Course Syllabus

Physics 2213 **1/17/2024** **Spring 2024**

Week	Date	Day	Topic	Subtopics	Y & F 15th ed. Chapter.section(s)	Pset*	Exams
1	Jan 23	T	**Electric Force**	Electric charge & force	21.1-2		
	Jan 25	R		Coulomb's Law & Superposition	21.3-4	**0**	
2	Jan 30	T	**& Electric Field**	Electric Fields	21.5		
	Feb 1	R		Calculating electric fields	21.6-7	**1**	
3	Feb 6	T		Electric field lines & Gauss's Law	22.1-4		
	Feb 8	R		Gauss's Law & conductors	22.4-5	**2**	
4	Feb 13	T	**Electric PE**	Electric Potential Energy & Work	23.1-2		
	Feb 15	R	**& Potential**	Calculating Electric Potential	23.3-5	**3**	
5	Feb 20	T	**& Capacitance**	Capacitance & Electric energy	24.1-2		
	Feb 22	R		Capacitors, Dielectrics, & Energy	24.3-5	**4**	Prelim 1
6	Feb 27	T		*FEBRUARY BREAK*			
	Feb 29	R	**Electric Current**	Current & Resistors	25.1-4, 25.6	**5**	
7	Mar 5	T	**& Circuits**	Kirchoff's Laws: Circuits	25.5, 26.1-2		
	Mar 7	R		Kirchoff's Laws: Circuits pt2	26.2-3	**6**	
8	Mar 12	T		RC Circuits	24.2; 26.4		
	Mar 14	R	**Magnetic Force**	Magnetic fields (B) & forces	27.1-5	**7**	
	Mar 19	*T*		Magnetic forces on currents	27.6-7, 27.9		
	Mar 21	*R*	**& Magnetic Field**	Biot-Savart Law	28.1-5	**8**	
9	Mar 26	T		Biot-Savart Law pt2	28.1-5		
	Mar 28	R		Ampere's Law	28.6-8	**None**	Prelim 2
10	Apr 2	T		*SPRING BREAK*			
	Apr 4	R					
11	Apr 9	T		Ampere's Law + Magnetic materials	28.6-8		
	Apr 11	R	**Magnetic**	Faraday's Law + Induced EMF	29.1-2	**9**	
12	Apr 16	T	**Induction**	Lenz's Law + Magnetic Induction	29.3-7, 30.1		
	Apr 18	R	**Inductance**	Displacement current + Inductance	30.2-3, 31.6	**10**	
13	Apr 23	T		LR Circuits	30.4		
	Apr 25	R	**AC Circuits**	LC and damped LRC Circuits	30.4-6	**11**	
14	Apr 30	T	**AC Circuits**	Driven LRC Circuits	31.1-5		
	May 2	R	**EM Waves**	Maxwell's Eqns. & EM waves	32.1-4	**12**	
14	May 7	T		Finale			
15	May 8-10			*STUDY PERIOD*			
May 11-18				***FINAL EXAM: TBA***			

*** Problem Sets are due Fridays at 11:59pm unless otherwise announced**

NOTE: This syllabus is subject to change. Updates will be made at lecture.