**Fall 2006** | **EE 210 Lecture Plan** | **Prof. Neureuther**

**Version 8/27/06**

| Wk | Lec | Date | Topic | Reading |
|---|---|---|---|---|
| 1 | 1 | 29-Aug | Overview, Introduction, Vector Caclulus | Intro/Survey, Covers |
| | 2 | 31-Aug | Vector Calculus, Electrostatics (Poisson Eq) | 1.1-1.7 |
| 2 | 3 | 5-Sep | Integral representations, Theorems, Green's Functions | 1.8-1.11 |
| | 4 | 7-Sep | Imaged Based Green's Functions and Use | 2.1-2.6 |
| 3 | 5 | 12-Sep | Orthogonal Functions, Expansions, Edge Conditons | 2.8-2.11 |
| | 6 | 14-Sep | Green's Functions N-1 and N eigenfunction expansions | 3.12 |
| 4 | 7 | 19-Sep | Dielectrics | Ch 4 lite on models |
| | 8 | 21-Sep | Magnetos Statics, Vector Potential | Ch 5 lite |
| 5 | 9 | 26-Sep | Maxwell's Equations | 6.1-6.4 |
| | 10 | 28-Sep | Poyting's Theorem, Energy, Impedance | 6.7-6.9, Collin |
| 6 | 11 | 3-Oct | Plane Waves | 7.1-7.4 |
| | 12 | 5-Oct | Phase and Group Velocity, k$\beta$ Diagrams | 7.9-7.11, Collin |
| 7 | 13 | 10-Oct | Cylindrical Waveguide | 8.2-8.5 |
| | 14 | 12-Oct | Sources in a Rectangular Guide | 8.12, Collin |
| 8 | 15 | 17-Oct | Wall Currents, Cavity Q | 8.1, 8.5, 8.8 |
| | 16 | 19-Oct | Dielectric Waveguides | 8.11, Kogelnik |
| 9 | | 24-Oct | Midterm Exam | Weeks 1-7 |
| | 17 | 26-Oct | Coupled Modes on T-Lines | Lynn |
| 10 | 18 | 31-Oct | Coupled Modes Optical Guides | Buckman |
| | 19 | 2-Nov | Periodic Structures and Coupling | Collin, Notes |
| 11 | 20 | 7-Nov | Small Reflections, Signal Flow Graphs | Collin, HP 154 |
| | 21 | 9-Nov | Distrubured Coupling Applications | Tamir 3.1 |
| 12 | 22 | 14-Nov | Radiation | 9.1-9.4 |
| | 23 | 16-Nov | Characterization of Radiation | 9.5, 9.12 lite multipole |
| 13 | 24 | 21-Nov | Scalar Diffraction Theory | 10.5-10.7 |
| | | 23-Nov | UC Holiday | |
| 14 | 25 | 28-Nov | Scattering Applications | 10.8-10.11, 10.1-10.2 lt |
| | 26 | 30-Nov | Review for Final | |
| 15 | | 5-Dec | Project Presentations | |
| | | 7-Dec | Project Presentations | |
| Final | | 18-Dec | Final 12:30-3:30 PM | |