

Student Learning Objectives

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

- The pedigree of a spontaneous mutation
- The concept of mutation rates and how they can be measured
- Sources of mutations
- Types of mutations
- The consequences of lengthening repeated sequences of DNA
- Mechanisms of DNA repair

Support videos:

- Mutation
 - <http://www.youtube.com/watch?v=eDbK0cxKKsk>

Vocabulary:

- Mutation
- Mutagen
- Mutation rate
- Radiation
- Background radiation
- Thymine dimer
- Base analog
- Types of mutations
 - Point
 - Insertion
 - Deletion
 - Inversion
 - Silent
 - Missense
 - Frameshift
 - Sense
 - Nonsense
- Allelic expansion
- Anticipation