

Course Description

BSC3930 | Biological Sciences Seminar | 1.00 credit

This course is designed for biological science majors. Students will gain an understanding of the broad range of career options within the biological sciences. Additionally, students will learn how to read, interpret, discuss, and cite selected examples of scientific literature in different areas of biology. Prerequisites: BSC2010, 2010L, 2011, 2011L.

Course Competencies:

Competency 1: The student will demonstrate knowledge of the different areas/disciplines of the biological sciences by:

- 1. Explaining the different areas/disciplines of the biological sciences and the importance of their contributions to society
- 2. Summarizing different career options available within the different areas/disciplines of the biological sciences
- 3. Explaining new developments in different areas of biological sciences

Competency 2: The student will demonstrate knowledge of the biological research process by:

- 1. Describing the steps of the scientific method and their role within the biological research process
- 2. Conducting a scientific literature search to locate primary and secondary research articles
- 3. Describing how to cite scientific literature properly
- 4. Summarizing necessary rules to follow for written and verbal technical reports
- 5. Preparing a short research paper with scientific citations and an abstract
- 6. Suggesting possible research experiments/observations in continuation of reported scientific data
- 7. Discussing results reported within oral presentations or written publications

Competency 3: The student will demonstrate knowledge of specific skill sets used in various biological science institutions/workplaces by:

1. Recognizing the traits necessary to gain employment within various biological science institutions/workplaces

Competency 4: The student will demonstrate practical knowledge of skills needed to obtain a job in various biological science institutions/workplaces by:

- 1. Compiling the components of a curriculum vitae or résumé
- 2. Summarizing the components of a successful grant proposal
- 3. Displaying an understanding of the job search and application process
- 4. Conducting an oral presentation of a research topic

Learning Outcomes:

- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Demonstrate knowledge of ethical thinking and its application to issues in society
- Describe how natural systems function and recognize the impact of humans on the environment