

CALIFORNIA INSTITUTE OF TECHNOLOGY
Control and Dynamical Systems

CDS 101/110
Course Survey

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Issued: 30 Sep 02
Due: 7 Oct 02

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 Monday, 7 October, at 5 pm in the box outside of 102 Steele.

1. Which course are you taking (CDS 101, CDS 110a, ChE 105, undecided): _____
2. What is your area of study (ME, ChE, CS, Bio, etc)? _____ Year (Jr, Sr, G1, G2, etc)? _____
3. 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:

<input type="checkbox"/> ACM 95/100 (complex variables, ODEs)	<input type="checkbox"/> AM 114 (complex variables, ODEs)
<input type="checkbox"/> AM 35 (statics and mechanics)	<input type="checkbox"/> ME 18/ChE 63 (engineering thermo)
<input type="checkbox"/> EE 20 (circuit theory)	<input type="checkbox"/> EE 32 (signals and systems)
<input type="checkbox"/> AM 151 (dynamics and vibrations)	<input type="checkbox"/> CDS 140 (dynamical systems)

4. 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 most of the topics in the right hand column in CDS 101 and almost all of them in CDS 110ab.

Topics:

<input type="checkbox"/> matrices and vectors	<input type="checkbox"/> frequency response
<input type="checkbox"/> eigenvalues and eigenvectors	<input type="checkbox"/> transfer function
<input type="checkbox"/> ordinary differential equations	<input type="checkbox"/> Laplace transform
<input type="checkbox"/> homogeneous and particular solutions	<input type="checkbox"/> PID control
<input type="checkbox"/> Jordan form	<input type="checkbox"/> lead/lag compensation
<input type="checkbox"/> asymptotic stability	<input type="checkbox"/> gain and phase margin
<input type="checkbox"/> region of attraction	<input type="checkbox"/> linear quadratic regulator
<input type="checkbox"/> limit cycles	<input type="checkbox"/> Kalman filter
	<input type="checkbox"/> feedback linearization