

ECE 3600

Tentative COURSE SCHEDULE

A. Stolp

08/24/08

Week	Date	lect	Topics	Textbook
1	T 08/26	1	Introduction, Power systems	Ch 1
	Th 08/28	2	Energy sources, generation, & environment, DC Power	Ch 3
2	M 08/31	Labor Day		
	T 09/02	3	Review of RMS, steady-state AC and phasors, F.T. Gadsby Power plant	2.1-2
	Th 09/04	4	AC power, P, Q, S, S , pf	2.3
3	T 09/09	5	pf correction, 3-phase power, Y- and delta-connections	2.4-5
	Th 09/11	6	Efficiency, per-unit analysis, Electromagnetics	2.6-8
4	T 09/16	7	Transmission lines, Power distribution, Ground return	4.1-4
	Th 09/18	8	Transmission line model	4.4-8
5	T 09/23	9	High voltage DC Transmission lines	skim Ch 7
	Th 09/25	10	The power network ("grid")	5.1-4
6	T 09/30	11	Power flow in the network	5.5-10
	Th 10/02	Exam 1		
7	T 10/07	12	Transformers, Model of the non-ideal transformer, F.T. Rocky Mountain Pow	6.1-6
	Th 10/09	13	Transformer Ratings, Autotransformers & 3-phase	6.7-11
	S 10/11	Fall Break		
	Su 10/19			
8	T 10/21	14	Distribution systems and Loads	8.1-3
	Th 10/23	15	Power Quality	8.4-6
9	T 10/28	16	Synchronous machines as generators	9.1-4
	Th 10/30	17	Control of Synchronous generators	9.5-7
10	T 11/04	18	Voltage regulation	10.1-3
	Th 11/06	19	Transient stability of power systems	10.4, 11.1-3
11	T 11/11	20	Dynamic stability of power systems	11.4
	Th 11/13	Exam 2		
12	T 11/18	21	Power system control, Frequency stability	12.1-3
	Th 11/20	22	Economic Dispatch, Fault detection	12.4, 13.2
13	T 11/25	23	Fault detection and protection	13.3-6
	Th 11/27	Thanksgiving		
14	T 12/02	24	Voltage surge protection	Ch 14
	Th 12/04	25	Wind, Small-scale power sources, Induction machine generator	
15	T 12/09	26	Solar power, Energy storage, DC-AC conversion	
	Th 12/11	27	Wrap-up, conclusions & review	
16	W 12/17	Final Exam, 1:00 - 3:00 pm		