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.