BIOL 4000: Service Learning in Biology

1-3 Credit Hours

Prerequisite: 60 hours and permission of instructor and department chair/program director.

A community activity that links learning to life by connecting meaningful community service activities with academic learning, personal growth, and civic responsibility. Activity will be designed with the instructor and approved by the chair/program director.

BIOL 4100K: Molecular Genetics

4 Credit Hours

Prerequisite: BIOL 3300

This course covers molecular genetics theory and practice. Students will examine gene structure and function to learn about genetic engineering and bioinformatics. Students will explore DNA structure, replication, and manipulation to understand sequencing, gene expression, and gene cloning. In the laboratory, students will create recombinant DNA, isolate and purify DNA for mapping and sequence analysis and examine the applications of real-time polymerase chain reactions.

BIOL 4110K: Global Biotechnology-Study Abroad

4 Credit Hours

Prerequisite: BIOL 3300

This course combines the best of both worlds - takes students beyond the typical tourist experience and immerses them in another culture and academic setting for a period of time. Students get the opportunity to engage in activities that increase their knowledge of and appreciation for global issues, languages, history, arts, literature, geography, and diversity of another country. Students will learn about the role of biotechnology and its application in industry with a global perspective.

BIOL 4115: Parasitology

3 Credit Hours

Prerequisite: BIOL 1108 and BIOL 1108L

This course examines the biology of parasites of major medical/veterinary importance. Students will learn how parasites are transmitted to their host(s) and the pathologies that are generated from host-parasite interactions. Students will also examine the epidemiology of parasitic infection, as well as the methods for suppressing parasites in host populations.