EE 351L **Spring 2014**

Linear Feedback-Control Systems Lab

Thursday, 9:00am–11:50am & 1:30pm–4:20pm, Holmes 386

Instructor:	Gurdal Arslan, Holmes 440, Phone: 956–3432, E-mail: `gurdal@hawaii.edu`
Instructor Office Hours:	anytime
TA:	Clay McKell, Holmes 390, E-mail: `mckell@hawaii.edu`
TA Office Hours:	Tuesdays 1:30-2:30pm in Holmes 386 or by appointment in Holmes 390
Webpage:	`http://www-ee.eng.hawaii.edu/~mckell/Teaching-files/EE351L.php` Site of announcements, handouts, labs, 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. Modeling and Digital Simulation Case Studies
3. Introduction To Data Acquisition and Real-Time Control
4. Op-amp, A/D-D/A converters and Compensator Emulation
5. Servo Position Control Design Project (Position and Rate Feedbacks)
6. Speed control Design Project (Velocity Feedbacks)
7. Position Control Design Project (PD controller Root-locus Design)
8. Position Control Design Project (Phase lead controller Root locus Design)
9. Ball and Beam Design Project
10. State variable modeling and Introduction to MATLAB Control System Toolbox