



HOUSTON COMMUNITY COLLEGE
Geology Program, Department of Natural Sciences

Course Syllabus Environmental Science GEOL 1305

Spring 2018 (59424)

Instructor: Robin Nagy

Instructor contact information: robin.nagy@hccs.edu

Office Hours by appointment in Spring Branch room 203

Course Location/Times: Monday & Wednesday, 12:30 – 1:50, Spring Branch room 203

Course Semester Credit Hours:

Credit Hours: 3 Lecture Hours: 3

Total Course Contact Hours

48.00

Course Length: 16-week

Type of Instruction

Lecture

Course Description:

A survey 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.

Course Prerequisite(s)

- Qualify to take INRW 0420 or ESOL 0360

Geology Program Learning Outcomes

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

Course Student Learning Outcomes (SLO) as defined by ACGM:

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 to determine population growth rate, and analyze impact on resource demand and waste production.

2.2. Compare the use of fossil fuel, nuclear, and renewable energy consumption (wind, solar, biomass and hydroelectric).

2.3. 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. 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

Course Calendar

		Chapter	Lecture Topic	LearnSmart Assignment* (due at noon)
1	M 1/15	HOLIDAY		
	W 1/17	Class Canceled due to weather		
2	M 1/22	1, 3	Introduction & Environmental Risk	
	W 1/24		Ecology and Evolution	
3	M 1/29	5	Organism Interactions	4 & 5 Part 1
	W 1/31		Ecosystem Interactions	5 Part 2
4	M 2/5	6	Biomes	6
	W 2/7	7	Populations	7
5	M 2/12	1, 3-7	Review	
	W 2/14		Exam 1 (Chapters 1 & 3-7)	
6	M 2/19	HOLIDAY		
	W 2/21	8-9	Energy Consumption & Fossil Fuels	8 & 9
7	M 2/26	17	Climate Change	17 Part 1
	W 2/28		Climate Change	17 Part 2
8	M 3/5	10	Renewable Energy Resources	10
	W 3/7	8-10, 17	Energy Issues Review	
	M 3/12	SPRING BREAK		
	W 3/14			
9	M 3/19	8-10, 17, other materials	Energy Project I	
	W 3/21		Energy Project II	
10	M 3/26		Energy Project III	
	W 3/28	8-10, 17	Exam 2 (Chapters 8-10 & 17)	
11	M 4/2	12	Land Use Planning	12
	M 4/4	13	Soil	13
12	M 4/9	14	Agricultural Chemicals	14
	W 4/11	15	Water Management	15
13	M 4/16	other materials	Hurricane Harvey	
	W 4/18	16	Air Pollution	16
14	M 4/23	18-19	Waste Disposal	18 & 19
	W 4/25	11	Biodiversity Loss	11
15	M 5/30	2, 20	Environmental Ethics & Policy	2 & 20
	W 5/2		Review	
16	M 5/7	11-16, 18- 20	NO CLASS	
	W 5/9		Exam 3 12:00 (Chapters 2 & 11-20)	

This course schedule is subject to change.

*This course calendar includes LearnSmart assignments (to be completed online prior to the indicated date), but additional assignments not listed here will also be required. Some assignments are in class, others are homework, and all will be announced.

Instructional Methods

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.

Student Assignments & Assessment(s)

You will be assessed via three exams, completion of LearnSmart assignments in McGraw Hill Connect (online), and a number of other assignments completed in class and at home. You will also be responsible for preparing to be a discussion leader for 2 of the lectures. Please see “Course Calendar” (above) for chapters covered on each exam and “Instructor Grading Criteria” (below) for a breakdown of the value of each assignment category. Your ideas must be clearly communicated to receive full credit – if your writing skills are not sufficient, the instructor may require that you take an assignment to the writing center for help. Work submitted without a name on it will not be given any credit. **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.)

Instructor's Requirements

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.

Please note that this **syllabus is subject to change, and revisions will be announced.

Program/Discipline Requirements:

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/resources-for/current-students/student-handbook/>

Where can you get help? Contact your instructor to meet at a time outside of office hours.

Contact the academic advising office or the counseling office.

Get help online via: <https://hccs.upswing.io/>

Search for tutoring at HCC at: <http://ctle3.hccs.edu/alltutoring/>

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 an Online 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.

Instructor Grading Criteria

Exam 1 = 25%
Exam 2 = 25%
Exam 3 = 25%
LearnSmart Assignments = 10%
Other Assignments = 10%
Discussion Leadership = 5%
TOTAL = 100%

Instructional Materials

Required Textbook: *Connect* access to *Environmental Science: A Study of Interrelationships*, 14th ed., by Enger and Smith; McGraw-Hill, 2016 (ISBN 9781259298448)

We will use an eTextbook – **you must have access to the Connect online system in order to complete assignments for the class**. If you want a hard copy of the text in addition to the eText, you can purchase a printout for an additional \$25 once you have set up your online access.

To set up an account (or log in if you have already used the Connect system) and purchase the access code: <http://connect.mheducation.com/class/59424> or follow the link in EagleOnline.

Note that this link is specific to this course and this semester – you must use this unique URL to get access to the appropriate online access. **DO NOT PURCHASE ACCESS WITHOUT CONFIRMING THE CORRECT COURSE, PROFESSOR, and CRN!**

I recommend purchasing directly through the McGraw Hill Connect system (by following the link above and entering payment info when prompted) – the cost is **\$85.00** through the

publisher and \$121.00 if you buy an access code through the bookstore. Remember, you must ensure that whatever you purchase allows you access to the Connect online system.

Students are responsible for securing the internet access required to complete these assignments (instructor will not give consideration to missing/late assignments due to technical issues). In most cases, the instructor cannot solve technical issues with the Connect platform – please contact the Connect support services as needed.

HCC Policy Statement:

Please familiarize yourself with campus policies in the HCC Student Handbook for topics including: ADA (students with disabilities), Scholastic Dishonesty, General Student Attendance, Repeating courses, Electronic Devices in class, Threatening Behavior, Religious Holidays, Withdrawal processes and more:

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

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.

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

Student with Disabilities (ADA):

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

Withdrawal Policy: The withdrawal deadline is April 3. 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.**

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).

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.

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.**

HCC Sexual Harassment Policy and 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

HCC Campus Carry statement: At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at <http://www.hccs.edu/departments/police/campus-carry/>

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.