

ECE 3600

A. Stolp

Tentative

08/08/09

COURSE SCHEDULE

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