

| Physics 323 Spring 2016 | | | | | | |
|-------------------------|-------------------------------------------------------------|-----------------------------------------------|---------------------------|--|--|--|
| | Text: Griffiths, "Introduction To Electrodynamics," 4th ed. | | | | | |
| | (ver. 29mar16 07:25) | | | | | |
| week | date | lecture topic | reading | | | |
| 1 | 29-Mar | Absorption & dispersion | 9.4.1 | | | |
| | 31-Mar | Electron theory of materials | 9.4.3 | | | |
| 2 | 5-Apr | Wave guides | 9.5.1 | | | |
| | 7-Apr | Rectangular TE & TM modes | 9.5.2 | | | |
| 3 | 12-Apr | Coaxial lines and termination | 9.5.3 | | | |
| | 14-Apr | Resonant cavities | special topic | | | |
| 4 | 19-Apr | Potential formulation & gauges | 10.1.1, 10.1.2 | | | |
| | 21-Apr | EXAM 1 | | | | |
| 5 | 26-Apr | Lorentz gauge. Canonical momentum | 10.1.3, 10.1.4 | | | |
| | 28-Apr | Retarded & advanced potentials | 10.2.1, 10.2.2 | | | |
| 6 | 3-May | Liéinard-Weichert potentials | 10.3.1, 10.3.2 | | | |
| | 5-May | Radiation. Electric dipole radiation | 11.1.1, 11.1.2 | | | |
| 7 | 10-May | Magnetic dipole radiation. | 11.1.3, 11.1.4 | | | |
| | 12-May | EXAM 2 | | | | |
| 8 | 17-May | Power radiated by a point charge | 11.2.1 | | | |
| | 19-May | Radiation reaction | 11.2.2 | | | |
| 9 | 24-May | Issues with radiation reaction. Damping | special topic, 11.2.3 | | | |
| | 26-May | Why is the sky blue? Start special relativity | special topic, 12.1, 12.2 | | | |
| 10 | 31-May | Transformation of fields | 12.3.1, 12.3.2 | | | |
| | 2-Jun | Tensor form of electrodynamics | 12.3.3, 12.3.4, 12.3.5 | | | |
| | | | | | | |
| 11 | 8-Jun | FINAL EXAM | | | | |