SP212 – General Physics II
Dr. Chris Morgan
Section 4341
Syllabus: Class Schedule, Lab Schedule and Reading Assignments

Week	MWR	Ch	Sects	Pages	Topic	Laboratory
Week 1 (7 – 9 Jan)	W	23	1-3	9	Course Policy; Charges & Coulomb's Law	***Lecture***
	R**	23	4-5	8	The Electric Field	
	F	23	6-7	5	Motions of Particles in an Electric Field	
Week 2 (12 – 16 Jan)	M	24	1-2	6	Electric Flux: Gauss's Law for **E** Fields	Intro to Electrical Measurements
	W	24	3-4	6	Applications of Gauss's Law	
	F	25	1-2	5	The Electrical Potential	
Week 3 (19 – 23 Jan)	M	-	-	-	*Martin Luther King, Jr. Birthday: No Classes*	***Problem Solving: Electrostatics***
	T*	25	3-4	6	Potential from Point Charges; **E** from V	
	W	25	5-6	7	Potential from Charge Distributions; Conductors	
	F	26	1-2	6	Capacitance; Combinations of Capacitors	
Week 4 (26 – 30 Jan)	M	26	3-4	8	Electrical Energy Storage	Simple Circuits
	W	26	5-6	7	Dielectrics; Electrical Dipoles	
	F	27	1-2	9	Current and Resistance; Test Review	
Week 5 (2 – 6 Feb)	M	27	3-6	8	Conduction and Electrical Power	Equipotentials and Electric Fields
	W	-	-	-	***Test #1 During Class Period***	
	F	-	-	-	Demonstration Lecture: Electrostatics	
Week 6 (9 – 13 Feb)	M	28	1-2	10	*emf* & Combinations of Resistors	***Problem Solving: Circuits***
	W	28	3	4	Kirchoff's Rules	
	F	28	4	6	RC Circuits	
Week 7 (16 – 20 Feb)	M	-	-	-	*Presidents' Day: No Classes*	Capacitance and RC Circuits
	W	29	1-3	11	Magnetic Fields; Forces on Conductors	
	F	29	4-5	7	Magnetic Forces on Moving Charges	
Week 8 (23 Feb – 27 Feb)	M	30	1	3	Biot-Savart Law	Kirchoff's Rules
	W	30	2	3	Forces on Parallel Conductors	
	F	30	3-4	7	Ampere's Law and Applications	
Week 9 (2 – 6 Mar)	M	30 34	5 1	4	Magnetic Flux; Gauss' Law for Magnetism; Displacement Current	Magnetic Force
	W	31	1	5	Faraday's Law of Induction	
	F	31	2-3	8	Motional *emf* ; Lenz's Law	
Week 10 (9 – 13 Mar)	M	31	4,5	6	Induced *emf* and Induced Electric Fields	Force Between Current-Carrying Wires
	W	-	-	-	***Test #2 During Class Period***	
	F	-	-	-	Demonstration Lecture: Electrodynamics	
(14 – 22 Mar)	***Spring Break: No Classes***					
Week 11 (23 – 27 Mar)	M	32	1-2	7	Self-Inductance; RL Circuits	Faraday's Law and Inductance
	W	32	3-4	4	Magnetic Energy Storage; Mutual Inductance	
	F	32	5-6	7	LC and RLC Circuits	
Week 12 (30 Mar – 3 Apr)	M	34	2-3	7	Maxwell's Equations; Electromagnetic Waves;	***Lecture***
	W	34	4-7	7	Energy, Momentum and Radiation Pressure	
	R**	35	1-4	7	Geometric Optics; Reflection	
	F	35	5,7,8	10	Refraction, Prisms, Total Internal Reflection	
Week 13 (6 – 10 Apr)	M	36	1-2	11	Images Formed by Mirrors	***Lecture***
	W	36	3	3	Images Formed by Refraction	
	R**	36	4	11	Thin Lenses	
	F	37	1-4	7	Double-Slit Interference	

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Week 14 (13 – 17 Apr)	M	37	5-7	8	Thin Film Interference	Thin Lenses
	W	38	1-4	10	Diffraction by Small Apertures; Test Review	
	F	-	-	-	***Test #3 During Class Period***	
Week 15 (20 – 24 Apr)	M	38	6	7	Polarization of Light Waves	Diffraction Gratings
	W	-	-	-	Final Exam Review	
	F	-	-	-	Demonstration Lecture: Light and Optics	
Week 16 (27 Apr)	M	-	-	-	Final Exam Review	

* Monday class schedule

** Lecture in Lab Classroom