Electromagnetic Theory, fall 2017, tentative schedule

	Monday	Wednesday	Friday
September	28 Overview Preface, Advertisement	30 Vector Algebra Section 1.1	1 **PS1(a)** Vector Derivatives 1.2
	4 Labor Day	6 Vector Integrals 1.3	8 **PS1(b)** Curvilinear Coordinates 1.4
	11 The Delta Function 1.5, 1.6	13 The Electric Field 2.1	15 **PS2** Gauss's Law 2.2
	18 The Electric Potential 2.3	20 Work and Energy 2.4	22 **PS3** Conductors 2.5
	25 **Review Session and Test** (Vectors and Electric Fields)	27 Laplace's Equation 3.1	29 The Method of Images 3.2
October	2 **PS4** Separation of Variables 3.3	4 The Multipole Expansion 3.4	6 Polarization 4.1
	9 **PS5** Field of a Polarized Object 4.2	11 The D Field 4.3	13 Linear Dielectrics 4.4
	16 **PS6** Velocity-Dependent Forces 12.3.1	18 **Review Session and Test** (Electrostatics)	20 Fall Break
	23 The Lorentz Force Law 5.1	25 The Biot-Savart Law 5.2	27 **PS7** Ampere's Law 5.3
November	30 The Vector Potential 5.4	1 Magnetization 6.1	3 **PS8** Field of a Magnetized Object 6.2
	6 The H Field 6.3	8 Linear and Nonlinear Media 6.4	10 **PS9** Ohm's Law 7.1.1
	13 **Review Session and Test** (Magnetostatics)	15 Motional EMF 7.1	17 Faraday's Law 7.2
	20 Inductance and Magnetic Energy 7.2	22 Maxwell's Equations 7.3	24 Thanksgiving Break
December	27 **PS10** Materials and Boundaries 7.3	29 The Poynting Vector 8.1	1 Potentials and Gauges 10.1
	4 **PS11** Additional Topics	6 Additional Topics	8 Review Session
	11 **Final Exam** (9:30 - 11:20 am)	13	15

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