

### Student Learning Objectives

By the end of this class you should understand the following:

- The number and type of human chromosomes
- The contents of chromosomes
- The process and products of mitosis
- The process and products of meiosis
- The general process of human development from zygote to an adult
- The cellular process of sex and the determination of gender

### Support videos:

- Steps of mitosis
  - <http://www.youtube.com/watch?v=C6hn3sA0ip0>
  - <http://www.youtube.com/watch?v=VIN7K1-9QB0>
- Crash Course
  - <http://www.youtube.com/watch?v=L0k-enzoeOM>
  - <http://www.youtube.com/watch?v=qCLmR9-YY7o>
- Sex
  - Links not provided

### Vocabulary:

- Chromosome
  - Homologous chromosomes
  - Centromere
  - Sister chromatids
- Mitosis
- Meiosis
- Phases of cell cycle
  - Interphase
  - Prophase
  - Metaphase
  - Anaphase
  - Telophase
  - Cytokinesis
- Haploid
- Diploid
- Gamete
- Crossing over