New Course Request

Indiana University

South Bend Campus

Check Appropriate Boxes:  Undergraduate credit □  Graduate credit □  Professional credit □

1. School/Division College of Liberal Arts & Sciences 2. Academic Subject Code GEOL

3. Course Number N190  (must be cleared with University Enrollment Services)  4. Instructor GEOL Faculty

5. Course Title The Natural World

Recommended Abbreviation (Optional) (Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Fall 2005

7. Credit Hours: Fixed at 3.0 or Variable from 0 to

8. Is this course to be graded S-F (only)? Yes X No

9. Is variable title approval being requested? Yes X No

10. Course description (not to exceed 50 words) for Bulletin publication: Introduces students to the methods and logic of science, and helps them understand the importance of science to the development of civilization and the contemporary world. Provides a context within which to evaluate the important scientific and technological issues of modern society. Interdisciplinary elements.

11. Lecture Contact Hours: Fixed at 2 or Variable from 2 to 3

12. Non-Lecture Contact Hours: Fixed at 0 or Variable from 0 to 2

13. Estimated enrollment: 30 of which 0 percent are expected to be graduate students.

14. Frequency of scheduling: every semester

15. Justification for new course: One of four courses in campus-wide general education "common core"

16. Are the necessary reading materials currently available in the appropriate library? Yes

17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.

18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant.

19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitted by:

Department Chairman/Division Director  Date 10/19/04

Dean of Graduate School (when required)  Date  

Approved by:

Dean  Date 12/1/04

Chancellor/Vice-President  Date  

University Enrollment Services  Date  

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.
PHYS-N 190 – The Natural World: Geology of Our National Parks

Instructor: Dr. Henry P. Scott, Department of Physics and Astronomy
Office: NS 345  Telephone: 520-5527
Office Hours: T: 10-11:00 and W: 11:30 – 12:30, or by appointment


Course Description: Our national and state parks contain some of the most beautiful scenery found on the planet and accordingly draw visitors from around the world. Their spectacular landscapes are the result of a wide range of geologic processes that we will discuss in this course. After introducing the basic framework of plate tectonics we will study individual parks as geologic case studies and introduce geological principles as necessary to scientifically understand what gives the parks their unique character.

Course Structure: Class meetings will consist of lectures, demonstrations and discussion; students are strongly encouraged to actively participate as we interpret geologic settings. There will be three equally weighted exams and out of class writing exercises (including a term paper as described below). Students will peer review each other’s writing assignments; this process is an important part of the course and thoughtful participation is required.

Term Paper: A term paper on a process or location of particular interest to each student will be required. The paper should be 5-8 pages in length and include appropriate literature citations.

Homework Assignments: Most assignments will be writing exercises designed to encourage students to explain landscapes in terms of geological processes that may have acted to create them. A fundamental goal of this course is for students to be able to look at a new setting and provide a plausible geologic explanation for how it formed. It is required that writing assignments be clearly and carefully written; if necessary students will be expected to take advantage of the writing center to work on their writing skills. There will be two steps to receive full credit for writing assignments: submission and peer review. After collecting assignments I will randomly redistribute them to the class for peer review. The peer review should include constructive criticism about the quality and content of the writing.

Grading: The course grade will be determined as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam Average</td>
<td>65%</td>
</tr>
<tr>
<td>Term Paper</td>
<td>15%</td>
</tr>
<tr>
<td>Homework Assignments</td>
<td>20%</td>
</tr>
</tbody>
</table>