

**Course Syllabus      Math012      Calculus for Business and Social Science**

**Winter 2017**

**De Anza College**

**Instructor:** Teck Ky

**Instructor Office:** S-43

**Office Hours:** T & Th 5:15 PM-6:15 PM

**Class Days:** T & Th

**Class Time:** 6:30 PM-8:45 PM

**Class Room:** G5

**Textbook:** Calculus and its Applications, 11<sup>th</sup> edition, by Bittinger, Ellenbogen, Surgent

**Calculator:** You will need to buy a calculator for this course. TI-83 or TI-84

**Topic:** This course will cover selected topic from chapters 1-6.3, including functions, limits and the derivative, differentiation, applications of the derivative, exponential and logarithmic functions, integration, and calculus of several variables used in business, economics, and social science applications.

**Relationship of the course to College Mission:** One aspect of the College's mission is to enable our students to realize their highest potential and to reach their goals. Mathematical literacy is as necessary as reading and writing literacy for competence in today's world. This class will help you foster a critical attitude towards mathematical arguments, and will help provide intuition about mathematical procedures which can sometimes be lost behind the mathematical formulas. We will use technology to explore and simulate data to look for a mathematical model.

**Learning Outcomes:** When the students finish this course, the students should be able to:

- Use correct notation and mathematical precision in evaluation and interpretation of derivatives and integrals.
- Evaluate, solve, interpret and communicate business and social science applications using appropriate differentiation and integration methodologies

**Writing Across Curriculum Part:** Students will use complete sentences to explain procedures on some of the problems from the textbook, exams, and computer projects.

**Laboratory project:** You will learn how to use Winplot and an Excel programs with your projects. Extensive Winplot and Excel programs demonstrations will be done in lecture. There are available Winplot and EXCEL programs in AD143.

**Accommodation:** If you have a learning or physical need that will require special accommodation, please make an appointment with our Disabled Students Program and inform me of your needs.

**Reading Regularly with your textbook = Understanding Class Material.**

**Homework:** Mathematics is learned by doing problems. You can't learn mathematics just by watching me during class or asking a tutor to solve the problems for you. Mathematics is a lot like playing an instrument or sport. Becoming proficient requires practice, practice, and

practice. The problems from your textbook and in-class problems are your opportunity to practice. Please try to maintain a constant level of effort. Do your homework each day. If you don't know how to solve the problem(s), please ask me in class or in my office. The problems will be assigned daily. You are expected to do all problems assigned, and turn in all the assignments on day you come to take the exam. Do not fall behind. Write on one side of the paper only. Staple multiple pages together. **No late homework will be accepted.**

**Quizzes:** Frequent quizzes on homework will be given at the end of the class period. There will be no make-up for missed quizzes.

**Exams:** There will be two two-hour exams. **One** Make-up exam will be allowed only under exceptional and justifiable circumstances, and you should be prepared to substantiate your case with some documentation. The exams will be given on **February 2 and March 2**. The final exam will cover the entire course and will be given on **Thursday, March 30**.

**Attendance:** Seminar/discussion type course requires regular attendance, and more than one absence will result in a drop. Please come to class on time. To be on time for every lecture is not only a goal but also a responsibility. I am here to help you with the class materials. But if you don't come to class, I can not help you. Students absent during the first week must contact the instructor to avoid being dropped. **But the ultimate responsibility of dropping this course lies with you.** The last day to drop with a "W" is **Friday, March 3**.

**Evaluation:** Grade will be determined on the basis of total points earned. The following scale will be used.

Homework	40	<b>A 564-600</b>
Project	20	<b>A- 528-563</b>
Quizzes	40	<b>B+ 468-527</b>
Exams	300	<b>B 456-467</b>
Final	200	<b>B- 444-455</b>
		<b>C+ 390-443</b>
		<b>C 360-389</b>
		<b>D 330-359</b>
		<b>F 000-329</b>

