GE16301, Environmental Issues and Resources,
Summer Session 2, 2013, 3 Credits

Instructor: Dr. Kenneth G. Galli
email: Kenneth.galli@bc.edu
Office: Devlin Hall 310
Office Hours: By appointment or after class nights following lectures.
Telephone: 617-552-4504
Schedule: Tuesdays & Thursdays 6:15 - 9:15 PM
Room: Devlin 218

Boston College Mission Statement

Strengthened by more than a century and a half of dedication to academic excellence, Boston College commits itself to the highest standards of teaching and research in undergraduate, graduate and professional programs and to the pursuit of a just society through its own accomplishments, the work of its faculty and staff, and the achievements of its graduates. It seeks both to advance its place among the nation's finest universities and to bring to the company of its distinguished peers and to contemporary society the richness of the Catholic intellectual ideal of a mutually illuminating relationship between religious faith and free intellectual inquiry.

Boston College draws inspiration for its academic societal mission from its distinctive religious tradition. As a Catholic and Jesuit university, it is rooted in a world view that encounters God in all creation and through all human activity, especially in the search for truth in every discipline, in the desire to learn, and in the call to live justly together. In this spirit, the University regards the contribution of different religious traditions and value systems as essential to the fullness of its intellectual life and to the continuous development of its distinctive intellectual heritage.

Course Description

GE 16301  Environmental Issues and Resources
Learn about the major processes at work inside and on the surface of the earth. Acquire skills that will promote logical decisions making about evaluating and purchasing land and property. Each class is designed to examine the facts, historical backgrounds, and through homework exercises, provide experience in analyzing and solving real-world problems associated with environmental issues, resources and sustainability. Demonstrations, videos, readings and a campus field trip underscore important concepts and applications.

June 25-Aug 1, T TH, 6:15-9:15 p.m., 3 credits
Lecturer Kenneth Galli, Ph.D.

Course Objectives

1. Gaining factual knowledge (terminology, classifications, methods, trends)
2. Learning to apply course material (to improve thinking, problem solving, and decisions)
Learn about the major processes at work inside and on the surface of the Earth. Acquire skills that will help you to make logical decisions about evaluating and purchasing land and property. Each class is designed to give you the facts, a historical background, and through homework exercises, experience in analyzing and solving real-world problems associated with environmental issues and resources. Tie-ins to key terms and concepts will be aided by reference to portions of John McPhee's book: The Control of Nature and through the use of selected videos on key topics. Geology is best done in the field so our last class will be a field trip to explore
Boston College campus and describe some important geological features that we have talked about in class. The final exam is on the last scheduled day. The course pack has most lecture material.

1. “The student will demonstrate knowledge across cultural settings and will learn the impact of culture, gender, and age in environmental geology as demonstrated by aspects of landslides, floods, earthquakes and volcanic eruptions and their effect on humans and human settlements.

2. “The student will demonstrate ethical skill pertaining to making sound decisions as demonstrated by answering questions in homework exercises regarding responsible land use with respect to map-reading, identifying potential landslide hazards, identification of historic landslides, mapping of the 50-year floodplain, producing groundwater table maps using well data, and the production of weighted value land use maps by the assessment of derivative maps to locate the best place to build a house.

**Grading**

Homework Exercises 35%
Mid-Term Exam (one-hour) 30%
Comprehensive Final Exam (two hours) 35%

**Summer Grading System**

The undergraduate grading system consists of twelve categories: A (4.00), A- (3.67), excellent; B+ (3.33), B (3.00), B- (2.67), good; C+ (2.33), C (2.00), C- (1.67), satisfactory; D+ (1.33), D (1.00), D- (.67), passing but unsatisfactory; F (.00), failure; I (.00), incomplete; F (.00), course dropped without notifying office; W (.00), official withdrawal from course. The graduate grading system is A (4.00), A- (3.67), Excellent; B+ (3.33), B (3.00), good; B- (2.67), C (2.00), passing but not for degree credit; F (.00), failure.

Grade Reports. All students are required to log into the web through Agora to access their summer grades. Students must utilize their BC username and password to log on. If your username or password is not known, the HELP Desk located in the Campus Technology Resource Center (CTRC) in O’Neill Library will issue a new one. The CTRC requires a valid picture ID (a BC ID, driver’s license or passport) to obtain your password.

**Text(s)/Readings (Required)**

2. Coursepack: GE 16301 Environmental Issues and Resources, for sale in the Boston College bookstore. This will also include all the homework exercises.

**Text(s)/Readings (Recommended)**

Will be available on the GE16301 Blackboard Vista site and at my https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html
Important Policies
http://www.bc.edu/content/bc/schools/advstudies/guide/academicinteg.html

Written Work
Graduate and undergraduate students are expected to prepare professional, polished written work. Written materials must be typed in the format required by your instructor. Strive for a thorough, yet concise style. Cite literature appropriately, using APA, MLA, CLA format per instructors decision. Develop your thoughts fully, clearly, logically and specifically. Proofread all materials to ensure the use of proper grammar, punctuation, and spelling. You are encouraged to make use of campus resources for refining writing skills as needed [http://www.bc.edu/libraries/help/tutoring.html].

Scholarship and Academic Integrity
It is expected that students will produce original work and cite references appropriately. Failure to reference properly is plagiarism. Scholastic dishonesty includes, but is not necessarily limited to, plagiarism, fabrication, facilitating academic dishonesty, cheating on examinations or assignments, and submitting the same paper or substantially similar papers to meet the requirements of more than one course without seeking permission of all instructors concerned. Scholastic misconduct may also involve, but is not necessarily limited to, acts that violate the rights of other students, such as depriving another student of course materials or interfering with another student’s work.

Request for Accommodations
If you have a disability and will be requesting accommodations for this course, please register with either Dr. Kathy Duggan (dugganka@bc.edu), Associate Director, Connors Family Learning Center (learning disabilities or AHD) or Dean Paulette Durrett, (paulette.durrett@bc.edu), Assistant Dean for students with disabilities, (all other disabilities). Advance notice and appropriate documentation are required for accommodations. http://www.bc.edu/content/bc/libraries/help/tutoring/specialservices.html.

Attendance
Class attendance is an important component of learning. Students are expected to attend all classes and to arrive by the beginning of and remain for the entire class period. When an occasion occurs that prevents a student from attending class, it is the student’s obligation to inform the instructor of the conflict before the class meets. The student is still expected to meet all assignment deadlines. If a student knows that he or she will be absent on a particular day, the student is responsible for seeing the instructor beforehand to obtain the assignments for that day. If a student misses a class, he or she is responsible for making up the work by obtaining a classmate's notes and handouts and turning in any assignments due. Furthermore, many instructors give points for participation in class. If you miss class, you cannot make up participation points associated with that class. Types of absences that are not typically excused include weddings, showers, vacations, birthday parties, graduations, etc. Additional assignments, penalties and correctives are at the discretion of the instructor. If circumstances necessitate excessive absence from class, the student should consider withdrawing from the class. In all cases, students are expected to accept the decision of the instructor regarding attendance policies specific to the class.
Consistent with our commitment of creating an academic community that is respectful of and welcoming to persons of differing backgrounds, we believe that every reasonable effort should be made to allow members of the university community to observe their religious holidays without jeopardizing the fulfillment of their academic obligations. It is the responsibility of students to review course syllabi as soon as they are distributed and to consult the faculty member promptly regarding any possible conflicts with observed religious holidays. If asked, the student should provide accurate information about the obligations entailed in the observance of that particular holiday. However, it is the responsibility of the student to complete any and all class requirements for days that are missed due to conflicts due to religious holidays.

There may be circumstances that necessitate a departure from this policy. Feel free to contact the Summer Session Office at 617-552-3800 for consultation.

**Deadlines**

Assignments are due at the beginning of the class period on the specified dates. Late assignments will be graded accordingly.

- No make-up exams will be given.
- An optional 4-page report that connects key points of a chapter from McPhee's book to environmental geological processes and problems may be passed in by anyone on July 12th. An excellent report can make the difference between a B and a B+ or a C- and a C. Maximum possible credit is 5%. Only reports handed in on that date will be counted.
- All must take the final exam at the specified time.

**Course Assignments** (readings, exercises and/or experiences)

A minimum of 2 hours per week for every hour of instructional time should be spent on readings and exercises. Please note that some weeks will require more time and some weeks less time.

Students are expected to complete the following out of class course assignments:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading/Exercises/Experiences</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/25</td>
<td><strong>HW 1 Intro to Geologic Materials and Resources</strong> demonstrated by Campus Field Trip assessing rocks as building materials. (Trip leaves at 6:25, don't be late!) Reading: Courespack (CP) Topic 1 Links: <a href="https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html">https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html</a></td>
<td>6/27</td>
<td></td>
</tr>
</tbody>
</table>
7/2 Natural Hazards, Slope Processes, and Subsidence
HW 3 assigned: Identifying Landslides & Mass Movements on Maps
— Knowing Where Not to Build!
Reading: CP, jm: Los Angeles Against the Mountains
Topics 3 and 4 Links: https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html

7/9 Rivers and Floods: Case Study — 1993 Mississippi
River Flood
HW 4 assigned: Determining Flood Risk
Reading: CP, jm: Atchafalaya
Topic 5 Links https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html

7/11 Groundwater Systems
HW 5 assigned: Groundwater Movement & Using
Well Data to Construct a Water Table Map
Reading: CP
Topic 6 Links: https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html

7/16 Geology, Society, and the Future
HW 6 assigned: Land Use Planning Optional McPhee Reports due today.
Reading: CP
Topic 7 Links: https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html

7/18 Mid-Term Exam (one hour)
Water Pollution
Reading: CP
Topic 8 Links: https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html

7/23 Coastal Processes
Reading: CP
Topic 9 Links: https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html

7/25 Earthquakes, Tsunamis and Their Hazards, Plate Tectonics
Reading: CP
Topic 10 Links: https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html

7/30 Volcanoes and Volcanic Hazards
Reading: CP, jm: Cooling the Lava.
Topic 11 Links: https://www2.bc.edu/kenneth-galli/teaching/ge16301-links.html

8/1/13 In-Class Final Exam