CALIFORNIA INSTITUTE OF TECHNOLOGY
Control and Dynamical Systems

CDS 101/110a

D. MacMartin & R. Murray   **Course Survey**   Issued: 1 Oct 12
Fall 2012   Due: 3 Oct 12

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 3 Oct (Wed) at 3 pm, either in class or in the box outside of 102 Steele.

1. Which course are you taking (circle one):   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. 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 104/AM 125/CDS 201 (linear analysis)   ____ BE 150/Bi 250b (systems biology)

   ____ ACM 95/100 (complex variables, ODEs)   ____ CDS 140 (dynamical systems)

   ____ ACM/EE 116 (random processes)   ____ ChE 105 (control of chemical systems)

   ____ AM/CE 151 (dynamics and vibrations)   ____ EE 113 (feedback circuits)

   ____ Ae 105 (aerospace engineering)   ____ ME/CS 132 (robot motion planning)

5. 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 of the top section in CDS 101 and all three columns in CDS 110ab.

   ____ matrices and vectors   ____ transfer functions   ____ Laplace transforms

   ____ eigenvalues/eigenvectors   ____ asymptotic stability   ____ sensitivity function

   ____ differential equations   ____ gain/phase margin   ____ linear quadratic regulator

   ____ frequency response   ____ PID control   ____ Kalman filter

   ____ Mathematica   ____ MATLAB   ____ Python

6. What is the reason you are taking the class (check all that apply)?

   ____ Option requirement   ____ Recommended by advisor

   ____ Need for my research   ____ Recommended by friend

   ____ Interested in topic   ____ Other: _____

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