

Physics 2415: General Physics II

Michael Fowler, UVa Physics, Fall 2009

[Syllabus](#)

Lecture Notes:

[Lecture 1](#): Introducing Electrostatics

[Lecture 2](#): Coulomb's Law, Superposition

[Lecture 3](#): Dipole Field, Infinite Line and Plane, Conductors

[Lecture 4](#): Gauss' Law

[Lecture 5](#): Using Gauss' Law: Spheres, Lines, Planes

[Lecture 6](#): Electrostatics

Lecture 7: (in preparation)

[Lecture 8](#): Capacitance

[Lecture 9](#): Energy in Capacitors

Kirchhoff's Laws: [Example worked in class](#).

[Lecture 22](#): Mutual Inductance

[Lecture 23](#): LC , LR and LRC Circuits

[Lecture 24](#): Circuits with AC Source

[Lecture 25](#): Waves

[Lecture on light propagation and Young's double slit experiment](#) **New!**

Spreadsheets:

[Spreadsheet for AC LCR Circuit](#).

[Spreadsheet for Adding Two Sine Waves](#).

[Spreadsheet to Sum Fourier Components](#).

Flashlets

Waves:

[Forces on a Tiny Piece of a Vibrating String.](#) [Air Motion for Sound Wave in Tube.](#)

[Assorted Acoustic Animations](#)

Waves at Boundaries:

[Sine Wave Hits Wall,](#) [Wave Hits Fixed End,](#)

[Heavy To Light String.](#)

Light Interference:

[Young's Double Slit Interference Experiment.](#)