

SYLLABUS: Fall Term 2013
SPP 513: CALCULUS FOR PUBLIC POLICY

TIME AND PLACE: Mon & Wed, 1:05-2:25; Room 1110 Weill. Discussion sections meet Fridays 1:00-2:30 in 1110 and 1120 Weill. The discussion session will be used for some tests and occasionally for regular classes. We will have a *regular class* Friday September 6 and Friday October 18 at 1 pm. No class Monday, September 16, Monday October 14 (fall break), and Wednesday November 27 (Thanksgiving Eve).

INSTRUCTOR: Carl P. Simon, Professor of Mathematics, Economics, Complex Systems, and Public Policy.(cpsimon@umich.edu)

PREREQUISITES: Permission of Instructor.

OFFICE: 4203 Weill. Phone:763-3074;

OFFICE HOURS: Mondays and Wednesdays 11-12 in 4203 Weill.

GRADUATE STUDENT INSTRUCTORS (Room 3208) :

Chris Montgomery (christo@umich.edu); Office hrs: Tuesday, 11:30-12:30 and Friday, 2:30-3:30)

Daniel Ben-Zadok (benzadock@umich.edu) Office Hrs: Thursdays 2:30-4:30.

TEXT: Required: Laurence Hoffman, Gerald Bradley, et al.: *Calculus for Business, Economics, and the Social and Life Sciences, Brief Version*. Eleventh or possibly Tenth Edition. (McGraw-Hill). **Brief version.** (I'll teach from the 11th edition, but I'm sure that the 10th can be used – with a little difficulty in calibrating exercise numbers.) You'll also need a **scientific calculator**, one with log and y^x keys, but not a graphing calculator.

TESTS: Tentatively, on Monday, September 30 (in class), Wednesday October 30 (in class) and Friday Nov. 22 1:00-2:30. Comprehensive final exam Friday December 13, 4-6 pm. (**no changes considered**). Old exams will be in Coursetools, but they should be considered as only rough guides to the types of questions that might be asked.

SYLLABUS: We will cover Chapter 1 (functions), Chapter 2 (derivatives: concept and techniques), Chapter 3 (applications of derivatives), Chapter 4 (exponentials and logarithms), Chapters 5 (integration), Chapter 6 (techniques of integration), and Chapter 7 (functions of several variables, partial derivatives) — about 4 classes per chapter. I will integrate the partial derivative discussions in Chapter 7 into earlier Chapters to coordinate better with the other SPP core courses, especially microeconomics.

GRADING: Each of three tests: 20%; Final exam: 30%; Homework: 10%. Homework will be assigned at the completion of each section; it will be due the following Monday in

class. Late assignments may not be graded. Participation in review sessions plays a role in borderline grades.

EXPECTATIONS: Courtesy: arrive and leave on time, no unnecessary talking, game playing, newspaper reading, etc. **Close your laptop computers and turn off your cellular telephones.** Keep up with assignments.

Honesty: any hint of dishonesty will be automatically referred to the Academic Judiciary or the Graduate Chairman.

COURSETOOLS Our C-Tools website will have announcements, syllabi, old tests and often homework problems. Check it regularly.