Instructor Information
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Course Information
Course Title: Environmental Science
Course Number: GEOL1405/ENVR1401
Section Number: 49002
Semester/Year: Spring 2020
Credit Hours: 4
Class Meeting Time/Location: Lec TR 9:30-12:20 C331 | Lab MW 9:30-12:20 C321
Certification Date: 01/27/20
Last Day to Withdraw: 02/26/20

Course Prerequisites
One of the following must be met: (1) Developmental Reading 0093 or (2) English as a Second Language (ESOL) 0044 or (3) have met the Texas Success Initiative (TSI) Reading standard.

Course Description
GEOL1405: 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

ENVR1401: Interdisciplinary study of both natural (biology, chemistry, geology) and social (economics, politics, ethics) sciences as they apply to the environment. Focus on current global concerns, including, global warming, overpopulation, deforestation, pollution, biodiversity and resource use. Practical laboratory experience emphasizes the application of fundamental principles of biology, chemistry and geology as well as critical thinking and analysis. (3 Lec., 3 Lab.) Coordinating Board Academic Approval Number 0301035201
Student Learning Outcomes

Lecture
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.

Texas Core Objectives
The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the activities you engage in will give you the opportunity to practice two or more of the following core competencies:
1. Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. Communication Skills - to include effective development, interpretation, and expression of ideas through written, oral, and visual communication
3. Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
5. Personal Responsibility - to include the ability to connect choices, actions, and consequences to ethical decision-making
6. Social Responsibility - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

Required Course Materials


Note: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.
Graded Work

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<tr>
<th>Assignments</th>
<th>Percentages</th>
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<tbody>
<tr>
<td>Tests</td>
<td>20%</td>
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<tr>
<td>Quizzes</td>
<td>20%</td>
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<tr>
<td>Project</td>
<td>15%</td>
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<tr>
<td>Lab assignments</td>
<td>30%</td>
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<tr>
<td>In-class assignments</td>
<td>13%</td>
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<tr>
<td>Orientation</td>
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</tbody>
</table>

Final Grade

<table>
<thead>
<tr>
<th>Percentages</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
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<tr>
<td>80-89%</td>
<td>B</td>
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<tr>
<td>70-79%</td>
<td>C</td>
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<tr>
<td>60-69%</td>
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<tr>
<td>0-59%</td>
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Course Policies

Attendance Policy
- Students are expected to attend all classes, be on time, and stay until class is dismissed. Students who wish to have excused absences should contact the instructor before the absence, or immediately after in the case of emergencies. Students will be penalized for repeated tardiness. Contact directly, by e-mail, or by phone (voicemail is acceptable).

Make-up & Late Assignment
- Make-up labs and tests will only be given for accepted absences. Proof must be given (e.g. doctor’s note) and must be arranged prior to the day and time. In case of emergencies, contact the instructor as soon as possible.

Participation
- Students are expected to actively participate in classroom activities. There will be a number of in-class exercises in varying formats. These exercises provide the opportunity for you to practice geological concepts and strengthen your understanding.

Local Field Trips
- Students are expected to provide own transportation to local field sites.
Academic Dishonesty
- Students caught cheating will receive a failing grade for the course, and will be reported to school officials. Copying someone else’s assignments and/or labs is considered cheating. Both the student who copied, and the student who allowed someone else to copy, will be penalized.

Laboratory Practice
- Students will not receive a full credit if they were partially absent. This includes tardiness of more than 10 minutes. Students are expected to complete laboratory exercises in pencil. Please write legibly. If the instructor cannot read your writing, the students will not receive credit. Quality (neatness) of diagrams will also be incorporated into the lab grade. Food and drinks are prohibited in the laboratory.

Classroom Etiquette
- Cell phones and headphones are strictly prohibited. A student who repeatedly disrupts the learning environment will be asked to leave the classroom and will be reported to the dean. This includes texting, and a student will be penalized.

Institutional Policies
Institutional Policies relating to this course can be accessed using the link below. These policies include information about tutoring, Disabilities Services, class drop and repeat options, Title IX, and more.

Eastfield Institutional Policies (http://www.eastfieldcollege.edu/syllabipolicies)

Course Schedule
- The schedule below is tentative and subject to change. Detailed outline will be provided in class.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
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<tr>
<td>2</td>
<td>Physical Systems</td>
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<tr>
<td>3</td>
<td>Environmental Systems</td>
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<tr>
<td>4</td>
<td>Human Population</td>
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<tr>
<td>5</td>
<td>Freshwater Systems and Resources</td>
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<tr>
<td>6</td>
<td>The Atmosphere, Air Quality, and Pollution</td>
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<tr>
<td>7</td>
<td>Global Climate Change</td>
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<tr>
<td>8</td>
<td>Energy</td>
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