

From	To	Topic
Module 1: How do wires behave at high frequencies?		
1/20	1/22	Review of algebra and units
1/22	1/24	Review of waves and phasors
1/24	1/27	Wires can act like circuits
1/27	1/29	Impedance
1/29	1/31	Reflection and VSWR
1/31	2/3	Input Impedance
2/3	2/5	Power to the Load
2/5	2/7	Microstrip
2/7	2/10	Matching and Transmission Lines as Circuit Elements
2/10	2/12	Sonnet Mini Project
2/12	2/14	Sonnet Mini Project
2/14	2/17	Sonnet Mini Project Due; Review & Questions
Module 2: What is electricity and magnetism?		
2/17	2/19	Coulomb's Law: Charges and vector fields
2/19	2/21	Electric potential & gradient
2/21	2/24	Dielectrics, polarization, and boundary conditions
2/24	2/26	Gauss' Law & divergence
2/26	2/28	Capacitance
2/28	3/3	Current & conductors
3/3	3/5	Magnetic fields & Biot Savart Law
3/5	3/7	Ampere's Law & analogies between electric and magnetic fields
3/7	3/16	SPRING BREAK! Have fun, be safe...
3/16	3/17	Faraday's Law & Inductance
3/17	3/19	Guest lecture, introduce mini-project
3/19	3/21	Computational EM mini-project
Module 3: How does energy propagate through space?		
3/21	3/24	Computational EM mini-project (Dr. Cheville out of town)
3/24	3/26	Time varying electric & magnetic fields
3/26	3/28	The wave equation & plane waves
3/28	3/31	Power, intensity, flux, Poynting vector
3/31	4/2	Polarization
4/2	4/4	Interaction of EM waves with matter
4/4	4/7	Reflection, refraction, and Fresnel relations
4/7	4/9	Matlab Mini-Project
4/9	4/11	Matlab Mini-Project
4/11	4/14	Project Due; Review & Questions
Module 4: How to we couple energy from circuits to & from free space?		
4/14	4/16	Short dipole antennas
4/16	4/18	Some characteristics of antennas
4/18	4/21	Other types of antennas
4/21	4/23	Course Evaluations
4/23	4/25	Review
4/25	4/28	Questions