Math 103-52873 WEB

Intermediate Algebra

REEDLEY COLLEGE

Spring 2014

Mr. Jim Gilmore **Office**: FEM-1M

Office Hours: M 10:00, T 10:00, W 12:00

Meeting Rooms: FEM 4 E-Mail: jim.gilmore@reedleycollege.edu

<u>Course Description:</u> 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,

3rd Edition, 2012.

Notes: (Optional) Notes for this class will be available in the bookstore.

Required Web Access: Course Compass can be purchased from the bookstore with text or from www.coursecompass.com.

Course Compass:

For the WEB Class the code is: gilmore48988

ATTENDANCE: Students are expected to attend all class meetings, be on time. 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 **March 14, 2014**.

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 90% on an assignment before moving to the next assignment.

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 24% of your overall grade. Each Chapter is 6% of that total.
- *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 71% of the overall grade.

| Percent of Total Points | <u>Grade</u> |
|-------------------------|--------------|
| 89-100 | A |
| 78-88 | В |
| 68-77 | C |
| 60-67 | D |
| 0-59 | 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 kth 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

January 14 Orientation in CCI 205 from 7:00-9:00
February 4 Exam in CCI 205 from 7:00-9:00
March 11 Exam in CCI 205 from 7:00-9:00
April 22 Exam in CCI 205 from 7:00-9:00
May 20 Final Exam in CCI 205 from 7:00-9:00

The final is a test. Be sure you plan to be there!

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 Monday before at 10:00 AM or 12:00PM. I will not make any other arrangements to take the mandatory tests or the orientation.

How to send an Email to Mr. Gilmore

Read the syllabus. Often, the question you would like to ask has already been answered in the material I have provided for you.

Use your Reedley College email. I am deluged with emails every day, and by using your school account, you'll have a better chance of avoiding the spam filter. Last semester I received about 800 emails from students.

Your Subject line should be the class name and time of the class only.

• Example: Math 103 8:00 AM

This information helps me organize and prioritize student emails. The section information is especially important since I often teach multiple sections of the same course.

Always use a greeting. Do not begin with "Hey" or similar colloquialisms. You should use "Dear Mr. Gilmore:" **Briefly and politely state the reason you are emailing.** Offer only as much information as is relevant to the situation. Get to the point right away.

- Name the assignment or projects you are referring to instead of using pronouns or phrases, such as "this
 assignment".
- Example: Homework problem number 7 in section 7.1.

If you are emailing with a problem, suggest a solution. Be considerate, however, of how your solution might create additional work for me.

Sign it with your name and your student ID number (but never your Social Security number). Use your first and last name, even if you know that I know you.

Your email should be professional. It is important to use punctuation, capitalization, and complete sentences in all email correspondence to me.

Read it over. If you do not have spell-check on your email, then you can copy the message, paste it into a word-processing program, and run spell-check there. Consider not only the mechanics, but also what you have said. Strive for a polite tone, concise language, and clear purpose.

• Allow adequate time for a reply. Follow up if more than a few days have passed and you have not gotten a response, then it is appropriate to politely ask if I received your email and had time to consider what you wrote.

If you are simply sending me information then I may not consider a reply necessary. In this case, you are done. Example: "I have the flu and will not be in class on Tuesday, but Sue will turn my paper in for me."

If your issue is not resolved then consider an office visit.

Often the tone in emails cannot be properly judged. Rather than becoming upset, a visit in person can often remedy the situation.

- Use the words "please" and "thank you"--they really help and are universally appreciated.
- Try to contact a peer first if the purpose of your email is to find out what you missed when absent.
- Recognize that requests that may take only a few seconds to write and send, may take much longer to fulfill.
- Leave enough time for a response.

