CDS 101/110

R. Murray   **Course Survey**   Issued: 28 Sep 15
Fall 2015   Due: 30 Sep 15

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 by 30 Sep (Wed) at 3 pm, either in class or in the box outside of 109 Steele.

1. Which course are you taking (circle one):   CDS 101   CDS 110   undecided

2. What is your current option (ChE, CS, BE, 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 95/100 (complex variables, ODEs)   ____ CDS 240 (dynamical systems)

   ____ ACM 104 (linear analysis)   ____ CS/EE 145 (computer networking)

   ____ Ae 115 (spacecraft navigation)   ____ ChE 105 (control of chemical systems)

   ____ Ae/CDS/ME 251 (flow control)   ____ ChE/BE 169 (cellular engineering)

   ____ BE 150/250 (sytems biology)   ____ EE 113 (feedback circuits)

   ____ CDS 140 (dynamics/ODEs)   ____ ME 115 (kinematics and robotics)

5. Please rank your understanding of the topics below 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. We will cover all of the topics in the left two columns in CDS 101 and all of them in CDS 110/112.

   ____ 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

   ____ MATLAB   ____ SIMULINK   ____ Mathematica

   ____ Python   ____ Modelica   ____ Julia

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?