

# Reedley College

## Math 4C

### Spring '12 Syllabus

**Course:** Math 4C Trig/Precalculus

**Schedule number:** 51820

**Instructor:** Ron Reimer

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**Phone:** (559)638-3641 ext. 3355

**Office Hours:** 10 to 11 am TWTh

**Text:** Larson, Precalculus Real Mathematics, Real People Sixth Edition

**Website:** <http://www.webassign.net>

**Class Key:** reedley 0679 5129

**Meeting times:** Daily, 7:50 – 8:55 AM, 1/9/12 – 5/18/12

**Important dates:**

January 16	Monday	Martin Luther King Day, No Class
February 17 – 20	Fri, Mon	Presidents Weekend, No Class
March 9	Friday	Last day to drop a full term class
April 2 – 6	Mon – Fri	Spring Break, No Class
May 14	Monday	Final Exam 8:00 – 9:50 AM

**Course Description:** This course comprises both Math 4A and Math 4B. The course is an analytic and comprehensive study of algebra, analytic geometry and trigonometry designed to prepare students for calculus. Topics include linear, quadratic, and rational equations and inequalities; functions and relations and their graphs; exponential and logarithmic functions; trigonometric and inverse trigonometric functions and their graphs; right and oblique triangles; graphs, identities, and trigonometric equations.

#### Course Objectives

- A. Graph and identify the domain and range of conic sections and the following types of functions and their transformations: polynomials, square root, cube root, absolute value, rational, exponential, logarithmic, and trigonometric.
- B. Solve the following types of equations: polynomial, rational, radical, absolute value, trigonometric, logarithmic, and exponential.
- C. Identify the solution set for inequalities with absolute value, polynomial, and rational expressions.
- D. Set-up and solve mathematical modeling problems including: interest problems, exponential growth and decay, motion, and surveying problems.
- E. Apply the analytic aspects of trigonometric functions of right, acute, and related angles.
- F. Derive basic trigonometric identities and use them to simplify trigonometric expressions and solve trigonometric equations.
- G. Apply the unit circle to trigonometry and perform angle conversions.
- H. Memorize the trigonometric values of the fundamental angles.
- I. Apply the analytic aspects of inverse trigonometric functions and trigonometric formulas to simplify and solve trigonometric problems.
- J. Find the inverse of one-to-one functions, and graph the functions and it's inverse.
- K. Optional Topics (if time permits)
  - o Solve systems of equations
  - o Use partial fraction decomposition to prepare an expression for integration.
  - o Represent vectors in the rectangular coordinate system and identify their magnitude and direction; perform operations (addition, subtraction, scalar multiplication, dot product) with vectors.

**Attendance:** In order to maintain continuity of subject matter regular attendance is imperative in any academic course. You are expected to attend all class sessions, arrive on time and stay for the entire session. If you have accumulated more than 5 absences on March 9, 2012, you will be dropped from this course. Do not be late to class. If you are not present when role is taken you will be marked absent, it is your responsibility to inform me if you arrive after role has been taken.

**Grading:** Grades will be based on four sets of criteria: Homework, Quizzes, Midterm exams, and a Final exam.

**Homework:** Homework is to be done on paper and answers must be submitted online at <http://www.webassign.net>. 100 attempts are allowed for each problem. All problems must be written on paper and worked in an organized manner with all steps shown. Paper completion of homework will be collected on a random basis. **No late homework assignments will be accepted.** Homework will make up twenty percent of your overall grade in this course.

**Quizzes:** A short quiz will be given at the beginning or end of class on a random basis. You will not be given notice of when these quizzes will occur. Quizzes will make up five percent of your grade.

**Midterm Exams:** The midterm exams will make up the majority of your grade in this course. In most cases a midterm exam will follow the completion of a chapter in the textbook and cover the material discussed in that chapter only. If appropriate a midterm exam may cover more or less than one chapter in the text. Your lowest midterm exam score will not be calculated in your overall grade. Midterm exams will make up sixty-five percent of your grade.

**Final Exam:** There will be a comprehensive final exam at the end of this course. The final exam may not be dropped from your grade. The final exam will make up ten percent of your grade. The final exam date for this course is Monday May 14, 2012 at 8:00 – 9:50 AM.

**Grading scale:**

Final Percentage Points	Grade
90<100	A
80<90	B
70<80	C
60<70	D
0<60	F

**Academic Dishonesty:** Academic dishonesty in any form is a very serious offense and will incur serious consequences, including but not limited to receiving a grade of F in the course. For the college policy on cheating and plagiarism, see the college catalog.

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.

A blackboard website will be maintained for this course. The web address is:  
<http://blackboard.reedleycollege.edu>

User Name = *Your student I.D. number*  
Password = *Your student I.D. number*