

ECEN 4803L - Linear Control Systems Laboratory

Fall 2026 Syllabus, Section 02, CRN 40735,

Credit hours: 1

Instructor

Xiaomei Ren

Professional Qualifications:

Master of Science in Engineering, Electrical Engineering, Youngstown State University 1999

Bachelor of Science, Electrical Engineering, Hefei University of Technology, Hefei, China. 1994

Senior Lecturer

Email: xren@ysu.edu

Office: Moser Hall

Office Phone: 3012

Preferred Contact Method: email

Public Instructor Information

Instructor Title: Senior Lecturer

Instructor Professional Qualifications: Master of Science in Electrical Engineering, Youngstown State University, 1999

Instructor Office Location: Moser Hall

Instructor Office Phone: 3012

Course Description

4803L. Linear Control Systems Laboratory. Laboratory exercises to accompany ECEN 4803. Three hours laboratory per week. Prereq.: ECEN 2633, ECEN 3712, MATH 3705, MECH 2620. Prereq. or Coreq.: ECEN 4803.1 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Lab Handouts		

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Day	Date	Proposed Topic	Due/To Prepare for Class
Thu	8/27	Lab Safety and Syllabus Review	
Thu	9/3	PLC Programming 1	
Thu	9/10	PLC Programming 2	
Thu	9/17	PLC Programming 3	
Thu	9/24	Make up lab	
Thu	10/1	LabView & DAQ	
Thu	10/8	VI Essentials	
Thu	10/15	DC Motor System Modeling	
Thu	10/22	Open and Close loop System	
Thu	10/29	PID DC Motor Speed Control	
Thu	11/5	DC Motor position Control	

Thu	11/12	Quanser System: Rotary Servo Speed Control
Thu	11/19	Quanser System: Rotary Servo Position Control
Thu	11/26	
Thu	12/3	Quanser System: Flexible Joint System Modeling and Control 1
Thu	12/10	Quanser System: Flexible Joint System Modeling and Control 2

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.