UF UNIVERSITY of FLORIDA

College of Liberal Arts & Sciences
Office of the Dean

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November 10, 2010

TO: General Education Committee
FROM: David Pharies, Associate Dean for Humanities, CLAS
RE: Application for general education classification for GLY 1880

I am writing in support of the Geology Department's request that the evaluation of GLY 1880 for General Education classification be expedited, hopefully in time for Spring 2011 registration. The College of Liberal Arts and Sciences feels that the course is appropriate for a "P" designation, and we are confident that, so designated, it will appeal to large numbers of students. We appreciate your consideration of this request.

UF UNIVERSITY of FLORIDA

Department of Geological Sciences

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11/09/2010

TO: General Education Committee

RE: Application for general education classification for GLY 1880

I am writing to request that the evaluation of GLY 1880 for General Education classification be done at the November 19, 2010 meeting. When this new course was approved the faculty member who submitted the paperwork was not aware that additional forms were required for Gen Ed designation. This course was designed for non-majors and intended to be a Gen Ed course. With such a topical subject we were anticipating the course would attract large numbers of students. The Department of Geological Science is offering two 175-seat sections of GLY 1880 for Spring 2011. When we scheduled the course for spring semester we thought that the designation was complete, because it appeared in the course catalog with a "P." Our concern is that without the Gen Ed P designation only a small number of students will select GLY 1880. We apologize for the oversight and thank you for considering fast-tracking the approval process.

Sincerely,

David Foster
Professor and Associate Chair

Application for General Education and/or Gordon Rule Writing Certification

I. A.) Course Number and Title: GLY 1880 Earthquakes, Volcanoes, and Other Hazards

B.) Credit Hours: __3_____

C.) Prerequisites:_____none_____

D.) Current Classification

1. General Education Code: ☐B ☐C ☐D ☐H ☐M ☐N ☐P ☐S ☒ None
2. Gordon Rule (Writing): ☐ E2 ☐ E4 ☐ E6 ☒ None
3. Gordon Rule (Math): ☐ M ☒ None

Requests:

II. General Education

A.) Requested Classification: ☐ B ☐ C ☐ D ☐ H ☐ M ☐ N ☒ P ☐ S

B.) Effective Date: ☐Fall ☒ Spring ☐ Summer__2011___(year)

Or

☐ 1-time Approval _____ (year)

C.) General Education purpose and learning outcomes for the course? [Detailed attached response requested.]

III. Gordon Rule

A.) Requested Classification for course ☐ E2 ☐ E4 ☐ E6

B.) Writing Requirements:

1.) Number of papers, essays, etc. with word count specified.

2.) Due Dates? Returned with feedback dates?

3.) What type of feedback will be provided the student (in reference to writing skill)?

_____Grade _____Corrections _____Drafts _____Other

4.) Assessment

a.) Will the written work be evaluated for grammar, punctuation and proper usage of standard written English?

b.) Will written work be evaluated for an effectiveness, organization, clarity and coherence of writing?
c.) Will a published rubric be used?

IV. Syllabus

Courses that offer students General Education and/or Gordon Rule credit must provide clear and explicit information for the students about the classification and requirements.

A.) For courses with a General Education classification, the syllabus should include:

- ☐ Statement of the General Education Purpose of the Course with attention to the General Education Classification requested
- ☐ List of assigned General Education Student Learning Outcomes
- ☐ List of any other relevant Student Learning Outcomes
- ☐ List of required and optional texts
- ☐ Weekly course schedule with sufficient detail (e.g. topics, assigned readings, other assignments, due dates)

B.) For courses with Gordon Rule (writing) classification, the syllabus should include:

- ☐ A description/list of Gordon Rule expectations for students (word count, page lengths and deadlines for assignments).
- ☐ A statement to the effect that students written assignments will be evaluated with respect to grammar, punctuation, and usage of standard written English, as well as clarity, coherence, and organization. Reference rubric.
- ☐ A statement indicating that students will receive feedback on written assignments prior to the last class meeting.
- ☐ Assessment note to include basis for grading (rubric) and a statement identifying the two components of the grading, letter grade for course and approved completion of the writing portion of the course.

V. Submission and Approvals

A.) Submitted by (Signature of Instructor): _____
Date 11-9-2010

B.) Department Approval: _____

C.) College Approval: _____

D.) Committee Action: ☐ Approved ☐ Denied ☐ Tabled Date_____

General Education purpose and learning outcomes for the course

GLY 1880 is an introductory science course aimed at communicating basic scientific precepts primarily to students who will not be majoring in a science. With that in mind, there are several goals for the course.

1) The course provides an overview of the geological sciences as viewed through the lens of natural hazards. This includes teaching both the basics of the behavior of the solid Earth, such as plate tectonics and the rock cycle, as well as other topics of interest in Earth science, such as natural resource management, and the atmosphere and climate change over geologic and human time scales. In order to approach these topics, many other basic elements of the physical sciences are introduced and explained.
2) The course aims to give the student better understanding of the concepts of risk, hazard, and vulnerability and how they affect them day to day and over the longer term. It aims to give them the tools to better evaluate risks they read about in popular press as well as those they may not be aware of.
3) Throughout the course, they learn how to approach topics scientifically, and how to use observations to assemble and test hypotheses. Ideally, this will convey the importance of scientific and critical thinking not only to science, but to the rest of their lives as well.

These overarching goals are approached through lectures that encourage student participation through the use of clickers, which allow for real-time feedback about how the students are learning the material as well as what specifically interests them about the topics. The basic course topics, natural hazards, tend to be topics that students are both interested in and have some basic familiarity with through the popular press. By using these as tools to teach basic scientific concepts, they are able to gain interest in topics they might not otherwise have noticed, while discussion of current events in the news brings the ideas outside of the classroom.

GLY 1880: EARTHQUAKES, VOLCANOES, AND OTHER HAZARDS
Instructor: Mark Panning

Syllabus Spring 2010

Lectures: Carleton Auditorium 100
MWF 4th period 8 3:00-3:50

Contact info:
Email: mpanning@ufl.edu or through E-Learning
Office: 229 Williamson Hall (next to the Hub)
Office Hours: Monday 12:50-1:40, Wednesday 1:55-2:45

Course Objectives (General Education Purpose):

1. To gain an overview of the physical geological sciences as viewed through the lens of natural hazards.
2. To get a better understanding of the concepts of risk, hazard, and vulnerability and how they affect you both day to day, and over a longer term.
3. To convey the importance of scientific and critical thinking not only to science, but to the rest of your life as well.

Grading:
10% Classroom participation (as measured by clickers... see below)
25% Exam 1 – Fri, Feb 12, in class period
25% Exam 2 – Fri, Mar 26, in class period
40% Final Exam – Group 27C, Tue, Apr 27, 12:30-2:30 pm, in Carleton Auditorium

Approximate Grading Scale:
90 or above – A
87-89 – A-
84-86 – B+
80-83 – B
77-79 – B-
74-76 – C+
70-73 – C
67-69 – C-
64-66 – D+
60-63 – D
57-59 – D-
56 or below - E

Textbook (required):
Natural Disasters, 7th Edition, P.L. Abbott
Older editions may be used as well, but page numbers will be given in the 7th Edition. The test materials will be based on lectures and the 7th Edition.

Reading assignments in the Abbott text are announced in lecture. The online syllabus will be updated with these assignments through the course of the semester. The reading assignments are meant to be supplementary to the class, and material will be included in the lecture that is not necessarily included in the text (and vice-versa).

Exams:
The first two exams will not be cumulative, and will only cover material included in the segment preceding the exam. Specifically, Exam I is expected to cover material in lectures from week I-VI, as well as reading material in Abbott, Ch. 2-4,6-7, while Exam II is expected to cover weeks VII-XI, and reading material in Ch. 5,8-11,13-15. This, like the schedule below, is subject to change.

The final exam will be semi-cumulative. By this I mean that it will focus on material covered since the second exam (expected to include Ch. 1, 12, 16-17), although mastery of some of the basic concepts (such as the risk equation and sources of energy) will be expected, as well as some overview comparisons between the types of hazards discussed in the course.

If there is an unavoidable reason why you can not be at the scheduled exam, you need to contact me to arrange a make-up exam before the scheduled exam. If you are unable to attend the exam due to illness, I will request a doctor's note.

"Extra Credit" Assignment:
In the second half of the semester, you will be given the option of completing up to 2 of 3 possible take-home projects which will take the form of a hazards-related report a few pages in length which will require independent access and assimilation of data available on the internet. If you decide to take advantage of this assignment, it will reduce the weight of the lower score from Exams I and II to 15% (rather than 25%). The remaining 10% of your grade will be based upon your score for the assignment. If 2 assignments are completed, they will further reduce the weight of the lowest exam by the same amount as the first assignment.

Classroom participation (clickers):
We will use clickers in this class to encourage active participation. The 'score' you get from the clickers contributes 10% to your grade but the score *does not depend on the fraction of questions you got right*. The reason for this policy is that the clicker questions are just as much a test on how well I am teaching the subject, as of your ability to absorb the material in class. The clicker questions are designed to help you prepare for questions you'll get in the exams. The clicker score contributes 10% to your final score. For every class where you've answered at least 60% of the questions – right or wrong – you will receive 1 point. The maximum number of points you can receive will be capped at 30. There will be 40 lectures during the semester that include clicker questions (there will be no clicker questions during the 2 in-class exams). *This means you will be able to miss up to 10 of these lectures at no penalty, while each absence above 10 will effectively deduct 1/3 of a point from your final grade*. This should be ample allowance for any absences required due to sickness, athletic traveling, etc., so ***there will be no need to approve absences in advance, and barring exceptional circumstances, no makeup points will be given***.

Other Policies:
Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

I will expect all students to uphold the standards of academic integrity as stated in the Student Honor Code (available through the Dean of students office at http://www.dso.ufl.edu/sccr/honorcode.php)

Schedule:
I. Week of Jan 4
Jan. 4. No class yet
Jan. 6. Introduction to the course
Jan. 8. Introduction to Hazards

II. Week of Jan 11
Jan. 11. Hazards need energy: How much, what kind, and from where?
Jan. 13. Energy II
Jan. 15. Plate Tectonics: How the Earth gets rid of its calories

III. Week of Jan 18
Jan. 18. MLK day – no class
Jan. 20. Earthquakes, plate tectonics, and the landscape
Jan. 22. Seismic waves and seismograms

IV. Week of Jan 25
Jan. 25. Magnitude and intensity: The largest earthquakes
Jan. 27. Quantifying risk and hazard
Jan. 29. Probabilities and predictions

V. Week of Feb 1
Feb. 1. The San Andreas Fault I
Feb. 3. The San Andreas Fault II
Feb. 5. Global seismicity

VI. Week of Feb 8
Feb. 8. Earthquake engineering
Feb. 10. Exam review
Feb. 12. Exam 1

VII. Week of Feb 15
Feb. 15. Magma generation in the Earth
Feb. 17. Introduction to volcanic hazards
Feb. 19. Plinean eruption columns and pyroclastic flows

VIII. Week of Feb 22

Feb. 22. Spreading-center and hotspot volcanism (add in Jelloea demo!)
Feb. 24. Subduction volcanoes: Ruiz, Pinatubo, and the Pacific Northwest
Feb. 26. Fire

IX. Week of Mar 1
Mar. 1. Floods I
Mar. 3. Floods II
Mar. 5. Tsunami

BREAK WEEK

X. Week of Mar 15
Mar. 15. Weather & tornadoes
Mar. 17. Hurricanes, typhoons
Mar. 19. Beach erosion

XI. Week of Mar 22
Mar. 22. Landslides/Avalanche
Mar. 24. Exam review
Mar. 26. Exam 2

XII. Week of Mar 29
Mar. 29. Population growth
Mar. 31. Natural Resources/Peak Oil
Apr. 2. Earth's habitability

XIII. Week of Apr 5
Apr. 5. Earth's habitability & climate change
Apr. 7. Ice ages
Apr. 9. Global Warming: What is it, and are we the cause?

XIV. Week of Apr 12
Apr. 12. Global Warming: What can we do about it?
Apr. 14. Impacts!
Apr. 16. Life and Death in the Cosmic Shooting Gallery

XV. Week of Apr 19
Apr. 19. Protecting ourselves from the fate of the Dinosaurs
Apr. 21. Last class: final exam review

This schedule is subject to change. Lecture notes will be available online through E-Learning.