E-Mail:

COURSE DESCRIPTION: This course will deal with many algebraic concepts consistent with a second course in algebra including: equations and inequalities in two variables, rational exponents and roots, quadratic functions, exponential and logarithmic functions, and the conic sections.

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Basic Skills Advisories: Eligibility for ENGL 126

Subject Prerequisites: Math 101 or Equivalent

REQUIRED TEXT: Charles P. McKeague, Elementary and Intermediate Algebra, Saunders College Publishing, 2nd Edition, 2004.

REQUIRED NOTES: Math 103 Notes are to be purchased from the bookstore. You will need both Chapters 7-9 and then available later in the semester notes for Chapters 10-12.

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. **STUDENTS LEAVING CLASS BEFORE THE END OF CLASS WILL BE COUNTED AS BEING ABSENT! Three (3) absences** may result in a drop from the course. However, 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 January 25 2008

TARDIES: Students are expected to be on time. It is distracting, rude and unfair to fellow classmates and to the instructor when a student is late. If you are not present when roll is taken you will be counted as absent.

HOMEWORK: Some homework will be collected. Each assignment collected will be graded on completeness, neatness, and effort. Homework should be written on one side of a standard sized paper 8.5" x 11"(No spiral paper please) stapled in the upper left-hand corner, and in order. Homework should be written in pencil. Record the class name, your name, homework (chapter, section and problems), and date on each homework assignment. On graded homework, a selected few problems will be graded. You will also be given homework checks.   If you miss a homework check or are late to class, you can still take the homework check before the next class, for a possible 40% of its worth. Problems must be written out (except word problems) and all work must be shown in order to receive credit. **NO LATE HOMEWORK WILL BE ACCEPTED!** *Note: Being absent the day homework is collected does not entitle you to turn it in late!*

MAKEUP ASSIGNMENTS: An optional makeup assignment will be available for each chapter. This makeup is worth five (5) points and can be used to help makeup missed assignments, increase low homework grades or as extra credit homework points.

TESTS: There are no makeup exams for missed tests. NO EXCEPTIONS!

FINAL EXAM: A two-hour comprehensive final exam worth 1 test will be given at the end of the semester during finals week. You are required to take the final exam, however the final exam will replace your lowest test score. **Your final is on May 13 @ 6:00pm – 8:00 pm**

Students are required to participate in all class discussions and activities. You may not start the homework during class. You may not study for another class or read a book during class.

GRADING:
- *HOMEWORK:* All of your homework scores will be added up and divided by the total possible points for the semester. This number is then multiplied by 100 to give a score between 0 and 100.
- *TESTS:* All of your test percentages will be averaged. This will give you a score between 0 and 100.
- Your homework grade is worth 20% of your grade. Your test score is worth 80% of your grade. *Example:* If your homework grade is 75 and your test grade is 85, then you would compute your grade as follows:

$$(.20)(75) + (.80)(85) = 15 + 68 = 83$$

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

WHERE TO FIND YOUR GRADE:
- Occasionally your grade will be emailed to you
- Available at http://sc.webgrade.classmanager.com/ReedleyCollege/ Your class will be identified by schedule number.
- You can also find it www.reedleycollege.edu . Click on Academic Programs. Under other links click on Micrograde and Webgrade. Enter your Reedley College Student ID number and password.

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, 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 and 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 the equations of the conic sections.

Course Outcomes

Upon completion of this course, students will be able to:

A) create a linear equation given a slope and a point or two points; graph linear equations and inequalities and use function notation to find the value of expressions.

B) add, subtract, multiply, and divide radical expressions and use exponent properties and conjugate properties to simplify and solve radical expressions.

C) complete the square of a quadratic equation and use the quadratic formula to solve any quadratic equation; graph quadratic equations using translations.

D) solve exponential and logarithmic equations by using equivalent expressions; use exponential and logarithmic properties to convert between common logarithms, natural logarithms and other bases.

E) expand binomial expressions using Pascal's triangle and the binomial coefficient formula; find the nth term of a sequence of numbers.

F) graph each of the conic sections by translations; put conic equations and inequalities into the standard form.

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)   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