

ECE 3600

A. Stolp

Tentative

08/23/15

COURSE SCHEDULE

Week	Date	lect	Topics	Textbook
1	T 08/25	1	Introduction, Energy sources, generation, & environment	notes
	Th 08/27	2	Review of steady-state AC and phasors	1.1,2, notes
	F 08/28		Field Trip - Gadsby Power plant (in place of lab)	
2	M 08/31		Field Trip - Gadsby Power plant (in place of lab but starts at 2:00pm)	
	T 09/01	3	Review of RMS, Single-phase AC power	notes, 1.8
	Th 09/03	4	Single-phase AC power, P, Q, S, S , pf, pf correction	
	F 09/04		Field Trip - Gadsby Power plant (in place of lab)	
3	M 09/07		Labor Day	
	T 09/08	5	3-phase power, Y- and delta-connections	2.1-2
	Th 09/10	6	3-phase power, balanced systems, Efficiency	2.4-6
	F 09/11		First lab: Electrical safety & Power factor correction	
4	M 09/14		First lab: Electrical safety & Power factor correction	
	T 09/15	7	One-line diagrams, Electromagnetics	2.6, 1.4
	Th 09/17	8	Ideal transformers, Ratings, Transformation of impedance	1.4
5	T 09/22	9	Transformers, Model of the non-ideal transformer	3.1-4
	Th 09/24	10	Transformer voltage regulation, Autotransformers, 3-phase, etc.	3.5-8
	F 09/25		Field Trip - Rocky Mountain Power dispatch (in place of lab)	
6	M 09/28		Field Trip - Rocky Mountain Power dispatch (in place of lab but may start at 2:00pm)	
	T 09/29	11	Per-unit system	3.9-12
	Th 10/01		Exam 1	
	F 10/02		Lab 2: Transformer model	
7	M 10/05		Lab 2: Transformer model	
	T 10/06	12	Rotational Motion, AC Machinery Fundamentals	1.3, Ch 4
	Th 10/08	13	Synchronous machines	5.1-4
	S 10/10		Fall Break	
	Su 10/18			
8	T 10/20	14	Synchronous machines as generators	5.4-8
	Th 10/22	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 10/27	16	Synchronous generator on line	Ch 6
	Th 10/29	17	3-phase Induction motors	Ch 7
10	T 11/03	18	Induction motors	Ch 7
	Th 11/05	19	Single-phase Induction motors	Ch 8
11	T 11/10	20	DC motors	
	Th 11/12		Exam 2	
12	Lab		Lab 4: Induction motors	
	T 11/17	21	DC motors	Ch 8
	Th 11/19	22	DC motors	Ch 8
13	T 11/24	23	Transmission lines and models	Ch 9
	Th 11/26		Thanksgiving	
14	Lab		Lab 5: DC motors	
	T 12/01	24	Transmission line models and calculations	Ch 9
	Th 12/03	25	Symmetrical faults	Ch 12
15	T 12/08	26	Faults, The 3 "sequences"	Ch 12, 13
	Th 12/10	27	Unsymmetrical faults	Ch 13
	T 12/15		Review, 3:30 ?? (may change, listen in class)	
16	W 12/16		Final Exam, 1:00 - 3:00 PM	