1 Electric Charge, Coulomb's Law, Electric Field, Motion of a Charge in Electric Field

1.1 Book Notes

- When charges are at rest in our frame of reference, they exert electrostatic forces on each other.
- Electrostatic forces are governed by a simple relationship known as Coulomb's law and are most conveniently described by using the concept of electric field.
- Two positive charges or two negative charges repel each other. A positive charge and a negative charge attract each other.
- The algebraic sum of all the electric charges in any closed system is constant.
- The magnitude of charge of the electron or proton is a natural unit of charge.
- The electric force on a charged body is exerted by the electric field created by other charged bodies.

1.2 Lecture Notes

• Law of conservation of charge: the net amount of electric charge produced in any process is zero.

1.3 Recitation

• Office is 115

- Tue/Thu: 10-Noon, 2-4:30

- Wed: 8-2, 2-4:30

- Fri: 8-Noon