

College: CLAS
Department: Biology
Degrees: B.A./B.S.

Learning outcomes

The Biology Department currently uses the following learning outcomes, which have been used for internal curricular review, and were also central to recent changes to our undergraduate curriculum.

- 1) Students will gain familiarity with importance of ecosystems and environments for living systems.
- 2) Students will become acquainted with basic physiological mechanisms of organism functions (including energetics, feedback, and homeostasis, transport, intercellular communication, and environmental perception).
- 3) Students will become acquainted with data collection and analysis.
- 4) Students will become acquainted with experimental design and critical observation.
- 5) Students will become acquainted with major evolutionary trends among organisms.
- 6) Students will become acquainted with mechanisms of genetic inheritance.
- 7) Students will become acquainted with operation of basic instrumentation.
- 8) Students will become acquainted with organism/environment interactions.
- 9) Students will become acquainted with proper format for written and/or oral communication in the biological sciences.
- 10) Students will become acquainted with salient distinctions among different major groups of organisms.
- 11) Students will become acquainted with structure and function relationships.
- 12) Students will become acquainted with the primary literature of various fields of biology.
- 13) Students will become acquainted with unity and diversity of life.
- 14) Exiting students will reflect upon their studies within the biology department and provide first hand feedback on the quality of their experiences at PSU.