TOPIC 7.1
Introduction to Natural Selection

Required Course Content

ENDURING UNDERSTANDING

EVO-1
Evolution is characterized by a change in the genetic makeup of a population over time and is supported by multiple lines of evidence.

LEARNING OBJECTIVE

EVO-1.C
Describe the causes of natural selection.

ESSENTIAL KNOWLEDGE

EVO-1.C.1
Natural selection is a major mechanism of evolution.

EVO-1.C.2
According to Darwin's theory of natural selection, competition for limited resources results in differential survival. Individuals with more favorable phenotypes are more likely to survive and produce more offspring, thus passing traits to subsequent generations.

EVO-1.D
Explain how natural selection affects populations.

EVO-1.D.1
Evolutionary fitness is measured by reproductive success.

EVO-1.D.2
Biotic and abiotic environments can be more or less stable/fluctuating, and this affects the rate and direction of evolution; different genetic variations can be selected in each generation.