Instructor: J.E. Bobrow; Office: Engineering Gateway 3220; Phone (949) 824-4116, email: jebobrow@uci.edu, office hours: Wednesday and Friday 1:30-2:30 pm. 

Classroom: DBH 1100, Monday, Wednesday, Friday, 3:00–3:50 pm. 

Discussion Sections: Teaching assistants Joan Aguilar and Daniel Ganjali will lead discussions on homework and on the use of Matlab. 

Text: Modern Control Systems, 12th Edition, by Dorf and Bishop, Prentice Hall. You can use an old edition. I will post the problems on the website each week. 

Software: Students need to use Matlab with the control systems toolbox. You can purchase a student edition of the software, or use the Engineering PC’s in ET 123. 

Course topics: In addition to the topics listed below, some demonstrations will be given class. 

1. Modeling, Laplace Transforms, Block diagrams (Chapter 2, all except 2.7). 
2. State variables and time-response (Chapter 3). 
3. Feedback characteristics and steady-state error (Chapter 4). 
4. Transient response (Unit step and ramp response) (Chapter 5). 
5. Stability and the Root-locus method (Chapters 6, 7). 
6. Frequency response plots (Chapter 8). 
7. Stability in the frequency domain, Nyquist Criterion (Chapter 9). 
8. Frequency response design (Selected topics from Chapter 10). 

Grading Policy: 

10% Homework (Due on Fridays by 4:30 pm in the box by the elevator on the second floor of Eng Gateway) 
40% Midterm Exam (at approximately week 6) 
50% Final Exam