Reedley College
Math 5B
Fall ʹ11 Syllabus

Course: Math 5B Second Semester Calculus
Schedule number: 56486
Instructor: Ron Reimer
E-mail: ron.reimer@reedleycollege.edu
Phone: (559)638-3641 ext. 3355
Office Hours: 9 to 10 am TWTh
Text: Anton, <u>Calculus Early Transcendentals Ninth Edition</u>
Meeting times: 8:00 – 9:50 AM, MTWTh 8/15/11 – 12/16/11
Important dates:

September 5	Monday	Labor Day, No Class
October 14	Friday	Last day to drop a full term course
November 11	Friday	Vetrans Day, No class
November 24,25	Thurs, Fri	Thanks Giving, No class
December 14	Wednesday	Final Exam 8:00 – 8:50 AM

Course Description: This class investigates the applications of integration,many techniques of integration, improper integrals, parametric equations, polar coordinates and functions. Further study involves conic sections, exponential growth/decay models, infinite series including Maclaurin and Taylor Series.

Course Objectives
  A. Determine the area between two curves in the coordinate plane.
  B. Determine the volumes of solids of revolution using the disk and shell methods.
  C. Determine the length of a curve in the coordinate plane.
  D. Solve application problems involving force, pressure, and work.
  E. Evaluate and use hyperbolic functions.
  F. Use the technique of integration by parts to evaluate definite and indefinite integrals.
  G. Evaluate definite and indefinite integrals involving combinations of trigonometric functions.
  H. Use the technique of trig substitution to evaluate definite and indefinite integrals.
  I. Use the technique of integration by partial fraction decomposition to evaluate definite and indefinite integrals.
  J. Learn to use integral tables to evaluate definite and indefinite integrals.
  K. Apply Simpson's Rule to numerically evaluate integrals.
  L. Evaluate improper integrals.
  M. Use, differentiate, and integrate parametrically defined functions.
  N. Use polar coordinates to define and analyze polar functions.
  O. Derive the equations for and graph conic sections.
  P. Investigate the behavior of exponential functions.
  Q. Mathematically model exponential growth and decay phenomena.
  R. Investigate the behavior of sequences and series.
  S. Judge convergence or divergence by apply appropriate tests.
  T. Apply convergence tests including the Comparison, Ratio, and Root Tests.
  U. Derive and use Maclaurin and Taylor Series.
  V. Derive and use power series.
  W. Investigate the convergence of Taylor Series and use the Remainder Theorem.

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 October 14, 2011, 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 will be scored based on completeness and neatness. To be complete you must write down all problems (except word problems), show all necessary steps to solve the problem and show your solution. Please use standard 8.5" x 11" paper (no spiral notebook paper please), write your work in pencil and staple multiple papers together in the upper left hand corner. Record the **class name**, **your name**, **section and problem numbers** on each page of your homework assignment. **No late homework assignments will be accepted**. Homework will make up twenty percent of your grade.

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 you 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 Wednesday, December 14, 2011 at 8:00 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*