EE 351L **Spring 2013**

Linear Feedback-Control Systems Lab

Thursday, 1:30pm–4:20pm, Holmes 386

Instructor:	Gurdal Arslan, Holmes 440, Phone: 956–3432, E-mail: `gurdal@hawaii.edu`
Instructor Office Hours:	anytime
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TA Office Hours:	Tuesdays 12-1pm in Holmes 386
Webpage:	`http://www2.hawaii.edu/~gurdal/index_files/EE351L.htm` Site of announcements, handouts, homeworks, etc.
Policies:	No credit will be given to late lab reports. Attendance is mandatory. Grades are weighted 30% Participation, 30% Pre-labs, 40% Reports. All work must be original.

Lab Experiments

1. MATLAB Structure and Use
2. State variable modeling and Introduction to MATLAB Control System Toolbox
3. Modeling and Digital Simulation Case Studies
4. Introduction To Data Acquisition and Real-Time Control
5. Op-amp, A/D-D/A converters and Compensator Emulation
6. Servo Position Control Design Project (Position and Rate Feedbacks)
7. Speed control Design Project (Velocity Feedbacks)
8. Position Control Design Project (PD controller Root-locus Design)
9. Position Control Design Project (Phase lead controller Root locus Design)
10. Ball and Beam Design Project