CALIFORNIA INSTITUTE OF TECHNOLOGY
Control and Dynamical Systems

CDS 101/110
Course Survey

R. Murray
Fall 2004

Issued: 27 Sep 04
Due: 1 Oct 04

The purpose of this survey is to get a sense of the background and level of the students in the class. Please mark your answers in the space provided.

Please turn in this survey by Friday, 1 October, at 5 pm in the box outside of 109 Steele. You may also turn it in after lecture on Wednesday or Friday.

1. Which course are you taking (CDS 101, CDS 110a, undecided): _____

2. What is your current option (ME, ChE, CS, Bio, etc)? _____ Year (Jr, Sr, G1, G2, etc)? _____

3. Are you obtaining a minor in CDS (yes, no, maybe)? _____

4. How did you hear about this course? Put a check mark next to all that apply. If you heard about this course in more than one way, please circle the method that was most effective in your choice to attend the first lecture.

____ Caltech catalog	____ Faculty advisor	____ Other students
____ Option requirements	____ Option rep	____ E-mail list
____ Other faculty	____ CDS web page	____ Other: _____

5. Put a check mark next to any of the following courses that you have already taken. Put a 'C' if you are currently enrolled in the course:

____ ACM 95/100 (complex variables, ODEs)	____ AM 125 (linear algebra, ODEs)
____ AM 35 (statics and mechanics)	____ ME 18/ChE 63 (engineering thermo)
____ ChE 101 (kinetics, reactor design)	____ ChE/BE 210 (cellular engineering)
____ EE 20 (circuit theory)	____ EE 111 (signals and systems)
____ EE 113 (feedback circuits)	____ CS/EE 145ab (computer networking)
____ CDS 101 (feedback principles)	____ CDS 140 (dynamical systems)

6. Please rank your understanding of the following topics on a scale of 1 to 5, using the following classification:

1	2	3	4	5
never heard of topic		remember main ideas/concepts		very familiar with topic

   Note: it is *completely OK* if you have not heard of many of these topics. The purpose of the survey is to understand that background of the class. We will cover all of the topics in the left two columns in CDS 101 and all of them in CDS 110ab.

____ matrices and vectors	____ transfer function	____ Laplace transform
____ eigenvalues and eigenvectors	____ asymptotic stability	____ sensitivity function
____ ordinary differential equations	____ gain/phase margin	____ linear quadratic regulator
____ frequency response	____ PID control	____ Kalman filter

7. Are there any specific applications of feedback and control concepts that you are interested in?