Username and password is sent to your school email that you have on record with Blackboard.

**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, 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 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 Objectives**

In the process of completing this course, the student will:

- A. Use the properties of lines and linear inequalities, and apply operations on functions.
- B. Simplify radical and complex expressions and perform operations on them.
- C. Solve quadratic equations using various techniques including factoring and quadratic formula, and graph parabolas.
- D. Apply the properties of exponents and logarithmic functions to change the base of a logarithm.
- E. Manipulate and graph equations of conic sections.
- F. Optional Topics (if time permits) Generalize arithmetic and geometric sequences and find the  $k$ th term of a binomial expansion.

### **Course Outcomes**

Upon completing this course students will demonstrate the ability to:

- A. Simplify and/or factor mathematical expressions into forms more conducive to analysis.
- B. Solve equations introduced in Intermediate Algebra (linear, quadratic, exponential, logarithmic, and radical).
- C. Graph functions and relations introduced in Intermediate Algebra (linear, quadratic, exponential, logarithmic, and radical).
- D. Apply Intermediate Algebra topics (linear, quadratic, exponential, logarithmic, and radical functions) to solve real-life problems.

## **COURSE CONTENT 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. Operations on functions
  
- B. Rational Exponents and Roots
  - 1. Rational exponents
  - 2. Simplified form for radicals
  - 3. Arithmetic operations on radical expressions
  - 4. Equations with radicals
  - 5. Complex numbers
  
- C. Quadratic Functions
  - 1. Quadratic equations
  - 2. Graphing parabolas
  
- D. Exponential and Logarithmic Functions
  - 1. Exponential Functions
  - 2. The Inverse of a function
  - 3. Logarithms and their properties
  - 4. Exponential and logarithmic equations and change of base
  
- E. Conic Sections
  - 1. Circle
  - 2. Ellipses and Hyperbolas
  
- F. Optional Topics (if time permits)
  - 1. Quadratic Function
  - 2. Quadratic inequalities
  - 3. Second-degree inequalities and non-linear systems
  
- G. Sequences and Series
  - 1. Arithmetic and geometric sequences
  - 2. Series
  - 3. Binomial Expansion

### *Important Dates*

August 13	Class Begins
August 14	FEM 4 6:00 PM Orientation
September 3	Labor Day
September 11	FEM 4 6:00 Test on Chapters 8 and 9
October 12	Last day to drop
October 23	FEM 4 6:00 Test on Chapters 10 and 11
November 12	Veterans Day
November 13	FEM 8 6:00 Test on Chapter 12
November 22-23	Thanksgiving
December 11	FEM 8 6:00 PM Tests on Chapter 13 and Comprehensive final

All meetings are on the Reedley college campus. These meetings are not optional and the times are fixed. Please be sure that you are available on these dates. The only other time by arrangement is the same Tuesday at 10:00 AM. I will not make any other arrangements to take the mandatory tests or the orientation.