Electromagnetic Theory, fall 2015, tentative schedule

	Monday	Wednesday	Friday
September	31 **Overview** Preface, Advertisement	2 **Vector Algebra** Section 1.1	4 **Vector Derivatives** 1.2
	7 Labor Day	9 **PS1** **Vector Integrals** 1.3	11 **Curvilinear Coordinates** 1.4
	14 **The Delta Function** 1.5, 1.6	16 **PS2** **The Electric Field** 2.1	18 **Gauss's Law** 2.2
	21 **The Electric Potential** 2.3	23 **PS3** **Work and Energy** 2.4	25 **FWP1** **Conductors** 2.5
	28 **Review Session and Test** (Vectors and Electric Fields)	30 **Laplace's Equation** 3.1	2 **The Method of Images** 3.2
October	5 **PS4** **Separation of Variables** 3.3	7 **The Multipole Expansion** 3.4	9 **Polarization** 4.1
	12 **PS5** **Field of a Polarized Object** 4.2	14 **The D Field** 4.3	16 **Linear Dielectrics** 4.4
	19 **PS6** **Velocity-Dependent Forces** 12.3.1	21 **Review Session and Test** (Electrostatics)	23 Fall Break
	26 **FWP2** **The Lorentz Force Law** 5.1	28 **The Biot-Savart Law** 5.2	30 **PS7** **Ampere's Law** 5.3
November	2 **The Vector Potential** 5.4	4 **Magnetization** 6.1	6 **PS8** **Field of a Magnetized Object** 6.2
	9 **The H Field** 6.3	11 **Linear and Nonlinear Media** 6.4	13 **PS9** **Ohm's Law** 7.1.1
	16 **Review Session and Test** (Magnetostatics)	18 **Motional EMF** 7.1	20 **FWP3** **Faraday's Law** 7.2
	23 **Inductance and Magnetic Energy** 7.2	25 **PS10** **Maxwell's Equations** 7.3	27 Thanksgiving Break
December	30 **Materials and Boundaries** 7.3	2 **The Poynting Vector** 8.1	4 **Potentials and Gauges** 10.1
	7 **PS11** **Additional Topics**	9 **Additional Topics**	11 **FWP4** **Review Session**
	14 **Final Exam** (9:30 - 11:20 am)	16	18

(Reading assignments are from Griffiths, Introduction to Electrodynamics.)