Biology (BS BIOL) and Allied Health (BS ALHT) Student Learning objectives

- 1. Majors will acquire a broad knowledge of biological concepts across the discipline.
- 2. Majors will demonstrate scientific literacy, including the ability to research and evaluate source material.
- 3. Majors will demonstrate the ability to collect, analyze and interpret scientific data.
- 4. Majors will demonstrate competency in presentation of scientific ideas and concepts in written format.
- 5. Majors will demonstrate competency in presentation of scientific ideas and concepts in oral format.

1. Our majors will acquire a broad knowledge of biological concepts across the discipline.

As participants in biology-based studies or careers, our graduates will require knowledge of a wide range of biological concepts and how to tie them together. To prepare our students to apply successfully to graduate or professional schools, enter clinical programs, or compete for a wide variety of biology-based occupations, we endeavor to provide our majors with a broad-based education, starting with a six-course core curriculum, supplemented with related chemistry, physics and mathematics courses. Students also take advanced biology electives in subjects of their own interest and a capstone senior seminar.

2. Our majors will demonstrate scientific literacy, including the ability to research and evaluate source material.

Scientific literacy represents a series of essential skills, both for a practicing scientist and for citizens of an increasingly technological world. The ability to make informed decisions on scientific matters rests on the prior ability to evaluate scientific information for validity and significance.

3. Our majors will demonstrate the ability to collect, analyze and interpret scientific data.

These are essential skills required for the practice of experimental science.

4. Our majors will demonstrate competency in presentation of scientific ideas and concepts in written format.

Effective communication of ideas is an essential component of most disciplines. It is especially important in complex and technological fields to be able to articulate ideas clearly and to a range of audiences. Effective communication in this program focuses on scientific writing directed towards common practices based on peer-reviewed journal articles.

5. Our majors will demonstrate competency in presentation of scientific ideas and concepts in oral format.

Program graduates will demonstrate an ability to use oral communication skills to convey scientific and technical concepts effectively. Effective communication of ideas is an essential component of most disciplines. It is especially important in complex and technological fields to be able to articulate ideas clearly and to a range of audiences. Effective oral communication in this program is focused towards both clear presentation of the student's own experimental results and conclusions (upper-level elective and independent research projects) and of the work of others (Senior seminars).

Language used in the Departmental Assessment Reports for BIOL and ALHT:

Allied Health Student Learning Objectives (SLOs)

- A. Allied Health majors will demonstrate a broad knowledge within their field
- B. Allied Health majors will demonstrate scientific literacy, including the ability to research and evaluate source material
- C. Allied Health majors will demonstrate the ability to collect, analyze and interpret scientific information
- D. Allied Health majors will demonstrate competency in presentation of scientific ideas in written format
- E. Allied Health majors will demonstrate competency in presentation of scientific ideas in oral format

Biology Student Learning Objectives (SLOs)

- A. Biology majors will acquire a broad knowledge of biological concepts across the discipline.
- B. Biology majors will demonstrate scientific literacy, including the ability to research and evaluate source material.
- C. Biology majors will demonstrate the ability to collect, analyze and interpret scientific data.
- D. Biology majors will demonstrate competency in presentation of scientific ideas and concepts in written format.
- E. Biology majors will demonstrate competency in presentation of scientific ideas and concepts in oral format.