

Student Learning Objectives

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

- Why an altered gene produces an altered phenotype
- The function and purpose of enzymes in the body
- Signs and symptoms of genetic metabolic disorders
- Common results of defects in transport and structural proteins
- Genetic variation in smell, taste, and drug sensitivities

Support videos:

- Enzyme activity
  - <http://www.youtube.com/watch?v=ok9esggzN18>
- Protein folding
  - <http://www.youtube.com/watch?v=lijQ3a8yUYQ>
- Protein structure & function
  - <http://www.youtube.com/watch?v=MG8ziGyattk>

Vocabulary:

- Enzyme
- Catalyze
- Phenylketonuria
  - Phenylalanine
  - Tyrosine
  - PAH
- Galactosemia
- Galactose
- GALT
- Lactose
- Lactase
- Variable expression
- Hemoglobin
- Sickle-cell anemia
- Pharmacogenetics