

## APPLICATION FOR NEW COURSE

OCT 16 2003

1. Submitted by: **College of Arts & Sciences** Date: **Nov. 12, 2002**  
Department/Division offering course: **Geological Sciences**
2. Proposed designation and Bulletin description of this course:

(a) Prefix and Number: **GLY 295** (b) Title: **Geoscience Orientation**  
\*NOTE: If the title is longer than 24 characters (including spaces), write a sensible title (not exceeding 24 characters) for use in transcripts: **n/a**

(c) Lecture/Discussion hours per week: **1** (d) Laboratory hours per week: **0**

(e) Studio hours per week: **0** (f) Credits: **1**

(g) Course description: **Survey of geoscience disciplines and post-baccalaureate career options for Geology majors. Introduction to the range of geoscience research approaches and means of dissemination of geoscience information. Guest speakers from industry, government, and academia will discuss career issues specific to geology, including consideration of appropriate educational preparation for potential career paths.**

(h) Prerequisites (if any): **GLY 220 and sophomore standing**

(i) May be repeated to a maximum of: **n/a** (if applicable)

4. To be cross-listed as: **n/a**  
Prefix & No. Signature, Chairman, cross-listing department

5. Effective Date: **Fall 2003** (semester and year)

6. Course to be offered: **Fall**

7. Will the course be offered each year? **No**  
(Explain if not annually):

**Offering course every-other-year will insure high enrollment that is most efficient for staffing and scheduling of guest speakers**

8. Why is this course needed: **This course was created in response to comments from students on Arts & Sciences exit surveys that there was an inconsistent approach to career advising within the Department. The DUS and other faculty were always open to discussing post-baccalaureate options with students, but this was usually done on an ad hoc basis. Comments on the exit surveys prompted us to consider covering this information in a more formal, organized, and thorough manner, using the range of geoscience expertise available in the UK and professional community.**

9. (a) By whom will the course be taught? **Faculty in Dept. of Geological Sciences**  
(b) Are facilities for teaching the course now available? **Yes**  
If not, what plans have been made for providing them?

10. What enrollment may be reasonably anticipated? **12**
11. Will this course serve students in the Department primarily? **(a) Yes**  
 Will it be of service to a significant number of students outside the Department?  
 If so, explain **(b) No**
- Will the course serve as a University Studies Program course? **(b) No**  
 If yes, under what Area?
12. Check the category most applicable to this course:  
 traditional; offered in corresponding departments elsewhere;  
 relatively new, now being widely established  
 not yet to be found in many (or any) other universities
13. Is this course part of a proposed new program? **(b) No**  
 If yes, which?
14. Will adding this course change the degree requirements in one or more programs? \* **(a) No**  
 If yes, explain the change(s) below:
15. Attach a list of the major teaching objectives of the proposed course, outline and/or reference list to be used.
16. If the course is a 100-200 level course, please submit evidence (e.g., correspondence) that the Community College System has been consulted: **n/a**
17. Within the Department, who should be contacted for further information about the proposed course?  
 Name/e-mail: **David P. Moecher, Associate Professor [moker@uky.edu](mailto:moker@uky.edu)** Phone Extension: **7-6939**

\*NOTE: Approval of this course will constitute approval of the program change unless other program modifications are proposed.

Signatures of Approval:

Frank R. Etensky 7-1401

13 Nov, '02

Department Chair  
David Leep

Date

DEC 13 2002

Dean of the College

Date

NOV 21 2002

Quinn Huggs

Date of Notice to the Faculty

10/7/02

\*Undergraduate Council

Date

\*University Studies

Date

\*Graduate Council

Date

\*Academic Council for the Medical Center

Date

\*Senate Council

Date of Notice to Univ. Senate

\*If applicable, as provided by the Rules of the University Senate

ACTION OTHER THAN APPROVAL:

## **Addenda**

### **1. Course Justification: Some Background**

This course was created in response to comments from students on Arts & Sciences exit surveys that there was an inconsistent approach to career advising within the Department. The DUS and other faculty were always open to discussing post-baccalaureate options with students, but this was usually done on an ad hoc basis. Comments on the exit surveys prompted us to consider covering this information in a more formal, organized, and thorough manner, using the range of geoscience expertise available in the UK and professional community. We believe that a course of this nature, which many degree programs at UK include as a similar course, is the most efficient vehicle for conveying this information to students. Although the University has the Career Center, we believe that such a venue cannot provide the detailed disciplinary background and advise on the range of post-baccalaureate professional career options specific to the geosciences.

### **2. Learning Outcomes**

Upon completion of this course, students should be able to:

- Demonstrate knowledge of the range of scientific disciplines and public policy areas in which a geoscience education is relevant.
- Apply the tools used to search for and retrieve print and electronic geoscience information in upper division courses in the major
- Apply the techniques discussed in class and complete a resume and cover letter appropriate to a professional geoscience field.
- Explain the relationship between basic geoscience research and how it is applied in the geoscience industry

### **3. Course Description for UK Bulletin**

Survey of geoscience disciplines and post-baccalaureate career options for Geology majors. Introduction to the range of geoscience research approaches and means of dissemination of geoscience information. Guest speakers from industry, government, and academia will discuss career issues specific to geology, including consideration of appropriate educational preparation for potential career paths. Prerequisites: *GLY 220 and sophomore standing.*

**GLY 295 Geosciences Orientation (1 Credit P/F)**  
**(Draft Syllabus)**

This course will explore the diverse disciplines and potential career paths in Geosciences. It will introduce students to the range of geoscience research methods and the methods for dissemination of scientific information. Guest speakers from industry, government, and academia will discuss career issues specific to geosciences, including consideration of appropriate educational preparation for each career path. Students will be introduced to and guided through the graduate school application process. In addition to lectures and in-class discussions, assignments will include readings from the literature, writing assignments including resumes and cover letters, and WWW exercises. This course is intended for majors who have had an introductory course in Physical Geology (GLY 220). This course should be taken during the sophomore or junior year.

**Prerequisites:** GLY 220, sophomore standing.

**Teaching Objectives:**

- Inform geoscience majors as to the spectrum of disciplines in the public and private sector that require a geoscience education
- Inform students of the post-baccalaureate career, educational, and research opportunities in geosciences
- Provide opportunities for students to meet geoscience professionals and establish mentoring relationships
- Guide students through the process of searching for print or electronic geoscience and career information
- Explore the methodologies of research and the scientific method as applied in the geosciences.

**Meeting Times:** M 4:00-4:50 p.m.

**Location:** 205 Slone Bldg.

**Course Coordinator:** Director of Undergraduate Studies

**Grades:** Passing grade will require regular attendance (with consideration of absences for legitimate reasons and students having a valid excuse) and maintain at least a C average on all assignments.

**Outline: List of Potential Topics**

- Introduction to Geoscience: the Breadth of Disciplines
- Geoscience Research Methods
- ‡Geoscience Information: Production and Dissemination
- Career opportunities (COs) in state government agencies (Dr. Cobb or Kiefer, Kentucky Geological Survey, or guest from KY Environmental Cabinet)
- Federal geoscience agencies and careers (guest from U.S. Geological Survey, or Minerals Management Agency)
- COs in the environmental/hydrogeology field (Dr. Alan Fryar; guest from environmental industry)
- COs in petroleum industry; geology (Drs. Howell, Thomas, or Drahovzal and/or guest from industry)
- COs in petroleum industry; geophysics (Dr. Woolery or Kenner; guest from industry)
- COs in the coal industry; (Dr. Rimmer, Hower, or Ebel; guest from industry)
- COs in the mining industry; national and international (guest from industry)
- COs in academia (faculty member from Univ. of Kentucky)
- COs in environmental or mineral law (Prof. Michael Healy, UK College of Law)
- Graduate school opportunities: preparation, selection, the application process, timing, and the GRE (Prof. A Fryar, Dir. Grad. Studies)

ARTS AND SCIENCES COLLEGE COUNCIL/CURRICULUM COMMITTEE

INVESTIGATOR REPORT

INVESTIGATING BODY Area A, Steven Yates  
(Area, Area Chair)

COURSE, MAJOR or DEGREE GLY 301<sup>295</sup>  
(department or college)

DATE FOR COUNCIL REVIEW 12/13/02

CATEGORY NEW, CHANGE, DROP

INSTRUCTIONS: This completed form will accompany the course application to the Graduate/Undergraduate Council(s) in order to avoid needless repetition of investigation. The following questions are included as an outline only. Be as specific and as brief as possible. If the investigation was routine, please indicate this. The term "course" is used to indicate one course, a series of courses or a program, whichever is in order. Return the form to the Associate Dean, 231 Patterson Office Tower for forwarding to the other Council(s). ATTACH SUPPLEMENT IF NEEDED.

List any modifications made in the course proposal as submitted originally and why.

IT IS SUGGESTED THAT THE COURSE NUMBER BE CHANGED TO GLY 295 SO THAT IT IS OPEN TO SOPHOMORES.

2. If no modifications were made, review considerations that arose during the investigation and the resolutions.

THE QUESTION OF WHETHER A COURSE REQUIRED FOR THE MAJOR CAN BE OFFERED PASS/FAIL WAS RAISED.

3. List contacts with program units on the proposal and the considerations discussed therein.

DAVID P. MOECHER, DEPT. OF GEOLOGY

4. Additional information as needed.

NONE

5. A&S Area A, Natural & Mathematical Sciences Curriculum Committee Recommendation:

APPROVE, APPROVE WITH RESERVATION, OR DISAPPROVE

6. A&S Council Recommendation:

APPROVE, APPROVE WITH RESERVATION, OR DISAPPROVE

7. Steven Yates  
A&S Council Investigator, Dr. Steven Yates

Date: 12/13/02

File: \InvestigatorRpt

CHANGE TO GLY 295