#### **SYLLABUS**

 Class Hours:
 CC1 200

 Class No:
 56716

 Instructor:
 Sharon Wu

 Phone:
 638-3641 ex-3497

 Office Hours:
 MWF 12 pm – 12:50 pm

or By appointment

**Office Location:** FEM 4D

E-mail: sharon.wu@reedleycollege.edu

## **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.

## **Learning 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 n<sup>th</sup> 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 Prerequisite/Advisories:

Prerequisite: Beginning Algebra (MATH 101) or equivalent.

Basic Skill Advisories: Eligibility for English 126.

#### **Textbook:**

McKeague, Elementary and Intermediate Algebra, 3<sup>rd</sup> Edition. By Thomson Brooks/Cole.

# **Course Outline:**

- Equations and Functions: Slope of a line; equation of a line; function notations; algebra and composition with functions; variation.
- Rational Exponents and Roots: Rational exponents; Expressions involving rational exponents; simplified form for radicals; addition, subtraction, multiplication, and division of radical expressions; equations with radicals; complex numbers.
- Quadratic Functions: Completing the square; the quadratic formula; equations quadratic in form; graphing parabolas; quadratic inequalities.
- Exponential and Logarithmic Functions: Exponential functions; the inverse of a function; logarithms are exponents; properties of logarithms; common logarithms and natural logarithms; exponential equations and change of base.
- <u>Conic Sections</u>: The circle; ellipses and hyperbolas; second-degree inequalities and nonlinear systems.

• <u>Sequences and Series</u>: Sequences; series; arithmetic sequences; geometric sequences; the binomial expansion.

## **Homework Assignments:**

Assignments are given for each of the chapter sections presented in the course. Homework is due at the beginning of the next class session after the section is completed. Each homework is worth **20 points** and will be graded on **correctness, completeness, neatness,** and **effort** of the entire assignment. Problems must be written out (except word problems) and **all work must be shown** in order to receive full credit. Homework should be done on 8.5" by 11" lined paper, stapled on the upper left hand corner, with class name (MATH 103), your name, and chapter/section numbers on the upper right hand corner. **Points will be deducted for late homework.** Being absent the day homework is collected does **not** entitle you to turn in the homework late without penalty!

## **Quizzes:**

There will be unannounced short quizzes in the class. There are **no** makeup quizzes, so attendance is very important.

#### **Tests:**

There are **chapter tests** at the end of each chapter. Each test is worth **100** points. Early tests can be arranged. 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). The final examine is comprehensive and it is required.

## **Grading:**

70% of your final grade points are from test scores.

20% of your final grade points are from homework points.

10% of your final grade points are from quizzes and class work.

Class letter grade is assigned using following scale:

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

❖ If you have perfect attendance and your grade is within 1 point (or 1%) of the next higher letter grade, the instructor will award you the next higher letter grade.

## **Important Dates (RC Campus):**

Class begin	Monday	08/18/08
Last day to register	Friday	09/05/08
Last day to change to/from a	Friday	09/19/08
Pass/No-Pass grading basis		
Last date to drop:	Friday	10/17/08
No classes:		
Labor Day	Monday	09/01/08
Veteran's Day	Tuesday	11/11/08
Thanksgiving Holidays	Thursday – Friday	11/27/08 – 11/28/08
Finals	Monday	12/15/08 11 am – 12:50 pm

**Fall 2008** 

### **Attendance:**

Students are expected to attend all class meetings, be on time, and be in class the entire class session. Students, who leave the class before the end of class, will be counted as tardy. Two tardiness count as one absence. 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 the class begins.

Students will be dropped from this class if they failed to attend the first class session of the semester. Any student who misses **10** classes (2 weeks) or more will be dropped from this class.

# **Canceled Class Notification:**

Click on "Canceled Class Meetings" on Reedley College webpage (<a href="www.reedleycollege.edu">www.reedleycollege.edu</a>) for class cancellations.

## **Student Conduct:**

Students are expected to conduct themselves in a responsible manner in the classroom. Specific rules and regulations have been established in Board Policy 5410. Failure to adhere to the accepted standards will result in disciplinary action. Campus Policies on Student Conduct is described in <a href="Reedley College Class Schedule">Reedley College Class Schedule</a>.

## Accommodations for students with disabilities:

If you have a verified need fro 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.

## **Plagiarism and Cheating Policy:**

Cheating and plagiarism is prohibited in the class. Incidents of cheating and plagiarism will result a failing grade on the particular examination or assignment in question.