41414 Math 12-61 MW Intro. Calculus for Bus. & Soc. Sci, Spring, 2013

Instructor: Dr. Karl Schaffer Office phone: 408-864-8214

Class meeting days: Mon./Wed. Office: E-23A

Class time 6:30-8:45 PM Office Hrs:: Mon/Wed/ 5:30-6:20 PM, Tue/Thu 12:30-1:20 PM

Classroom: E-36 or by appointment

email: schafferkarl@fhda.edu De Anza class web site: http://nebula2.deanza.edu/~karl/

Class link login name: damath password: kmath

Course content: Introduction to limits, differentiation, and integration of single variable functions. Differentiation of multivariate functions. Applications in business, economics, and social science.

Recommended: Programmable graphing calculator.

Not allowed: computers or other communication capable devices may not be used during class time or exams. Put away and DO NOT use cell phones during class.

Text: Applied Calculus, 3^{rd} **edition, by Hughes-Hallett, Gleason, et al.** We will cover most of the text. It is the 3^{rd} edition, rather than the current 4^{th} edition, so you should be able to purchase it very inexpensively online. Your first homework assignment is due the third class session.

Grades: 90-100 A, 80-89 B, 70-79 C, 60-69 D, < 60 F, based on:

15%	Short quizzes, writing assignments or reports, or in-class assignments, often to be given
	during class. These will often involve group work. You may drop your lowest score.
15%	45 min. exam, Wed., April 24 (Open book, open notes, Scantron mostly)
15 %	45 min. exam, Wed., May. 15 (Open book, open notes, Scantron mostly)
15 %	45 min. exam, Mon., June 10 (Open book, open notes, Scantron mostly)
20%	Homework assignments. Homework is assigned during each class and must be kept in a loose-
	leaf binder. Your homework will be collected at the end of each chapter. Homework is graded
	for completion, not correctness. NO LATE HOMEWORK ACCEPTED. EVER! See page 2 of
	green sheet for homework list.
20%	Final Exam: mandatory, comprehensive, given on Wed., June 26, 6:15-8:15 PM. (Open book,
	open notes, Scantron mostly) There will be no make-ups or early exams. The final exam will
	be used to replace one of the three 45 minute exams, if and only if final is higher.

NO LATE WORK IS ACCEPTED - NO MAKE-UPS. IF YOU MUST MISS ONE MAJOR EXAM, IT WILL BE REPLACED WITH THE FINAL EXAM SCORE, BUT THIS IS NOT A GOOD IDEA! HOMEWORK ASSIGNMENTS MAY BE CHECKED AT ANY TIME, SO KEEP YOUR WORK CURRENT!

Some background on the instructor: Ph.D. and MA in Mathematics from UC Santa Cruz, undergraduate work at University of Chicago and University of Alabama. Grew up in New England and Alabama. Do research in the mathematics of "networks," (graph theory) and am very active in math education for K-12. I am also a modern dance performer and choreographer, and company I co-direct does shows about math and dance, among other things. For more background on this see http://www.mathdance.org and/or www.movespeakspin.org.

Math 12 Homework, Applied Calculus, 3rd Edition Your homework will be collected at the end of each chapter.

Chapter 1: End of chapter review, odd problems only, due at beginning of 3rd class session.

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Ch. 2.1: # 1, 3, 4, 6, 7, 11-13, 15, 17, 18, 24
Ch. 2.2: # 3, 6, 9-12, 13, 15, 17, 28, 29
Ch. 2.3: # 1, 7-10, 17, 19, 36
Ch. 2.4: # 2, 6, 8-13, 19, 21, 22, 24
Ch. 2.5: # 2, 6, 8, 10, 14, 15
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Ch. 3.1: #1,7,8,24,25,30,39,41,43,47,49,51,53,55

Ch. 3.2: #3, 13, 15, 21, 23, 24, 27, 29, 31

Ch. 3.3: #1, 5, 9, 16, 25, 31, 36, 39, 40, 42, 44, 49, 53

Ch. 3.4: #3, 4, 5, 8, 19, 34, 35, 40, 41, 44

Ch. 3.5: #1, 2, 8, 14, 21, 24, 25, 26

Ch. 4.1: # 2, 4, 6, 10, 14, 15, 19, 22, 24, 27 Ch. 4.2: 3, 4, 6, 9, 13, 18, 24, 25, 26, 28, 31 Ch. 4.3: 4, 5, 6, 10, 14, 18, 22, 24, 29, 30, 37, 44, 46, 50 Ch. 4.4: 1, 2, 5, 6, 8, 14, 22, 24

Ch. 4.5: 1, 2, 4, 5, 8, 10, 14

Ch. 4.6: 1, 2, 3, 4, 8 10, 12, 14, 18

Ch. 4.7: 1, 4, 5, 6, 8, 10, 15

Ch. 4.8: 1, 2, 3, 7, 10, 12

Ch. 5.1: # 2, 4, 6, 10, 11, 14, 16

Ch. 5.2: # 2, 3, 5, 6, 8, 12, 14, 17, 20

Ch. 5.3: #3, 4-7, 8, 11, 12, 15, 16, 17, 18, 26, 27

Ch. 5.4: #2, 4, 6, 7, 10, 12, 13, 19, 20, 29

Ch. 5.5: # 1-4, 8, 9, 11, 13

Ch. 6.1: #1, 2, 3, 7, 8, 11, 12, 20, 22

Ch. 6.2: #1, 2, 3, 5, 10, 11, 12

Ch. 6.3: #2, 4-6, 12, 15, 16

Ch. 6.4: #1, 2, 5, 6, 14, 17

 $Ch.\ 7.1: \#\ 1, 4, 10, 13, 14, 19, 20, 24, 25, 31, 32, 37, 40, 45, 46, 52, 58$

Ch. 7.2: # 1, 2, 3, 6-40 multiples of three only, 41, 42

Ch. 7.3: # 3-20 (multiples of three only), 23, 24, 28, 31, 33-36, 38, 39, 43, 45

Ch. 7.4: #2, 3, 6, 9, 10, 15, 18, 19, 24-27

 $Ch.\ 8.1: \#\ 1\text{-}6, 8, 9, 12, 13, 16$

Ch. 8.2: # 1, 4, 7-9, 12, 14, 15, 17, 18

Ch. 8.3: # 2-4, 6, 8, 10

Ch. 9.1: #1, 2, 4, 9, 11

Ch. 9.2: #2,4,6,7,14,21,22,28,29,33

Ch. 9.3: #5, 6, 8, 10-13, 16

Ch. 9.4: # 3, 6, 7, 15, 16, 19, 20, 22, 23, 36

Ch. 9.5: # 2, 4, 6, 10, 14, 15, 18, 20

Ch. 9.6: #1, 8, 11, 28, 29, 33

Ch. 10.1: # 1, 2, 4, 5, 11, 8, 9, 12, 14

Ch. 10.2: # 1-3, 5, 6, 10, 11, 16, 21, 22

Ch. 10.3: #1, 2, 3, 4, 6, 8, 9, 14, 15

Ch. 10.4: #1, 2, 3, 4, 6, 8, 9, 14, 15

Ch. 10.5: # 2, 3, 7, 12, 13, 17, 18, 21, 22

Ch. 10.6: # 1-3, 6, 7, 8, 10-13

Ch. 10.7: # 1, 2, 5, 7, 8, 11, 12, 13, 14, 15