Class Hours: T-Th 1:00 PM – 2:15 PM
Classroom: ELAB 306
Professor: Doug Looze
Office: KEB 113F    Phone: (413) 545-0973    email: looze@ecs.umass.edu
Office Hours: T 3:00 PM - 4:00PM, W 3:00 – 5:00
Course URL: https://moodle.umass.edu/ (login using OIT ID)

The moodle page contains all the course material to date, including this syllabus, the problem sets, and the lecture notes.


Exams: There will be an evening 2-hour midterm exam from 7-9 PM (on a date to be determined) and a final exam given during exam week. Each exam will count as 35% of the final grade. All exams will be open book and open notes.

Homework: There will be approximately 8 homework assignments. Late homework will not be accepted. Homework will count as 30% of the final grade.

Prerequisite: Linear Algebra (undergraduate level).

Course Outline

Objectives: Provide a basic understanding of linear systems and the methodologies that are used to analyze and model such systems; provide the necessary background for advanced material in systems, control and communications.

1. Linear Algebra                                      3 Lectures
2. State variable models                               3 Lectures
3. Solution of state variable models                   8 Lectures
4. Controllability and Observability                   8 Lectures
5. Realization                                         5 Lectures
6. Internal Stability                                  5 Lectures
7. Feedback                                            5 Lectures