

ECEN 360 Course Outline for Fall 1996

Date	Text Section	Topic
Sep 4		Introduction
Sep 5	7.2-7.3	Transmission Lines - Telegrapher & Wave Equations
Sep 6	7.4-7.5	Transients
Sep 9	7.6-7.7	Transients
Sep 11	7.8-7.9	Transients
Sep 12	7.10-7.11	Sinusoidal Steady State Analysis
Sep 13		Sinusoidal Steady State Analysis
Sep 16	5.6,7.12	Smith Chart
Sep 18	7.15	VSWR, Unknown Load Measurement
Sep 19	7.14	Impedance Matching
Sep 20	7.14	Impedance Matching
Sep 23-25		Test #1
Sep 23	DF 1	Electromagnetic Field Theory - Differential Forms
Sep 25	DF 2	Maxwell's Laws in Integral Form
Sep 26	DF 3	Spherical and Cylindrical Coordinate Systems
Sep 27	DF 4.1-4.3	Gauss' Law
Sep 30	DF 4.1-4.3	" "
Oct 2	EFW 4.3-4.4	Electric Potential
Oct 3	DF 4.4, EFW 4.5	Capacitance
Oct 4	EFW 3.4-3.5	Dielectric Materials
Oct 7-9		Test #2
Oct 7	DF 5.1-5.3	Ampere's Law
Oct 9	DF 5.4, EFW 4.12	Inductance
Oct 10	EFW 3.6-3.7	Magnetic Materials
Oct 11	DF 6, EFW 1.8.3	Faraday's Law
Oct 14	DF 7.1	Maxwell's Laws in Forms (Point Form)
Oct 16	DF 7.2-7.3	" "
Oct 17	EFW 2.3-2.6	Maxwell's Laws in Vectors (Point Form)
Oct 18	EFW 2.7-2.11	" "
Oct 21-23		Test #3
Oct 21	DF 9	Boundary Conditions
Oct 23	DF 9	Boundary Conditions
Oct 24	DF 8	Uniform Plane Waves - Conceptual Behavior
Oct 25	2.12-2.14	Wave Equation
Oct 28	6.1	Wave Solution
Oct 30	2.15	Polarization of Plane Waves
Oct 31	2.15	Polarization of Plane Waves
Nov 1	3.11	Plane Wave Propagation in Lossy Media

Nov 4	3.11	Plane Wave Propagation in Lossy Media
Nov 6-9		Test #4
Nov 6	6.3	Plane Wave Reflection & Transmission - Phase Matching
Nov 7	6.5	Critical Angle
Nov 8	6.3	Reflection and Transmission Coefficients
Nov 11	6.4	Brewster's Angle
Nov 13	Notes	Waveguides - Parallel Plate Waveguides
Nov 14	Notes	“ “
Nov 15	8.2-8.3	Rectangular Waveguides
Nov 18	8.3-8.4	“ “
Nov 20	8.5-8.6	“ “
Nov 21	Notes	Dielectric Slab Waveguides
Nov 22	Notes	“ “
Nov 25-27		Test #5
Nov 25	9.2-9.3	Antennas - Hertzian Dipole
Nov 27	9.2-9.3	“ “
Nov 28	Holiday	Thanksgiving
Nov 29	Holiday	Thanksgiving
Dec 2	9.4	Antenna Parameters
Dec 4	9.6	Antenna Arrays
Dec 5		Presentations by Mike Jensen & Richard Selfridge
Dec 6	9.6	“ “
Dec 9	9.6	“ “
Dec 11		Presentations by David Long & David Arnold
Comprehensive Final Exam (25% of Grade)		
Dec 19	11:00am - 2:00pm	In 240 CTB