| Electrostatics: elctric field, potential, Gauss law Electrostatics: Field energy and stress tensor | F15 |
|--|--------------------|
| Electrostatics: Capacitance | F20 |
| • | |
| Electrostatics: Images | F19, S21 F16 |
| Electrostatics: separation of variables, Green's functions | _ |
| Electrostatics: Multipole Expansion (added-JV) | F18, S20, S22 |
| Polarization: Multipole expansion | |
| Polarization Dielectric media, boundary conditions | |
| DC Currents: Continuity Equation, Kirchhoff laws, Ohm's law | |
| DC Currents: Energy dissipation | |
| Magnetostatics: Magnetic interaction of currents | |
| Magnetostatics: Fields of currents (JV) | S15, S19, F20, S22 |
| Magnetostatics: Vectpr Potential, Ampere's law | |
| Magnetostatics: Magnetic flux, energy, inductance | |
| Magnetostatics: Magnetic dipoles | |
| Magnetostatics: Magnetic Media and Boundary Conditions | S19 |
| Magnetostatics: Stress tenspor | S21 |
| Magnetodynamics: Induction | |
| Magnetodynamics: Self and mutual induction | F16 |
| Magnetodynamics: Quasistatic approximation, skin effect | F15 |
| Magnetodynamics: Gauge invariance | |
| Magnetodynamics: Displacement current | F17 |
| Magnetodynamics: Inductors and AC currents | |
| Magnetodynamics: Electromotiove forces | F12, S20, S22 |
| Plasmas | S17,S18 |
| Waves: Plane waves, power | |
| Waves: waves in media | S15, S21, F21 |
| Waves: Dissipation, dispersion, Kramers-Konig | |
| Waves: Reflection and refraction | |
| Waves: Wave Packets (JV) | F17 |
| Waves: waveguides, resonance cavities | S18 |
| Radiation: Near zone and radiation zone | F14, S18 |
| Radiation: Antennas | F15, F19 |
| | • |

Radiation: Multipole expansion S21

Radiation; Spectrum

Radation: Scattering F16

Radiation: Accelerated charges S15, S16, F17, S19, F19, S20, F20

Radiation: Born approximation, Fresnel and Fraunhofer diffraction Relativity: Kinematics \$16

Relativity: maxwell equations

Relativity: transformation of E and B fields S17, S17, S18,S18

Relativity: stress tensor

Relativity: Lagrangian and Hamiltonian in EM fields

Relativity: Relativistic Fields (JV) F14
Relativistic Cjharges: Lienard-Wiechert potential S16

Relativistic Charges: Synchrotron radiations

Relativistic charges: radiation

Relativistic charges: Bremsstrahlungs

Relativistics charges: Limitations of Maxwell Equations