



**Department of Natural Sciences  
GEOLOGY Program**

<http://www.hccs.edu/geology>

---

**GEOL 1305: Environmental Science | Lecture | CRN 12725**

Fall 2019 | 16 Weeks (8/26/2019-12/13/2019)

In-Person | West Loop Campus room C247 | Tuesday/Thursday 11:00 – 12:20  
3 Credit Hours | 48 hours per semester

**Instructor Contact Information**

Instructor: Robin Nagy  
Office Hours: by appointment  
HCC Email: [robin.nagy@hccs.edu](mailto:robin.nagy@hccs.edu)

Please contact me regarding any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear the concerns, support your success, and just to discuss course topics.

**Instructor's Preferred Method of Contact**

Please contact me via email using your @hccs.edu email (per HCCS policy) or via the Canvas inbox. I will do my best to respond to emails within 24 hours Monday through Thursday; I will reply to weekend messages on Monday mornings.

The Department of Natural Science can be contacted via phone 713-718-6050 or email [natural.sciences@hccs.edu](mailto:natural.sciences@hccs.edu)

**What's Exciting About This Course**

The most multidisciplinary field of science! This class is for everyone. Everyone! Where does air pollution come from? What are the impacts of different forms of energy? How can the reintroduction of wolves impact the streams in Yellowstone? Paper or plastic; incandescent or LED? How can environmental ethics and economics and progress work simultaneously? What is your carbon footprint? Can your personal choices actually impact the environment? What are we doing with hazardous waste? The information in this course will help you understand humans' impact on Earth and enlighten you about the connectedness of everything that surrounds us.

**My Personal Welcome**

Welcome to Environmental Science! —I'm delighted that you have chosen this course. One of my passions is to know as much as I can about the earth, and I can hardly wait to pass

that on. I will present the information in the most exciting way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life. As you read and wrestle with new ideas and facts that may challenge you, I am available to support you. The fastest way to reach me is by my HCC email. The best way to really discuss issues is in person and I'm available during posted office hours to tackle any questions you might have. My goal is for you to walk out of the course with a better understanding of the environment and how it affects you. So please visit me or contact me whenever you have a question.

### **Prerequisites and/or Co-Requisites**

GEOL 1305 requires college-level reading and writing skills. The minimum requirements for enrollment in GEOL 1305 is qualifying to enroll in INRW 0300/0420 or ESOL 0370/0360. Please carefully read and consider the repeater policy in the [HCCS Student Handbook](#).

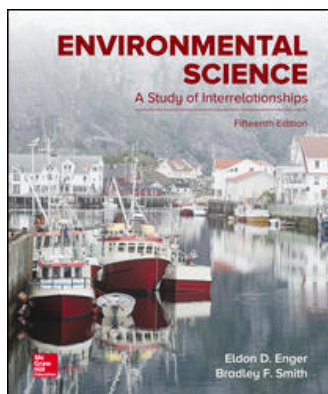
### **Canvas Learning Management System**

This section of GEOL 1305 will use [Eagle Online Canvas \(https://eagleonline.hccs.edu\)](https://eagleonline.hccs.edu) for textbook access, assignments, grade posting and announcements. It is your responsibility to log in to Canvas on a regular basis, to monitor announcements and assignments, and to be aware of your grade.

HCCS Open Lab locations may be used to access the Internet and Eagle Online Canvas. It is recommended that you **USE [FIREFOX](#) OR [CHROME](#) AS YOUR BROWSER.**

## Instructional Materials

### Textbook Information



The textbook listed below is **required** for this course. However, you do not need to purchase the book or an access code. This course is First Day Access and your ebook access is covered through your course fee (see below for details). You must have access to the ebook to complete course assignments.

**"Environmental Science: A Study of Interrelationships"** (15<sup>th</sup> edition) by Enger and Smith (McGraw-Hill). Digital book via *Connect* ISBN: 1260134709

### About First Day Access

All sections of this class are "First Day Access". Students will automatically have access to the book within the EagleOnline Canvas course for their section. Instructors will have instructions for you about finalizing registration to access Connect (the McGraw-Hill system where the book and other materials are accessed). The cost of book access is part of student's course fees. Student may "opt out" of included access, but will need to pay for book access on their own, which costs more.

## Other Instructional Resources

### Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the [HCC Tutoring Services](#) website for services provided.

### Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at <http://library.hccs.edu>.

Check out the Geology LibGuide maintained by the HCC library <https://library.hccs.edu/geology>

### Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at <http://www.hccs.edu/resources-for/current-students/supplemental-instruction/>.

## Course Overview

GEOL 1305 is a survey course of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources.

### Core Curriculum Objectives (CCOs)

GEOL 1305 satisfies the social science requirement in the HCCS core curriculum. The HCC Geology Program Committee has specified that the course address the following core objectives:

- **Critical Thinking:** Students will demonstrate the ability to engage in inquiry and analysis, evaluation and synthesis of information, and creative thinking.
- **Communication Skills:** Students will demonstrate effective development, interpretation and expression of ideas through written, oral, and visual communication.
- **Quantitative and Empirical Literacy:** Students will demonstrate the ability to draw conclusions based on the systematic analysis of topics using observation, experiment, and/or numerical skills. Notably, students will use graphs and charts in assessments during the semester.
- **Teamwork:** to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal by working together with other classmates on assignments or a project during the semester.

### Program Student Learning Outcomes (PSLOs)

Can be found at:

<https://learning.hccs.edu/programs/geology>

### Course Student Learning Outcomes (CSLOs)

Upon completion of GEOL 1305, the student will be able to:

1. Recognize, describe, and quantitatively evaluate earth systems, including the land, water, sea, and atmosphere, and how these function as interconnected ecological systems.  
Minimum topics covered: Environmental Interrelationships, Organism interaction in environments, Types of ecosystems and communities, Biodiversity issues
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).  
Minimum topics covered: General Population characteristics, Renewable and non-renewable energy, Land-use planning, Soil and agricultural methods, Water resources and management, Air quality and pollution, Climate change, Solid waste and hazardous waste management.
3. Acquire a scientific vocabulary and critical thinking skills related to environmental science.  
Minimum topics covered: Basic scientific principles and the scientific method.

4. Assess the effectiveness and feasibility of environmental policy and its impact. Minimum topics covered: Environmental ethics, Economics and environmental concerns, A variety of policies related to energy, land-use, pollution, resource management, waste management

## Learning Objectives

- 1.1 List the four categories of limiting factors for organisms in an ecological systems (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.

## Student Success

Successful completion of this course requires a combination of the following:

- Reading the textbook via eBook or SmartBook
- Attending class
- Completing assignments
- Participating in class activities

## Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description (including due date) of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and make up
- Provide the course outline and class calendar which will include a description of any special projects or assignments

- Arrange to meet with individual students before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the HCCS Student Handbook

## **Assignments, Exams, and Activities**

### **Assignments**

Students are required to complete “LearnSmart” assignments via the Connect e-textbook system. These assignments will help you approach the content in each chapter efficiently and effectively, and check your learning before exams. Completion of these assignments is a part of your course grade; due dates for each assignment are clearly indicated in Connect and the course calendar above. **No late submissions will be accepted.** Students are responsible for securing internet access required to complete these assignments (instructor will not give consideration to missing/ate assignments due to technical issues). Contact the Connect support services as needed. In addition to LearnSmart, students will be asked to complete a variety of other assignments to address learning outcomes. These assignments may include (but are not limited to): written responses to prompts, drawing concept sketches, reading, data analysis, group discussions and in-class activities. Participation in all class activities is mandatory unless otherwise indicated. All assignments will be described in detail during class and due dates will be clearly indicated in Canvas. Clear written communication is required – if writing skills are not sufficient to communicate knowledge, you may be required to visit the writing center for help. It is your responsibility to communicate with the instructor regarding make-up work and/or exams if you miss class. See HCCS attendance policy and “Student Assessments” below for more details about missed work.

### **Exams**

Exam 1 (Chapters 1, 3, 5-7, 11) Tuesday, 10/1  
 Exam 2 (Chapters 12, 14-16, 18) Thursday, 10/31  
 Final Exam (Chapters 8-10, 17, 20) Tuesday, 12/10

### **Final Exam**

The final exam will cover chapters 8-10, 17 and 20 (not cumulative). The exam is on Tuesday, December 10 at 11:00 AM.

### **Grading Formula**

Exams 20% each x 3 exams = 60%

LearnSmart reading assignments = 15%

Other assignments = 15%

Plastic Project = 10%

<b>Grade</b>	<b>Total Points</b>
A	>90%
B	80 - 89%
C	70 - 79%
D	60 - 69%
F	<59%

### **Incomplete & Withdrawal Policy:**

In order to receive a grade of Incomplete ("I"), a student must have completed at least 85% of the work in the course. Student must contact instructor via email before the end of the semester to arrange. In all cases, the instructor reserves the right to decline a student's request to receive a grade of Incomplete.

The withdrawal deadline is November 1. Instructor will not withdraw students for excessive absences, failing grades, or any other reason. The decision to withdraw from this class is solely the responsibility of the student. **Any student wishing to withdraw from the class is responsible for doing so themselves before the stated deadline.**

**HCC Grading Scale can be found on this site under Academic Information:**

**<http://www.hccs.edu/resources-for/current-students/student-handbook/>**

## Course Calendar

THIS CALENDAR IS SUBJECT TO CHANGE. All assignments will be posted in Canvas or announced in class. Please maintain awareness of assignments and due dates in Canvas.

1	8/27	Introductions
	8/29	Chapter 11 (Biodiversity) due, review Chapter 4
2	9/3	
	9/5	Chapters 1, 3, 5 due
3	9/10	
	9/12	Chapter 6 (Ecosystems and Communities) reading due
4	9/17	Biomes infographics due
	9/19	Chapter 7 (Population Growth) reading due
5	9/24	
	9/26	
6	10/1	<b>EXAM 1: Chapters 1, 3, 5-7, 11</b>
	10/3	Chapter 12 (Land Use Planning) reading due
7	10/8	
	10/10	Chapter 14 (Agricultural Methods) due
8	10/15	Chapters 15 (Water Management) and 16 (Air Quality Issues) due
	10/17	
9	10/22	
	10/24	Chapter 18 (Solid Waste Management) due
10	10/29	
	10/31	<b>EXAM 2: Chapters 12, 14-16, 18</b>



11	11/5	Chapters 8 (Energy and Civilization) and 9 (Nonrenewable Energy Sources) due
	11/7	Chapter 10 (Renewable Energy Sources) due
12	11/12	
	11/14	
13	11/19	
	11/21	
14	11/26	Chapter 17 (Climate Change) due
	11/28	NO CLASS - HOLIDAY
15	12/3	
	12/5	
	12/10	<b>FINAL EXAM: Chapters 8-10, 17, 20</b>

### Syllabus Modifications

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

## Instructor's Practices and Procedures

### Missed Assignments

**Late work will not be accepted and deadlines will not be extended. Missed exams & assignments will result in a score of 0.** Make-up exams & assignments may be offered on a case-by-case basis for extreme circumstances beyond control, and generally require documentation (such as a letter from a hospital or court). In these cases, **the instructor must be contacted via email within 24 hours of the missed class. Make-up exams or assignments will not be allowed if you do not communicate with the instructor within 24 hours following your absence.** Do not wait until the next face-to-face class meeting! It is the responsibility of the student to communicate with the instructor regarding all missed classes. (Note, if you know you will be missing class, communicate with the instructor in advance of your absence.)

### Academic Integrity

**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 (including cell phones) for an exam, leaving the classroom during 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 (at his/her discretion) 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 reported for breaking the student code of conduct, being withdrawn from the course/program, or being expelled from school may be imposed on a student who violates the standards of academic integrity. See the [Student Handbook](#) for additional details.

During exams you may not access your textbook, notes, or other course materials unless specifically authorized by the instructor. **Using a cell phone (or even having it visible/audible) during an exam will result in a score of zero for that exam.** You may not leave the classroom during an exam unless specifically authorized to do so by the instructor (leaving during an exam may result in a score of zero).

Here’s the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance):

<http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/>

### **Attendance Procedures**

Attendance is required and will be monitored. In class we will cover content and complete assignments that cannot be completed outside of class – such as group discussions, in class data analysis, and collaborative project. It is not possible to make up assignments that are missed due to lack of attendance – a grade of zero will be assigned in such instances. See missed assignment policy above for details.

The withdrawal deadline is November 1. Instructor will not withdraw students for excessive absences, failing grades, or any other reason. The decision to withdraw from this class is solely the responsibility of the student. **Any student wishing to withdraw from the class is responsible for doing so themselves before the stated deadline.**

### **Student Conduct**

In this class, we will utilize a number of active learning techniques. Class time is not a passive “lecture” during which I talk and you write down everything on the powerpoint slides – rather, our class time will be spent in active discussion and debate. You are meant to ask questions, share your ideas, bring your own background and perspective to class topics, and be prepared to contribute to the academic rigor of the course.

### **Instructor’s Course-Specific Information (As Needed)**

The key to success in this course is participation and active learning – be present and thoughtful, share your ideas, and reflect on what you are learning. Assess your understanding and **be aware of your overall grade throughout the semester.** If at any time you need help or guidance please communicate with the instructor immediately – I am happy to provide support but will not know that you want/need it unless you let me know. It is your responsibility to be aware of your grades in the class.

Please arrive on time and prepared (with paper, pen/pencil, required assignments, and any other materials as required by the instructor). Do not disrupt class while you are here, and do not leave early. The early alert system may in some cases be used to refer you to an advisor in the case of excessive absences (including arriving late/leaving

early), behavioral problems, lack of participation, failure to complete assignments, and/or poor grades. However, not all students with poor grades will necessarily be referred using early alert – **do not assume you are passing the class!**

Please make sure that your **cell phones and all other electronic devices are turned off** during class time. See the electronic device policy for detail.

### 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.

**If a cell phone is used in any way (even if it passively rings, makes noise, or becomes visible) during an exam, the student will receive a zero for that exam.**

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.

**Policy on Recording Devices:** Use of recording devices (including camera phones, cameras, audio recorders, video recorders, or other devices capable of recording voice or image) is prohibited in the classroom. Use of a recording device during exams is considered academic dishonesty. **YOU MAY NOT TAKE PICTURES OF POWERPOINT SLIDES OR CONTENT WRITTEN/DRAWN ON THE WHITEBOARD WITHOUT INSTRUCTOR PERMISSION.**

## Geology Program Information

The Geology Program faculty are excited you are participating in this course! Please visit the LearningWeb page to find additional information about the HCC Geology degree plan, links to Geoscience programs across Texas, careers in Geosciences, Diversity in Geosciences, and program contact information.

<https://learning.hccs.edu/programs/geology>

Additionally, students can find more information about Science, Technology, Engineering, and Math (STEM) opportunities and events on the HCC STEM page: <https://www.hccs.edu/stem>

## HCC Policies

Here's the link to the HCC Student Handbook <http://www.hccs.edu/resources-for/current-students/student-handbook/> In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- disAbility Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services

- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

Note: **Intolerance of any kind is unequivocally prohibited.** If at any time during this class your words or actions interfere with the rights of another student (or the instructor) to learn in a safe and accepting environment, you will be reported to HCC police and administration immediately.

### **EGLS<sup>3</sup>**

The EGLS<sup>3</sup> ([Evaluation for Greater Learning Student Survey System](#)) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS<sup>3</sup> surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

<http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/>

### **Campus Carry Link**

Here's the link to the HCC information about Campus Carry:

<http://www.hccs.edu/departments/police/campus-carry/>

### **HCC Email Policy**

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go [to HCC Eagle ID](#) and activate it now. You may also use Canvas Inbox to communicate.

### **Housing and Food Assistance for Students**

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

## **Office of Institutional Equity**

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (<http://www.hccs.edu/departments/institutional-equity/>)

### **disAbility Services**

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term

conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <http://www.hccs.edu/support-services/disability-services/>

### **Title IX**

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross  
Director EEO/Compliance  
Office of Institutional Equity & Diversity  
3100 Main  
(713) 718-8271  
Houston, TX 77266-7517 or [Institutional.Equity@hccs.edu](mailto:Institutional.Equity@hccs.edu)  
<http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/>

### **Office of the Dean of Students**

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/>

### **Department Chair Contact Information**

Chair of Department of Natural Sciences:  
Dr. Kumela Tafa ([kumela.tafa@hccs.edu](mailto:kumela.tafa@hccs.edu)) office phone: 713-718-5569