BIOLOGY, B.S. (BEHREND)

Begin Campus: Any Penn State Campus

End Campus: Erie

Program Learning Objectives

- **Apply Physical Laws**: Students will be able to apply physical laws to biological dynamics.
- **Apply Statistics**: Students will be able to apply statistical methods to diverse data.
- **Biological Structures**: Students will be able to articulate and explain for multiple levels of the biological hierarchy the physical and chemical characteristics of biological structures influence their function.
- **Chemistry**: Students will understand the relationship of the chemistry of molecules to biological systems.
- **Communicate**: Students will be able to communicate ideas and results of experiments and research effectively both orally and in writing.
- **Data Visualization**: Students will be able to develop and interpret graphs.
- **Design**: Students will be able to design scientific processes to understand living systems.
- **Develop Biological Applications**: Students will be able to develop biological applications to solve societal problems.
- **Energy and Matter**: Students will be able to articulate and explain for multiple levels of the biological hierarchy that organisms captures and transform energy and matter.
- **Evolution**: Students will be able to articulate and explain for multiple levels of the biological hierarchy that evolution explains the diversity and unity of life.
- **Literature**: Students will be able to search for, acquire, and interpret original scientific literature.
- **Model**: Students will be able to computationally model dynamic systems.
- **Organisms**: Students will be able to articulate and explain for multiple levels of the biological hierarchy that organisms store and process information.
- **Systems**: Students will be able to articulate and explain for multiple levels of the biological hierarchy that biological systems are complex and hierarchical.