University of Arkansas – Fort Smith 5210 Grand Avenue P.O. Box 3649 FORT SMITH, AR 72913 479-788-7000

General Syllabus

BIOL 4001 Seminar in Biology

Credit Hours: 1

Lecture Hours: 1

Laboratory Hours: 0

Prerequisite: Senior standing

Prerequisites or corequisites: BIOL 4803/4801 Cell and Molecular Biology/laboratory and one of the following: BIOL 3814 Animal Physiology or BIOL 3824 Plant Physiology or BIOL 3834 Microbial Physiology

Effective Catalog: 2018~2019

I. Course Information

A. Catalog Description

Exposes students to the details of scientific communication methods and develops their abilities to acquire, organize, assimilate, and present scientific information. Examination of published information pertaining to biological questions and presentation of the findings to the biology department faculty members is required.

B. Additional Course Information

This course is a requirement for B.S. in Biology majors. Students must take the course in the senior year.

II. Student Learning Outcomes

A. Subject Matter

Upon successful completion of this course, the student will be able to:

- 1. Efficiently utilize available library resources to acquire adequate research material.
- 2. Comprehend and organize primary scientific research.
- 3. Critically analyze peer-reviewed scientific publications.
- 4. Organize a clear and concise oral presentation of researched topics to a broad biological audience.

B. University Learning Outcomes

BIOL 4001 Seminar in Biology enhances student abilities in the following areas:

Analytical Skills

Critical Thinking Skills: Students will identify, critically analyze, and organize primary scientific literature.

Communication Skills (written and oral)

Students will present oral presentations to the class and Biology faculty and also be able to answer questions pertaining to their research by their audience.

Ethical Decision Making

Students will conduct themselves in an ethical manner and evaluate ethical considerations during discussions of primary scientific literature.

Global and Cultural Perspectives

Students will access published research from around the world as they work with primary scientific literature, and thus develop a global perspective about the disparate geographical contributions of the scientific community.

III. Major Course Topics

Course topics can include any biological area and will vary each semester depending upon the inquiry-based research interest of the student.