

SYLLABUS

Class No: 54913
Class Hours: Daily 11:00 AM-11:50 AM
Room No: SOC-30

Instructor: Sharon Owens
Phone: 638-3641 ex-3497
Office: FEM 4D
Office Hours: Tuesday, Wednesday, and Friday: 10:00 AM - 10:50 AM
or by appointment

Course Objectives:

Students will be able to: Solve linear equations, quadratic equations; equations involving rational and radical expressions; systems of equations and inequalities; Graph linear equations and inequalities and to understand the relationship between a graph and the relationship that generates it; Understand, setup and interpret the solution of application problems.

Course Outline:

- The Basics: Notation and symbols; real numbers; addition/subtraction/multiplication/division of real numbers; properties of real numbers; subsets of real numbers; addition and subtraction with fractions.
- Linear Equations and Inequalities in One Variable: simplifying expressions; addition/multiplication properties of equality; solving linear equations; formulas; linear inequalities.
- Linear Equations and Inequalities in Two Variables: paired data and graphing ordered pairs; solutions to linear equations in two variables; graphing linear equations in two variables; intercepts; the slope of a line; finding the equation of a line; linear inequalities in two variables
- Systems of Linear Equations: solving linear systems by graphing; The elimination method; The substitution method.
- Exponents and Polynomials: multiplication/division with exponents; operations with monomials; addition/subtraction/multiplication/division of polynomials; binomial squares and other special products.
- Factoring: the greatest common factor and factoring by grouping; factoring trinomials; the difference of two squares; solving equations by factoring.
- Rational Expressions: reducing to lowest terms, addition/subtraction/multiplication/division of rational expressions; equations involving rational expressions; complex fractions; proportions; variation.
- Roots and Radicals: definitions and common roots; properties of radicals; simplified form for radicals; addition/subtraction/multiplication/division of radical expressions; equations involving radicals
- Quadratic Equations: completing the square; quadratic formula; complex numbers; complex solutions to quadratic equations; graphing parabolas

Course Prerequisite:

College Arithmetic (MATH 50) or equivalent and eligibility for English 26.

Textbook:

McKeague, Elementary Algebra; Sixth Edition. Saunders College Publishing.

Homework and assignments:

Assignments are given for each of the chapters presented in the class. The assignments vary in length depending the material covered in class. Assignments provide students with the necessary practice to acquire the skills taught in the course. Consistent and timely completion of written assignments is absolutely essential to the successful completion of the course. **Late assignments are NOT accepted.**

Each homework worth **20 points** and will be graded on **completeness, neatness, and effort** of the entire assignment. Homework should be written on 8.5" by 11" lined paper, stapled on the upper left hand corner, with class number, your name, and chapter/section number on the upper right hand corner.

To gain maximum benefit from the class, all text material should be read prior to the meeting the instructor presents the material. The assignments should be completed after the material has been presented in class and prior to the next class meeting.

Attendance:

Students are expected to attend all class meetings, be **on time**, and be in class the **entire** class session. Students leaving the class before the end of class will be counted as being absent. Your classmates and I would greatly appreciate that you take care of your personal needs (i.e., using the restroom, getting a drink...etc.) **before** class begins.

Students may be dropped from this class if they fail to attend the first class session of the semester. Any student who misses **five** classes or more may be dropped from this class. College policies on attendance may be found on Reedley College Class Schedule.

Cooperative Learning Groups:

You will do some of the work of this course in cooperative learning groups. It seems to work best if there are four students in each group. You will be working with your small group on in-class activities, homework problems, and sometimes during quizzes.

Working well in a group is an important skill which can be learned. Some of you may enjoy the group work more than others. After graduation, most of you will probably be working in jobs which will require you to function as a member of a project team. In this course, group work

- gives you an opportunity to talk about the mathematical ideas we are studying,
- provides moral support while you are working on problems, and
- offers you an opportunity to practice skills in working effectively as part of a team.

Working with your group is very important to your understanding the material in the course. Group activities include working cooperatively with each other in the group on assignments, presenting solutions for problems to the class, and answering questions on current topics.

Quizzes:

There will be unannounced short quizzes (i.e. 5 - 10 minutes) in the class. Each quiz worth **ten points**. There are **no** make-up quizzes, so attendance is very important.

Tests:

There are chapter tests at end of each chapter which worth **100 points** each. Early tests can be arranged with a very good reason. A more difficult late test can only be arranged if you have an excuse verified by an impartial party (i.e., a doctor or a court clerk).

Grading:

70% of final grade points are from the average test score.
20% of final grade points are from the average of homework
10% of final grade points are from the average of quizzes.
Final grade is assigned using following scale:

90-100 points	A
80- 89 points	B
70- 79 points	C
60- 69 points	D
< 60 points	F

Important Dates:

Class begin: Monday 01/10/2000
Drop deadline date: Friday 03/10/2000
No classes: 1/17/2000 (M), 2/18/2000 (F), 2/21/2000 (M), 4/17- 4/22 (Spring Break)
Final Examine: Wednesday 05/17/2000 10:30 a.m. - 12:30 a.m.