

ECE 3600

A. Stolp

Tentative

08/13/19

COURSE SCHEDULE

Week	Date	lect	Topics	Textbook
1	T 08/20	1	Introduction, Energy sources, generation, & environment	notes
	Th 08/22	2	Review of steady-state AC and phasors	1.1,2, notes
	F 08/23		Field Trip - Gadsby Power plant (in place of lab)	
2	M 08/26		Field Trip - Gadsby Power plant (in place of lab but starts at 2:00pm)	
	T 08/27	3	Review of RMS, Single-phase AC power	notes, 1.8
	Th 08/29	4	Single-phase AC power, P, Q, S, S , pf, pf correction	
3	M 09/02		Labor Day	
	T 09/03	5	3-phase power, Y- and delta-connections	2.1-2
	Th 09/05	6	3-phase power, balanced systems, Efficiency	2.4-6
	F 09/06		First lab: Electrical safety & Power factor correction	
4	M 09/09		First lab: Electrical safety & Power factor correction	
	T 09/10	7	One-line diagrams, Electromagnetics	2.6, 1.4
	Th 09/12	8	Ideal transformers, Ratings, Transformation of impedance	1.4
5	T 09/17	9	Transformers, Model of the non-ideal transformer	3.1-4
	Th 09/19	10	Transformer voltage regulation, Autotransformers, 3-phase, etc.	3.5-8
	F 09/20		Field Trip - Rocky Mountain Power dispatch (in place of lab)	
6	M 09/23		Field Trip - Rocky Mountain Power dispatch (in place of lab but may start at 2:00pm)	
	T 09/24	11	Per-unit system	3.9-12
	Th 09/26		Exam 1	
	F 09/27		Lab 2: Transformer model	
7	M 09/30		Lab 2: Transformer model	
	T 10/01	12	Rotational Motion, AC Machinery Fundamentals	1.3, Ch 4
	Th 10/03	13	Synchronous machines	5.1-4
S 10/05		Fall Break		
Su 10/13				
8	T 10/15	14	Synchronous machines as generators	5.4-8
	Th 10/17	15	Synchronous machines as motors, pf correction	5.9-13
			Field Trip - Substation (alternates with lab 3)	
		Lab	Lab 3: Synchronous machines, Connection to the "line"	
9	T 10/22	16	Synchronous generator on line	Ch 6
	Th 10/24	17	3-phase Induction motors	Ch 7
10	T 10/29	18	Induction motors	Ch 7
	Th 10/31	19	Single-phase Induction motors	Ch 8
11	T 11/05	20	DC motors	
	Th 11/07		Exam 2	
12		Lab	Lab 4: Induction motors	
	T 11/12	21	DC motors	Ch 8
	Th 11/14	22	DC motors	Ch 8
13	T 11/19	23	Transmission lines and models	Ch 9
	Th 11/21	22	Transmission line models and calculations	Ch 9
14		Lab	Lab 5: DC motors	
	T 11/26	25	Symmetrical faults	Ch 12
	Th 11/28		Thanksgiving	
15	T 12/03	26	Faults, The 3 "sequences"	Ch 12, 13
	Th 12/05	27	Unsymmetrical faults	Ch 13
	M 12/09		Review, 4:00 ?? (may change, listen in class)	
16	T 12/10		Final Exam, 1:00 - 3:00 PM	