BIOLOGY, B.S. (CAPITAL)

Begin Campus: Any Penn State Campus

End Campus: Harrisburg

Program Learning Objectives

- **Understand important topics in biology:** Students will be able to apply the physical, chemical and biological concepts in a biological system. Measures key literacies in 5 categories: Evolution, Information flow, Structure-function linkage, Transformations of energy and matter, and Systems.
- **Interdisciplinary Thinking:** Integrate knowledge between biology subfields and between biology and other disciplines.
- **Process of Experimental Biological Science:** Students will demonstrate proficiency in laboratory techniques, generate hypothesis, design experiments, and interpret data.
- **Quantitative Reasoning and Data Science:** Students will apply basic quantitative concepts to summarize quantitative data, use modeling or simulations to approach problems including large databases and statistical methods.
- **Written Communication:** Logically document/relate biological concepts in a compelling manner suited to the audience with appropriate supporting data and references.
- **Verbal Communication:** Logically present biological concepts in a compelling manner suited to the audience with appropriate language, supporting material and references.
- **Teamwork:** Students will be expected to work successfully as team members, while simultaneously building upon their abilities to become self-directed learners.
- **Biology and Society:** Explore the impacts of biological research on society and the environment, evaluate the ethical implications of biological research, and describe different perspectives in biological issues