

Institute for Science and Mathematics

Fall 2017 Workshop Series

Life Science - Study of Living Systems

Instructor: Mike Donaldson, Ph.D

Overview: Students will learn about the structures and functions of living organisms, at age-appropriate levels. Students will also learn about environments, processes and interactions that occur in the living world.

Topics Covered:

Cell Biology

- Cell structure
- Metabolism and cellular functions

Molecular Biology

- DNA
- Protein synthesis
- Cell division

Organisms and their environments

- Plants
 - Photosynthesis
 - Plant structures and functions
 - Environments and ecological roles
- Animals
 - Taxonomy
 - Invertebrates
 - Vertebrates
 - Environments and ecological roles
- Variety and diversity of the living world
 - Bacteria and archaea
 - Protozoa
 - Fungi