A. Stolp 08/23/10

Tentative

## **COURSE SCHEDULE**

ECE 3600

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