Learning Outcomes

Department of Biology

PROGRAM: BIOLOGY, BA; BIOLOGY, BS

1) Students will demonstrate an understanding of the process of science, and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).
2) Students will participate in the life of the department in Biology/Chemistry clubs or in various positions of responsibility such as graders, tutors, and teaching assistants.
3) Students will develop a rationally defensible integration of science and faith.
4) Students will be prepared for post-graduate studies or science-related careers.

PROGRAM: BIOLOGY-CHEMISTRY, BS

1) Students will demonstrate an understanding of the process of science, and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, and organismal.
2) Students will apply key concepts and principles in quantitative analysis, biochemistry, bioinorganic chemistry, organic chemistry, and physical chemistry (thermodynamics and kinetics).
3) Students will use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.
4) Students will participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, stockroom workers and/or teaching assistants.
5) Students will develop a rationally defensible integration of science and faith.
6) Students will be prepared for post-graduate studies or science-related careers.

PROGRAM: ENVIRONMENTAL SCIENCE, BS

1) Students will demonstrate an understanding of the process of science, and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).
2) Students will apply key concepts and principles in analytical chemistry including quantitative and instrumental analysis.
3) Students will use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.
4) Students will participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, stockroom workers and/or teaching assistants.

5) Students will develop a rationally defensible integration of science and faith, particularly with regard to environmental stewardship.
6) Students will be prepared for post-graduate studies or science-related careers.