



Geology Program, Department of Natural Sciences
Course Syllabus
Environmental Science
GEOL 1305

Spring 2018 Second Start Environmental Science
DE

(GEOL 1305 CRN 15359)
Instructor contact information (Dr. Peter Azah Abanda, peter.abanda@hccs.edu)

Prior to Session beginning – use HCCs.edu email

(peter.abanda@hccs.edu)

After Session begins: Inbox in our Canvas Course – Be sure to include your Student ID number and Course name and CRN number in the subject line on all emails.

Use Canvas Inbox ONLY to email – Phone messages may receive a delayed response. Please use email as preferred method of communication.

Do NOT use Comment boxes in assignments to contact me.

Office Location and Hours: Online

Course Location/Times: Online

Course Semester Credit Hours (SCH) (lecture, lab)

Credit Hours: 3

Lecture Hours: 3

Total Course Contact Hours

+48 hrs electronic instruction

Course Length = 8 weeks (08/27-10/21).

Some Important dates:

Aug 25 Fall 2018 1st 8 WK: Saturday Registration

Aug 27 Fall 2018 1st 8 WK: Classes Begin

Oct 1 Fall 2018 1st 8 WK: Last Day to withdraw

Oct 21 Fall 2018 1st 8 WK: Semester ends

Online Lectures and Discussions

Course Description:

This course is a survey of the forces, including humans that shape our physical and biologic environment, and how they affect life on Earth. The course is an introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources.

Course Prerequisite(s). Must qualify to enroll in INRW 0420 or ESOL 0360

FREQUENT REQUISITES

- Qualify to take GUST 0342 (9th -11th Grade Reading) or higher – and -
- Qualify to take ENGL 0310 or 0349 or INRW 0420
- Online DE Orientation must be completed prior to beginning this course
- See instructions at HCC Distant Ed Student page.
- It is your responsibility to make sure you start the course on time, log in regularly and meet all deadlines.
- No accommodations will be made for missing an assignment deadline and this includes technical difficulties, work or personal issues. Poor internet connectivity, poorly functioning computer, or any other technical issue is your responsibility to work around.
- To meet this requirement,
 - ALWAYS BEGIN YOUR WORK WELL BEFORE THE DEADLINE TO ALLOW SUFFICIENT TIME TO COMPLETE IT AND SUBMIT IT. THIS WILL ALLOW YOU TO WORK AROUND ANY TECHNICAL DIFFICULTIES. YOU CAN ALSO WORK AHEAD.
- One of the biggest mistakes students make is underestimating the amount of time required to study and complete assignments.
- Completing your work on time is only going to help you do well in this course.
- You MUST log in and complete the first week assignments by the due dates Date of Record (June 8) to avoid being dropped from this course for non-attendance.

Academic Program Learning Outcomes

1. Students will recognize scientific and quantitative methods. Students will evaluate the differences of scientific approaches and communicate these findings, analyses, and interpretations in oral and written communication.
2. Students will demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, religion, and public policies.
3. Students will demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.
4. Students will identify and recognize the differences in competing scientific theories.

Course Student Learning Outcomes (SLO):

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.
4. Assess the effectiveness and feasibility of environmental policy and its impact.

Learning Objectives:

- 1.1 List the four categories of limiting factors for organisms in an ecological system (raw materials, energy, waste products and interactions among organisms).
- 1.2 Interpret environmental trends from data (graphs or histograms or tables)
- 2.1 Utilize population data (e.g., from the US Census Bureau at <http://www.census.gov/>) to determine population growth rate, and analyze impact on resource demand and waste production.
- 2.2. Calculate personal energy or resource consumption (e.g., via household electric meter readings or water usage).
- 2.3. Compare the use of fossil fuel, nuclear, and renewable energy consumption (wind, solar, biomass and hydroelectric).
- 2.4. Discuss current events related to environmental science as reported by news media.
- 3.1. Discuss the reliability of science through the Scientific Method in resolving environmental problems.
- 3.2. Discuss the chemical behavior of matter and states of matter (solid, liquid, or gas) in relation to kinetic and potential energy.
- 3.3. Support the notion that energy cannot be created nor destroyed, but when energy is converted from one form to another, some energy is converted into a less useful form.
- 4.1 Explore how the political process impacts environmental decision making.
- 4.2 Evaluate significant environmental policies (e.g., clean air act, recycling nuclear fuel rods) related to what procedures are actually in place.

Core Curriculum Objectives:

This course is in the Life and Physical Science Core Curriculum “functional component area” and meets the objectives of:

- **Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Communication Skills** - to include effective development, interpretation and expression of ideas through written, oral and visual communication
- **Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

- **Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

Tentative Course Calendar. This calendar is subject to modification by the instructor. Students will be notified of any changes to the calendar. See course calendar in Canvas for details

| Week | Lecture and discussion topics including chapter readings | Assignments/Exams |
|--|--|--|
| Week 1 | Introductions, connect registration and navigation, Environmental Interrelationships. Chapter 1, Environmental Ethics. Chapters 2. | Chp 1 Connect reading exercise and quiz <u>Due 09/02</u> |
| Week 1 | Risk, economics and environmental concerns. Chapter 3 | Chp 3 Connect reading exercise and quiz |
| Week 2 | Interrelated Principles: Matter, Energy, and Environment. Chapter 4. | Chp 4 Connect reading exercise and quiz |
| <u>Week 2: Ecological Footprint discussion exercise due on TBA @11 :59 PM</u> | | |
| Week 2 | Interactions: Environment and Organism. Chapters 5. | Chp. 5 Connect reading exercise and quiz. |
| Week 3 | Review chapters 1, 2, 3, 4,& 5 for Exam 1 | <u>Exam #1 Chapters 1, 2, 3, 4, and 5.</u> |
| <u>Exam 1 on TBA Exam will be opened for 24hrs from 12:00AM on TBA to 11:59 PM</u> | | |
| Week 3 | Kinds of Ecosystems and Communities. Chapter 6. | Chp. 6 Connect reading exercise and quiz. |
| Week 3 | Population: Characteristics and Issues. Chapter 7. | Chp.7 Connect reading exercises and quiz. |
| <u>Discussion News response # 1 due</u> | | |
| Week 4 | Energy and Civilization: Patterns of Consumption Chapter 8. | Chp. 8 Connect reading exercise and Chp. 8, 9, &10 quiz |
| Week 4 | Nonrenewable Energy Sources. Chapter 9. Renewable Energy Sources Chapter 10. | Chp. 9 &10 Connect reading exercise and Chp 8, 9, &10 quiz |
| Week 5 | Review chapters 6, 7, 8, 9, 10 for Exam #2. | |
| <u>Exam #2 on date TBA . Exam will be opened for 24 hrs from 12:00AM to 11:59 PM</u> <u>Environment in the news presentation due date TBA</u> | | |
| Week5 | Biodiversity issues. Chapter 11 | Chp.11 Connect reading exercises and quiz. |
| <u>Discussion News response # 2 due</u> | | |
| Week 6 | Land-Use planning. Chapter 12 | Chp.12 Connect reading exercises and quiz. |
| Week 6 | Soil and its uses, chapter 13 | Chp. 13 Connect reading exercise and quiz. |
| Week 7 | Water management. Chapter 15 | Chp. 15 Connect reading exercise and quiz |
| Week 7 | Solid waste management and disposal. Chapters 18 | Chp.18 Connect reading exercise and quiz |
| <u>Discussion News response # 3 due</u> | | |
| Week 8 | Air quality issues. Chapter 16 | Chp. 16 Connect reading exercise and quiz |

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|--|---|---|
| Week 18 | Climate Change: A Twenty First Century Issue. Chapter 17. | Chp. 17 Connect reading exercise and quiz |
| Week 8 Final Exam on date TBD Exam will be opened for 24 hrs from 12:00AM to 11:59 PM Review chapters 11, 12, 13, 15, 16, 17, and 18 for Final Exam Term project due See term project guidelines in Canvas. | | |

Instructional Methods

Online instruction using Eagle Online Canvas.

Student Assignments

See above course outline table including tentative course outline. Assignment calendar will be updated weekly.

Student Assessment(s)/grading

| TYPE OF ASSESSMENT | # OF ASESSMENTS | POINTS | TOTAL POINTS |
|---|-----------------|---------|--------------|
| Unit exams | 2 | 150 x 2 | 300 |
| Final Exam | 1 | 200 | 200 |
| Term project | 1 | 100 | 100 |
| Environment in the news Presentation | 1 | 50 | 50 |
| Discussion | Various | 100 | 100 |
| Reading assignments, In-class and online quizzes and homework | Various | 250 | 250 |
| Total | | | 1000 |

Description of Exams and Assignments

- **Reading Practice Homework:** Homework is vital to success in any class! Therefore, it is important that you do your homework regularly and get help immediately when you have questions. Homework will be regularly assigned throughout the semester. All assignments will be online on McGraw-Hill Connect. Due dates are communicated in the course syllabus. See document detailing how to access and complete Reading practice assignments
- **Quizzes:** Quizzes will be administered regularly throughout the semester. All quizzes are online. All quizzes will be posted on Connect. Their deadline will be communicated in the course syllabus as well as on Eagle Online Canvas.
- **Research Paper:** The paper will be about a geoscience topic of the student's interest. The length of the paper should be 3–5 pages, typed, and double-spaced with references. At least one of the references should come from the HCC library. The student may be expected to submit a video presentation of approximately 5-minute, sharing information about their topic.
- **Exams:** There will be 2 unit exams and a final exam. There is NO makeup exam.
- **Discussions:** Discussions will be assigned throughout the semester and students will be required to contribute to the discussion by answering a set of questions or giving their opinion about a topic and responding to their classmate's contribution.
- **Environment in the News presentation.** Students will research a topic on the environment that has been on the news recently (up to about 10 years). See detailed document regarding presentation in Canvas. Students will prepare, record, and submit a 3-5 minutes video presentation through YouTube. Video link will be submitted through Canvas.

Instructor's Requirements:

This class is 100% online and offered through EagleOnline Canvas. Students are expected to have a working computer with internet access. If you are taking a HCC Online course(s), you must complete an Online Orientation for each course. The Online Orientation consists of 6 steps. Steps 1 and 2 are the same for every HCC Online section. Steps 3-5 may be different for every HCC Online section.

Visit the following website for HCC online resources.

<http://www.hccs.edu/online/course-resources/>

Program/Discipline Requirements: If applicable

All HCC policies regarding attendance, withdrawal, academic honesty, students with disabilities, grading, and student rights will be followed in this course. Refer to syllabus section titled "Instructor's Requirements", "HCC Policy Statements", and "Grading" for more details as well as the Student Handbook <http://www.hccs.edu/district/students/student-handbook/>

HCC Grading Scale:

| | |
|------------------------------------|----------------------------|
| A = 100- 90: | 4 points per semester hour |
| B = 89 - 80: | 3 points per semester hour |
| C = 79 - 70: | 2 points per semester hour |
| D = 69 - 60: | 1 point per semester hour |
| 59 and below = F | 0 points per semester hour |
| FX (Failure due to non-attendance) | 0 points per semester hour |
| IP (In Progress) | 0 points per semester hour |
| W (Withdrawn) | 0 points per semester hour |
| I (Incomplete) | 0 points per semester hour |
| AUD (Audit) | 0 points per semester hour |

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses.

FINAL GRADE OF FX: Students who stop attending class and do not withdraw themselves prior to the withdrawal deadline may either be dropped by their professor for excessive absences or be assigned the final grade of "FX" at the end of the semester. Students who stop attending classes will receive a grade of "FX", compared to an earned grade of "F" which is due to poor performance. Logging into a DE course without active participation is seen as non-attending. Please note that HCC will not disperse financial aid funding for students who have never attended class.

Students who receive financial aid but fail to attend class will be reported to the Department of Education and may have to pay back their aid. A grade of "FX" is treated exactly the same as a grade of "F" in terms of GPA, probation, suspension, and satisfactory academic progress.

To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not affect GPA.

Health Sciences Programs Grading Scales may differ from the approved HCC Grading Scale. For Health Sciences Programs Grading Scales, see the "Program Discipline Requirements" section of the Program's syllabi.

Instructor Grading Criteria

Midterm Exams x2 @ 15% each = 30 % total
Final exam = 20 %
Quizzes and reading = 25 %
Environment in the news presentation = 5 %
Discussions= 10 %
Term project = 10 %

Instructional Materials

Required Textbook: *Environmental Science: A Study of Interrelationships*, 14th ed., by Enger and Smith; McGraw-Hill, 2016 (ISBN 9781259298448). Be sure to use the 2 weeks Courtesy access when you first register for McGraw-Hill connect if you do not have an access code. After 2 weeks of free access, you'll be required to enter the code to continue accessing the textbook and associated resources.

Students will purchase an access code to either gain access to Connect at the HCC bookstores or directly from the McGraw-Hill connect website. You will have the option to order a loose-leaf printed copy of the textbook once you are registered in Connect if you desire. This is not a requirement. Access to the Connect website is mandatory as the reading assignments and quizzes will be on this platform. Information on how to register for connect is available on the following website:

<https://www.youtube.com/watch?v=tFQVHI2pRM8>

<https://www.youtube.com/watch?v=xgwc6-0y8tA>

Course link to the textbook and resources:

http://connect.mheducation.com/class/p-abanda-de-fall-2018_first-8-wks_geol-1305_crn--15359

HCC Policy Statement:

Please familiarize yourself with campus policies in the HCC Student Handbook:

<http://www.hccs.edu/district/students/student-handbook/>

Student with Disabilities (ADA):

If you have any special needs or disabilities, which may affect your ability to succeed in college classes or participate in college programs/activities, please contact the office of disability support services at the college. Upon consultation and documentation, you will be provided with reasonable accommodations and/or modifications. Please contact the DSS office as soon as you begin the term.

<http://www.hccs.edu/district/students/disability-services/ada-counselors/>

Central College

713.718.6164

Coleman College

713-718-7376

Northeast College

713-718-8322

Northwest College

713-718-5667

713-718-5408

Southeast College

713-718-7053

Southwest College

713-718-7909

Adaptive Equipment/Assistive Technology

713-718-6629

713-718-5604

Interpreting and CART services

713-718-6333

Academic Honesty: “Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Disciplinary proceedings may be initiated by the college system against a student accused of scholastic dishonesty. Penalties can include a grade of “0” or “F” on the particular assignment, failure in the course, academic probation, or even dismissal from the college. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion.” **Cheating** includes looking at or copying from another student’s exam, orally communicating or receiving answers during an exam, having another person take an exam or complete a project or assignment, using unauthorized notes, texts, or other materials for an exam, and obtaining or distributing an unauthorized copy of an exam or any part of an exam. **Plagiarism** means passing off as his/her own the ideas or writings of another (that is, without giving proper credit by documenting sources). Plagiarism includes submitting a paper, report or project that someone else has prepared, in whole or in part. **Collusion** is inappropriately collaborating on assignments designed to be completed independently. These definitions are not exhaustive. When there is clear evidence of cheating, plagiarism, collusion or misrepresentation, a faculty member will take disciplinary action including but not limited to: requiring the student to retake or resubmit an exam or assignment, assigning a grade of zero or “F” for an exam or an assignment; or assigning a grade of “F” for the course. Additional sanctions, including being withdrawn from the course/program or expelled from school, may be imposed on a student who violates the standards of academic integrity. See the [Student Handbook](#) for additional details.

Attendance:

This is an online class so attendance will be checked using the login counter.

Withdrawal Policy: The last date to withdraw is Monday October 1, 2018.

The State of Texas imposes penalties on students who withdraw/drop courses excessively. Students are limited to no more than SIX total course withdrawals throughout their educational career at a Texas public college or university. Students are encouraged to review the [HCC 6 Drop Policy](#).

Students who repeat a course three or more times face significant tuition/fee increases at HCC and other Texas public colleges and universities. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing, homework, test-taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

Religious Holidays: If you observe a religious holiday and miss class, you must notify your instructor in writing two weeks in advance to arrange to take a test or make up an assignment. A religious holiday is “a holy day observed by a specific religion and the place of worship is exempt from property taxation under Section 11.20 of the Tax Code.”

Policy on Electronic Devices: The use of electronic devices by students in the classroom is up to the discretion of the instructor. Any use of such devices for purposes other than student learning is strictly prohibited. If an instructor perceives such use as disruptive and/or inappropriate, the instructor has the right to terminate such use. If the behavior continues, the student may be subject to disciplinary action to include removal from the classroom or referral to the Dean of Student Services.

Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Office for Students with Disabilities for information regarding reasonable accommodations.

HCC Sexual Harassment Policy: HCC shall provide an educational, employment, and business environment free of sexual harassment. Sexual harassment is a form of sex discrimination that is not tolerated at HCC. Any student who feels that he or she is the victim of sexual harassment has the right to seek redress of the grievance. HCC provides procedures for reviewing and resolving such complaints through its Grievance Policy. Substantiated accusations may result in disciplinary action against the offender, up to and including termination of the employee or suspension of the student. In addition, complainants who make accusations of sexual harassment in bad faith may be subject to equivalent disciplinary action.

Student Rights and Responsibilities:

<http://www.hccs.edu/district/about-us/policies/d-student-services/d4-student-rights--responsibilities/>
and in the Student Handbook

EGLS₃ -- Evaluation for Greater Learning Student Survey System

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time near the end of the term, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and department chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

TITLE IX OF THE EDUCATION AMENDMENTS OF 1972, 20 U.S.C. A§ 1681 ET. SEQ. Title IX of the Education Amendments of 1972 requires that institutions have policies and procedures that protect students' rights with regard to sex/gender discrimination. Information regarding these rights are on the HCC website under Students-Anti-discrimination. Students who are pregnant and require accommodations should contact any of the ADA Counselors for assistance. It is important that every student understands and conforms to respectful behavior while at HCC. Sexual misconduct is not condoned and will be addressed promptly. Know your rights and how to avoid these difficult situations. Log in to: www.edurisksolutions.org. Sign in using your HCC student e-mail account, then go to the button at the top right that says Login and enter your student number.