

Course: Life Sciences 11 (formerly Biology 11)

Credits: 4

Description: This course begins with an overview of biology, a review of science safety and a breakdown of the scientific method. It elaborates on cell theory through the study of cellular specialization, energy use, reproduction and viral disease. Moving from cells to organisms, you will explore the interrelationships within and between organisms that lead to evolutionary processes, including an exploration of the adverse impacts of human activity on biodiversity. Evolution requires a constantly adapting system of organism classification based on complexity and genetic relationships. Thus, you will develop critical thinking skills as you evaluate the current classification systems and create your own model. Finally, you will apply knowledge from this course to analyze real world problems through the following case studies: The Scientific Method & Malaria, Cancer & Mitosis, Ethical Questions during a Pandemic, The Evolutionary Impact of Invasive Species, The Evolution of Viruses: A Fourth Domain of Life? and Sustaining Biodiversity.

Recommended prerequisites: Science 10

Resources: Online course materials are provided. Personal computer and internet connection are required (not supplied by SAIL). Please note online course platform is not fully compatible with tablets or smartphones.

