## 1415 Math 2A-63 MW Differential Equations, Winter, 2009

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

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

Class time 6-8:10 PM Office Hrs: : Mon/Wed/ 5:00-5:50 PM, Tue/Thu 12:30-1:20 PM

Classroom: E-36 or by appointment

email: <a href="mailto:schafferkarl@fhda.edu">schafferkarl@fhda.edu</a> De Anza class web site: <a href="http://nebula2.deanza.edu/~karl/">http://nebula2.deanza.edu/~karl/</a>

Login name to the De Anza class site: karl, you will be given password in class! This site will contain homework assignments, references, etc.

**Course content:** Ordinary differential equations, with selected applications. This course will include qualitative, numerical, and analytical approaches.

Recommended: Programmable graphing calculator.

**Text**: Differential Equations, Third Edition. By Blanchard, Devaney, Hall. Published by Thomson Brooks/Cole Publishing Co., 2006. ISBN 0-495-01265-3. The authors maintain an excellent web site at <a href="http://math.bu.edu/odes/">http://math.bu.edu/odes/</a>, with sample exams, interactive lessons, notes, etc. The text has a CD-Rom with excellent exploratory software.

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

20%	Short quizzes, writing assignments or reports, or in-class assignments, often to be given during class,
	though we may be able to use the online quizzes provided by the publisher. These will often involve
	group work. You may drop your lowest score. These assignments will together constitute the number of
	points of <b>one exam</b> .

20% One hour exam, Wed. Jan. 28 (Open book, open notes) One hour exam, Mon., Feb. 23 (Open book, open notes)

**Homework assignments**. Homework is assigned during each class and must be kept in a loose-leaf binder. Your homework may be checked periodically (usually during exams), and some assignments

may be collected for grading. Homework is graded for completion, not correctness. NO LATE

HOMEWORK ACCEPTED. EVER!

Final Exam: mandatory, comprehensive, given on Wed., March 25, 6:15-8:15 PM. (Open book, open

notes) There will be no make-ups or early exams. The final exam will be used to replace one of the two

one-hour exams, 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 interested in and will use collaborative learning and interdisciplinary learning techniques in the class. 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 www.mathdance.org and/or <a href="https://www.schafferstern.org">www.schafferstern.org</a>.