

# University of Mary Washington

## Student Learning Outcomes for Biology

Students will demonstrate knowledge of Core Concepts for Biological Literacy. Students will demonstrate knowledge of:

1. Core Concept of the concepts and processes of evolution.
2. Core Concept of the nature of structure and function.
3. Core Concept of information flow, exchange, and storage.
4. Core Concept of the pathways and transformations of energy and matter.
5. Core Concept of the nature of biological entities as systems.

Students will demonstrate abilities of Core Competencies for the Practice of Biology. Students will be able to:

6. Core Competency for the practice of Biology of how to apply the processes of science.
7. Core Competency for the practice of Biology of how to use quantitative reasoning.
8. Core Competency of the practice of Biology of how to use modeling and simulation.

Students will demonstrate abilities of Core Competencies for Societal Issues in Biology. Students will be able to:

9. Core Competency for societal issues in Biology of the ability to tap into the interdisciplinary nature of science.
10. Core Competency for societal issues in Biology of the ability to communicate and collaborate with other disciplines.
11. Core Competency for societal issues in Biology of the ability to understand the relationship between science and society.