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

General Syllabus

GEOS 20003 Geoscience Seminar

Credit Hours: 3 Lecture Hours: 3 Laboratory Hours: 0

Prerequisite(s): GEOL 11103/11101 Physical Geology/Lab or PHSC 11043/11031

Earth Science/Lab

Effective Catalog: 2020-2021

I. Course Information

A. Catalog Description

Introduction to technical writing, editing, and oral presentations in geosciences. Students will locate, read, and interpret published scientific papers and geologic reports. Preparation of abstracts, research proposals, scientific papers and presentations will also be covered.

B. Additional Information

This course is required for the B.S. degree in Geoscience.

II. Student Learning Outcomes

A. Subject Matter

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

- 1. Access and navigate local and online scientific resources
- 2. Explain how scientific papers are peer reviewed
- 3. Prepare requests for funding and explore the process of grant review
- 4. Make oral presentations to technical and non-technical audiences
- 5. Prepare abstracts, research proposals, and a research paper

B. University Learning Outcomes (ULO)

This course will enhance student abilities in the following areas:

Analytical Skills Critical Thinking Skills Students will identify a problem or issue and will research, evaluate, and compare information from varying sources in order to evaluate authority, accuracy, recency, and bias relevant to the problems/issues. The student will generate solutions/analysis of problems/issues evaluated and will assess and justify the solutions and/or analysis.

Communication Skills (written and oral)

Students will communicate proficiently. The student will compose coherent documents appropriate to the intended audience and effectively communicate orally in a public setting.

Ethical Decision Making

Students will model ethical decision-making processes. The students will identify ethical dilemmas and affected parties and will apply ethical frameworks to resolve a variety of ethical dilemmas.

III. Major Course Topics

- A. Locating scientific papers
- B. Reading and summarizing published papers
- C. Writing scientific abstracts
- D. How to properly cite sources
- E. Writing scientific papers
- F. How to create a 5-minute proposal presentation
- G. How to create a 15-minute oral presentation
- H. How to create functional and easy to read graphs