

ECE 3600

Tentative

A. Stolp

01/07/24

Spring 2024 COURSE SCHEDULE

Week	Date	lect	Topics	Textbook
1	M 01/08	1	Introduction, Energy sources, generation, & environment	1.1
	W 01/10	2	Hw1, Review of steady-state AC and phasors	notes, 1.2
	F 01/12	3	Review of steady-state AC and phasors	notes
2	M 01/15		Martin Luther King Day	
	W 01/17	4	RMS, Single-phase AC power	notes, 1.8
	F 01/19	5	Single-phase AC power, P, Q, S, S , pf, pf correction	notes, 1.8
3	M 01/22	6	Single-phase AC power, 3-phase power	2.1 - 2
	W 01/24	7	3-phase power, Y- and delta-connections	2.3 - 6
	F 01/26	8	3-phase power, balanced systems, efficiency, One-line diagrams	2.4 - 6
4	M 01/29		Field Trip	
	W 01/31	9	Electromagnetics, Ideal transformers, Ratings	1.4, Ch 3
	F 02/02	10	Transformation of impedance, Model of the non-ideal transformer	3.4 - 5
5	M 02/05	11	Non-ideal transformer, tests	3.7 - 8
	W 02/07	12	Transformer voltage reg., Autotransformers, 3-phase, etc.	3.9 - 10
	F 02/09	13	Power system diagrams Per-unit system	3.6, 10.1
6	M 02/12		Exam 1	
	W 02/14	14	Per-unit system	3.6, 10.2
	F 02/16	15	Rotational Motion, AC Machinery Fundamentals	1.3, Ch 4
7	M 02/19		Presidents Day	
	W 02/21	16	Synchronous machines	5.1 - 6
	F 02/23	17	Synchronous machines as generators, examples	5.8, Ch 6
8	M 02/26	18	Placing generator on line, Synchronous machines as motors	Ch 6, 5.9
	W 02/28	19	Synchronous motors, pf correction	5.10 - 13
	F 03/01	20	3-phase Induction motors,	7.1 - 5
	S 03/02		Spring Break	
	Su 03/10			

ECE 3600 Spring 2024 Course Schedule p2

Week	Date	lect	Topics	Textbook
9	M 03/11	21	3-phase Induction motors, examples	7.6 - 8
	W 03/13	22	3-phase Induction motors, tests	7.9 - 10
	F 03/15	23	Single-phase Induction motors	notes
10	M 03/18	Exam 2		
	W 03/20	24	DC motors	notes, 8.1-2
	F 03/22	25	DC motors	8.4 - 9
11	M 03/25	Field Trip		
	W 03/27	26	DC motors & loads	notes, 8.10
	F 03/29	27	Finish DC motors, Transmission lines	notes, 9.1-5
12	M 04/01	28	Transmission lines	notes, 9.6
	W 04/03	29	Transmission line models, calculations & examples	9.8 - 9
	F 04/05	Exam 3		
13	M 04/08	Field Trip		
	W 04/10	30	Power System & Power Flow Problem	9.6, 10.3
	Th 04/11			
	F 04/12	31	Power Flow Problem, Faults	Ch 12
14	M 04/15	32	Types of faults, The 3 "sequences"	Ch 13
	W 04/17	33	Faults, Sequence Impedances	notes
	Th 04/18	ME Design Day, Union Build.		
	F 04/19	34	Protection	notes
15	M 04/22	35	Protection	notes
	T 04/23	Last Day of Classes		
	W 04/24	Reading Day, ECE 3600 Review		
	Th 04/25	ECE3600 Final 3:30 pm		
	F 04/26			
16	M 04/29			
	T 04/30			
	W 05/01			