Geology 1405 – 23501 Environmental science

Fall 2020

Section: 23401
4 Credit Hours
Lecture and Lab Activities are Online.
Instructor: L. Bradshaw  M.S.
Office: K 144
Office hours:  M-W  2:00-3:00, T-R 9:00-10:30
Telephone: 972/860-4713
E-mail:  LannaBradshaw@dcccd.edu

Prerequisite Required: College level ready in Reading.

From the DCCCD Catalog: This is a Texas Common Course Number. This is a Core Curriculum course selected by the colleges of DCCCD.

Course Description: This course covers the earth as a habitat with special attention to the interrelationships between humans and the physical environment. Topics covered include: geologic factors in land use planning, hydrology, geologic hazards, waste disposal and pollution, conservation of earth’s natural resources, climate, energy and geologic resource development, population dynamics, and related current issues in environmental geosciences. (3 Lec., 3 Lab.)

Coordinating Board Academic Approval Number 0301035301

Student Learning Outcomes:

Lecture:
Upon successful completion of this course, you will:
1. Recognize, describe, and quantitatively evaluate earth systems, including the land, water, sea, and atmosphere, and how these function as interconnected ecological systems.
2. Assess environmental challenges facing humans caused by their interaction with the physical and biological environment (e.g., population growth, energy resources, food production, pollution, water and resource use).
3. Acquire a scientific vocabulary and critical thinking skills related to environmental science.

Lab:
1. Apply the scientific method to environmental investigation.
2. Measure and observe aspects of the environment (e.g., air, water, soil) through sampling and sample analysis.
3. Develop an assessment plan for an environmental case study.
4. Demonstrate the collection, analysis, and reporting of data.
EXEMPLARY EDUCATIONAL OBJECTIVES:

Because this course is a choice for core curriculum credit, the following OBJECTIVES and COMPETENCIES are covered in accordance with the District curriculum process.

EDUCATIONAL OBJECTIVES:
1. To understand and apply method and appropriate technology to the study of the natural sciences.
2. To recognize scientific and quantitative methods and the differences between these approaches and the other methods of inquiry and to communicate findings, analyses and interpretation both orally and in writing.
3. To identify and recognize the differences among competing scientific theories.
4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values and public policies.
5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to modern culture.

INTELLECTUAL COMPETENCIES:
1. READING—the ability to analyze and interpret a variety of printed materials—books, documents and articles—above 12th grade level.
2. WRITING—the ability to produce clear, correct and coherent prose adapted to purpose occasion and audience—above 12th grade level.
3. LISTENING—analyze and interpret various forms of spoken communication, possess sufficient literacy skills of writing, reading—above 12th grade level.
4. CRITICAL THINKING—think and analyze at a critical level.
5. COMPUTER LITERACY—understand our technological society, use computer-based technology in communication

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Course Outline/Calendar:

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<th>Week beginning:</th>
<th>Lecture Topics</th>
<th>Lab Topics</th>
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<td>Week 1 1/21-1/27</td>
<td>Chapter 1 – Environment and Sustainability</td>
<td>Carbon Footprint</td>
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<td>Week 2 1/27-2/3</td>
<td>Chapter 2 – Science, matter, energy, and systems.</td>
<td>Critical Thinking questions Pg. 46</td>
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<td>Week 3 2/3-2/10</td>
<td>Chapter 3 - Ecosystems: What Are They and How Do They Work?</td>
<td>Ecosystems Activity</td>
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<td>Week 4 2/10-2/17</td>
<td>Chapter 4 - Biodiversity and Evolution</td>
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<td>Week</td>
<td>Dates</td>
<td>Chapter/Activity</td>
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<td>Week 5</td>
<td>2/17-2/24</td>
<td>Chapter 5 – Species Interaction, Ecological Succession, and Population</td>
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<td>Week 6</td>
<td>2/24-3/2</td>
<td>Chapter 6 – The Human Population</td>
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<td>Week 7</td>
<td>3/2-3/9</td>
<td>Chapter 9 – Sustaining Biodiversity: Saving Species and Ecosystem Services</td>
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<td>Week 8</td>
<td>3/9-3/16</td>
<td>Mid-Term</td>
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<td>Week 9</td>
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<td>Week 11</td>
<td>3/30-4/6</td>
<td>Chapter 17 Environmental Hazards and Human Health</td>
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<td>Week 12</td>
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<td>Chapter 18 Air Pollution and Ozone Depletion</td>
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<td>Week 13</td>
<td>4/13-4/20</td>
<td>Chapter 19 Climate Change</td>
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<td>Week 14</td>
<td>4/20-4/27</td>
<td>Chapter 13 Water Resources</td>
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<td>Week 15</td>
<td>4/27-5/4</td>
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<td>Chapter 21 Solid and Hazardous Waste</td>
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<td>Week 17</td>
<td>5/11-5/14</td>
<td>Finals</td>
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The instructor reserves the right to change this syllabus at any time during the semester. If changes do occur you will be notified promptly.

**Evaluation Procedures:** You will be evaluated by Exams, papers, quizzes, and labs

**Grading Scale:**

- **Exams = 20**
- **Quizzes = 40%**
- **Activities and/or Assignments = 40%**

**Grading Scale**

- **A = 100 – 90**
- **B = 89 – 80**
\[ C = 79 - 70 \]
\[ D = 69 - 60 \]
\[ F = >60 \]

**Important!**

The most important thing to remember for this online class is that if anything goes wrong while you are taking a quiz or exam, **stop** what you are doing, don’t leave the quiz or test and contact tech support so that they can see where you are and try to figure out what happened. They will then alert me and I can let you know how we are going to deal with the problem. If you just close the quiz or test and email me all I am going to see is that you started the test and then ended it. I can only go by what the program shows me you have done. So, if there is a problem always stop and contact tech support. Never just close the test or quiz.

**To Do Well In This Course**

Everything assigned during a specific week is due that week. Read early, use your ppts to study for the quiz. While studying for the quiz get your labs done. Sign in often, check for messages in your email or on the class site. Have everything done by the last day of the week you are in by 11:59. Remember the protocol for when something happens during a quiz. If you have questions, ask.

**INSTITUTIONAL POLICIES:**

**WITHDRAWAL**

If you are unable to complete this course, it is your responsibility to withdraw formally. The withdrawal request must be received in the Registrar’s Office by April 16th. Failure to do so will result in your receiving a performance grade, usually an “F.” If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a “W” (Withdraw) in each class dropped. For procedures see the Brookhaven College website and select A-Z for a listing.

**STOP BEFORE YOU DROP**

For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: [https://www1.dcccd.edu/coursedrops](https://www1.dcccd.edu/coursedrops)

**ACADEMIC DISHONESTY POLICY**

Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the Dallas County Community Colleges Code of Student Conduct published in the Brookhaven College Catalog. [https://www1.dcccd.edu/catalog/ss/code.cfm?loc=2](https://www1.dcccd.edu/catalog/ss/code.cfm?loc=2)
THE AMERICANS WITH DISABILITIES ACT INFORMATION
If you are a student with a disability and/or special needs who requires ADA accommodations, please contact your Disability/Special Services office in Room S-124 or call 972-860-4847 on the Brookhaven Campus.

STUDENT ABSENCES DUE TO RELIGIOUS OBSERVANCE:
Absences for observance of religious holy days are excused. A student whose absence is excused to observe a religious holy day is allowed to make-up an examination or complete an assignment within a reasonable time after the absence.

REPEATING THIS COURSE:
Effective with the Fall 2005 Semester, the Dallas County Community Colleges will charge additional tuition to students registering the third of subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in additional tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any Dallas County Community Colleges since the Fall 2002 Semester.

RETRIEVING YOUR GRADE AND ECONNECT
Grades may be checked on-line through eConnect or by visiting the Advising Center.
Specific instructions for obtaining your grades can be found at http://www.brookhavencollege.edu/studentsvcs/grades/
Go the Brookhaven College website and select A-Z and student services to learn about all their services.

STUDENTS RECEIVING FINANCIAL AID:
If you are receiving Financial Aid grants or loans, you must show participation in this class prior to the certification date of February 4, 2013 by either e-mailing or contacting the instructor or logging on to eCampus. Do not drop or stop attending any class without consulting the Financial Aid office. Changes in your enrollment level and/or failing grades may have adverse consequences. Phone: 972-860-4110.

TESTING CENTER: Cell phones and pagers are no longer allowed in the Testing Center (if applicable).

GENERAL STATEMENT: The instructor reserves the right to modify any course requirements, grading procedures and other related policies as circumstances dictate.