

ECE 313: Control Systems, Fall 2019

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Lectures: M/W/F 9:10-10:00 am, 2400 Engineering Building

Office hours: M/Tu/W 10:10-11:00am

Textbook: N.S. Nise, Control Systems Engineering, 7th Ed, 2015

D2L: The following material will be posted on D2L (d2l.msu.edu).

- Selected lecture slides
- Homework assignments (one week before the due date)
- Homework solutions (after the due date)

Grading: The final grade is computed using the following weights to the grades in homework and exam:

Homework	Exam 1	Exam 2	Exam 3
25%	25%	25%	25%

Policies:

- Exams are closed book (formulas are provided).
- Solutions of homework assignments should be **uploaded as a single pdf file** to a dropbox in D2L by **5 PM on the due date. No extensions will be granted. If homework is not submitted as a single pdf file, it would not be graded.** However, if the homework requires the use of MATLAB, you may submit two files. **Unreadable files will not be graded** and the student will not be allowed to re-upload after the due date. You must make sure that the uploaded file is readable.
- Every student is expected to submit his/her own work. When there are MATLAB assignments, include a copy of the MATLAB work area. All MATLAB work should be submitted as a single pdf file.
- If you have class/work conflict with the office hour, send e-mail to the instructor to arrange for alternative time.

Exam Schedule:

Exam 1: Friday, October 4, 9:10 - 10:00 (covers Lectures 2 – 14)

Exam 2: Friday, November 1, 9:10 - 10:00 (covers Lectures 15 – 24)

Exam 3: Wednesday, December 4, 9:10 - 10:00 (covers Lectures 25 – 36)

Important: Please read the Spartan Code of Honor at <http://asmsu.msu.edu/initiatives/spartan-code-of-honor/>

Lecture #	Date	Topic	Textbook Reading	HW due
1	W 8/28	Introduction	Ch. 1	
2	F 8/30	Mathematical Models	2.2-2.8 & 5.2-5.5	
	M 9/2	Labor day		
3	W 9/4	Mathematical Models		
4	F 9/6	Mathematical Models		
5	M 9/9	Mathematical Models		
6	W 9/11	Mathematical Models		HW1
7	F 9/13	Mathematical Models		
8	M 9/16	Time Response	4.1-4.8	
9	W 9/18	Time Response		HW2
10	F 9/20	Time Response		
11	M 9/23	Stability	6.1-6.4	
12	W 9/25	Stability		HW3
13	F 9/27	Steady State Errors	7.1-7.7	
14	M 9/30	Steady State Errors		
	W 10/2	Buffer		HW4
	F 10/4	Exam 1		
15	M 10/7	Root Locus Method	Chapter 8	
16	W 10/9	Root Locus Method		
17	F 10/11	Root Locus Method		
18	M 10/14	Root Locus Design	Chapter 9	
19	W 10/16	Root Locus Design		HW5
20	F 10/18	Root Locus Design		
21	M 10/21	Root Locus Design		
22	W 10/23	Root Locus Design		HW6
23	F 10/25	Root Locus Design		
24	M 10/28	Root Locus Design		
	W 10/30	Buffer		HW7
	F 11/1	Exam 2		
25	M 11/4	Frequency Response	Chapter 10	
26	W 11/6	Frequency Response		
27	F 11/8	Frequency Response		
28	M 11/11	Frequency Response		
29	W 11/13	Frequency Response		HW8
30	F 11/15	Frequency Response		
31	M 11/18	Bode Plot Design	Chapter 11	
32	W 11/20	Bode Plot Design		HW9
33	F 11/23	Bode Plot Design		
34	M 11/25	Bode Plot Design		
35	W 11/27	Bode Plot Design		
	F 11/29	Thanksgiving		
36	M 12/2	Buffer		HW10
	W 12/4	Exam 3		
	F 12/6	No Class: Design Day		