

ECE 3600

Tentative

A. Stolp

01/14/25

Spring 2025 COURSE SCHEDULE

Week	Date	lect	Topics	Textbook
1	M 01/06	1	Introduction, Energy sources, generation, & environment	1.1
	W 01/08	2	Hw1, Review of steady-state AC and phasors	notes, 1.2
	F 01/10	3	Review of phasors, RMS, Single-phase AC power	notes, 1.8
2	M 01/13	4	Single-phase AC power, P, Q, S, S , pf, pf correction	notes, 1.8
	W 01/15	5	Single-phase AC power, 3-phase power, Y and delta connections	2.1 - 3
	F 01/17	6	3-phase power, balanced systems, efficiency, One-line diagrams	2.4 - 6
3	M 01/20	Martin Luther King Day		
	W 01/22	7	Electromagnetics, Ideal transformers, Ratings	1.4, Ch 3
	F 01/24	Lab 1 (group A) or Gadsby power plant field trip at noon (group B)		
4	M 01/27	8	Transformation of impedance, Model of the non-ideal transformer	3.4 - 5
	W 01/29	9	Non-ideal transformer, Voltage reg., Autotransformers, 3-ph, etc.	3.7 - 10
	F 01/31	10	Per-unit system, One-line diagrams	3.6, 10.1
5	M 02/03	11	Per-phase, Per-unit	3.6, 10.2
	W 02/05	Exam 1		
	F 02/07	Lab 1 (group B) or Gadsby power plant field trip at 3:00pm (group		
6	M 02/10	12	Rotational Motion, AC Machinery Fundamentals, Synchronous machines	1.3, Ch4, 5
	W 02/12	13	Synchronous machines as generators, Examples	5.1-6, Ch 6
	F 02/14	Lab 2 A, Transformer model		
7	M 02/17	Presidents Day		
	W 02/19	14	Placing generator on-line, Sync machines as motors, pf correctior	notes
	F 02/21	Lab 2 B, Transformer model		
8	M 02/24	15	Sync motor examples, Starting Sync motors, 3-ph Ind. motors	5.9 - 13
	W 02/26	16	3-phase Induction motors, examples	7.1 - 5
	F 02/28	Dispatch Center field trip		
9	M 03/03	17	3-phase Induction motor examples	7.6 - 8
	W 03/05	Exam 2		
	F 03/07	18	3-phase Ind motor types, tests, Single-phase Induction motors	7.9-10,notes
	S 03/08	Spring Break		
	Su 03/16			

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Week	Date	lect	Topics	Textbook
S	03/08		Spring Break	
Su	03/16			
10	M 03/17	19	Single-phase Induction motors, DC motors	notes, 8.1-2
	W 03/19	20	DC motors	8.4 - 9
	F 03/21		Lab 3 A or Field trip B	
11	M 03/24	21	DC motors & loads	8.10, notes
	W 03/26	22	Finish DC motors, Transmission lines	notes, 9.1-5
	F 03/28		Lab 3 B or Field trip A	
12	M 03/31	23	Transmission line models and calculations	9.8-9, 9.6
	W 04/02	24	Finish transmission lines, Power Flow	10.1-3, 11.1
	F 04/04		Exam 3	
13	M 04/07	25	Power Flow & example	8.1
	W 04/09	26	Faults	Ch 12 - 13
	F 04/11		Lab 4 A, DC motors	
14	M 04/14	27	Types of faults, The 3 "sequences"	Ch13, notes
	W 04/16	28	Sequence Impedances, Protection	notes
	Th 04/17		ME Design Day, Union Build.	
	F 04/18		Lab 4 B, DC motors	
15	M 04/21	29	Protection	notes
	W 04/23		Reading Day, ECE 3600 Review	
	Th 04/24			
	F 04/25		ECE3600 Final 3:30 pm	
16	M 04/28			
	T 04/29			
	W 04/30			
	Th 05/01		Freedom	