Reedley College
Spring 2008

Course:	Math103 - Intermediate Algebra - 3 units
Schedule #:	56023
Location:	FEM 4
Time:	12:00 to 12:50
Days:	M T W Th F (Daily)

Instruction :	January 7 to May 9
Final Exam :	Wednesday, May 14 12:00 to 1:50
End of semester:	Friday, May 16

Instructor:	Marv Watts
Office:	Building FEM room 4A
Office Hours:	**Monday to Thursday** 9:10 to 10:10 AM
Phone:	559 638-3641 ext. 3279
e-mail:	rexlex@verizon.net

Text Book:	Elementary & Intermediate Algebra 2nd edition
	by Charles P. McKeague
	Saunders College Publishing

Course Description: Math 3 is a one semester course in intermediate algebra. The course covers fundamental laws, curve plotting, linear equations, quadratic equations, negative and fractional indices, arithmetic and geometric progressions, word problems and applications, the binomial theorem, the factor theorem, the remainder theorem, synthetic division, logarithms, matrices and determinants.

Prerequisite: Prerequisites will be rigorously enforced. Math 1 [Elementary Algebra] with a grade of "C" or better.

Drop Policy: Students with **8** or more absences may be dropped from class! Every 2 tardies will count as 1 absence. It is the student's responsibility to recognize when dropping a course becomes necessary.

Drop Deadline: - Friday, March 7   The drop deadline will be at the end of the ninth week. After that date, the student must be given a letter grade.

Attendance: You are expected to attend **all** class meeting and **be on time**. If you arrive late, it is your responsibility to inform the instructor after class so your absence will be changed to a tardy. Regular attendance and completion of assignments are imperative for success. Please be on time to class. It is distracting, rude and unfair to fellow classmates when a student is late.

Calculators: Calculators are not essential. If calculators are allowed on tests, there will be no sharing of calculators.

Homework: Homework **must** be written <u>clearly</u> and <u>neatly</u> on <u>one side</u> of standard size paper **8 ½" x 11"** (*no spiral or frayed paper please*) . Pages should be **stapled** in the upper left-hand corner, and in order. Homework should be written with pencil - <u>**don't use ink!**</u> Write down the homework problem and <u>**show all**</u> steps and calculations. **No work -No credit**, unless answer is obvious. Record the class name (Math103), your name, homework (**Chapter and section**), and date on the back of each homework assignment (see example below). Each homework assignment will be worth 0 to 10 points. When collected problem assignments will be spot checked. Not all assignments will be collected. Homework will be assigned at the end of each class and usually due at the beginning of the next class meeting. Late homework (no more than one day) will receive 5 points at most. Homework grades will be averaged at the end of the semester and a final homework grade from 0 to 100 will be assigned. Remember - your homework will also be graded on **completeness** and **neatness**. If you are absent an assignment may be mailed for full credit if postmarked the same day class meets or before.

Mail to:

Reedley College
Attn. Marv Watts
995 N. Reed
Reedley, Ca 93654

Example homework: Math 3
                    your name
                    Chapter 3 Sec 4
                    date

Examination Procedures: At least 6 exams (quizzes), a final, homework, and class participation will determine your grade. There will be <u>**no make-up exams during the period of instruction**</u>!! If a student misses an exam the final may be taken to replace the missed exam. The final will be **comprehensive**. The final may also be used to replace any exam (quiz) score. No exam (quizzes) scores will be dropped. Class participation will consist of student board work, short quizzes, and oral participation. The exams will consist of problems similar to homework problems. Each exam is worth 100 points, homework & class participation is worth 100 points and the final is 100 points. Partial credit will be given on exams and final. Exams and final will generally be closed book.

Grading: The following is the grading scale:

Tentative credit for course work:

100 to 87 A	Exams 600 points
86 to 77 B	Final 100 points
76 to 67 C	Class Participation & Homework <u>100 points</u>
66 to 57 D	Approximate total possible points 800
below 57 F	

Students whose grade averages are 86, 76, and 66 may be assigned the next higher grade if they have good attendance and have taken an active roll in class (class participation)

We <u>will not meet</u> for class on the following dates:

January 21, Monday	Martin Luther King Jr. holiday
February 15, Friday	Lincoln Day holiday
February 18, Monday	Washington Day holiday
March 17 -22, Monday to Saturday	Spring Recess

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 Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Academic Dishonesty: Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Remember - <u>Drop Deadline is Friday, October 13</u>

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 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 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