

Student Learning Objectives

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

- The difference between a gene, a genome, and genetics
- The concept of genes as blueprints for our bodies
- Several ways genetics is linked to our daily lives
- What the term genetic engineering refers to
- Ethical concerns surrounding the field of genetics
- The general structure of the human cell

Support videos:

- Parts of the cell
 - <http://www.youtube.com/watch?v=rABKB5aS2Zg>
- Crash Course
 - <http://www.youtube.com/watch?v=H8WJ2KENIK0>
 - <http://www.youtube.com/watch?v=cj8dDTHGJBY>
 - <http://www.youtube.com/watch?v=CBezq1fFUEA>

Vocabulary:

- Gene
- DNA
- Genetics
- Genome
- Genetic engineering
- Cell
- Macromolecules
 - Carbohydrate
 - Lipid
 - Protein
 - Nucleic Acid
- Cell membrane
- Cytoplasm
- Cytoskeleton
- Mitochondria
- Nucleus
- Ribosome
- Chromosome