

Approval Chart for Curriculum Changes

A = Approve I= Information Item¹ R= Advise & Respond²

Course Number AENV 130 or Degree Plan(s) _____

State the requested change and reason. A memo may be attached if more space is necessary.

We are requesting that AENV 130: Environmental & Technological Science be included in the Life and Physical Sciences menu for general education courses. See attached LPS menu application and course syllabus.

Circle the number that corresponds to the requested change. Degree plan changes are on the second page.

					COUNCIL ³					
	Change to a Course	Dept./School	College Academic	Deans	TEC	UGEC	UUAC	GRAD	Provost	President
1.	Title (description unchanged)	A	A	A	I				I	I
2.	Description (not affecting content)	A	A	A	I				I	I
3.	Course term(s)	A	I	A	I				I	I
4.	Content (substantive change)	A	A	A	I				A	I
5.	Number of hours (lecture, lab, contact)	A	A	A	A				A	I
6.	Course number within the hundred	A	A	I	I				I	I
7.	Course number beyond the hundred	A	A	A	A				A	I
8.	Prerequisites	A	A	A	I				I	I
9.	Course fee(s)	A	--	A	--				A	I
10.	From U to G <i>or</i> G to U	A	A	A	A				A	I
11.	Cross list with another department: U or G level	A	A	A	A				A	I
12.	Department of record	A	A	A	A				A	I
13.	Open or close a course	A	A	A	A				A	I
14.	New course — See website for application and process. This change includes combining or splitting a course(s).	A	A	A	A				A	I

Note: When an academic unit does not have a council, the UGEC and/or UUAC will serve as its academic council, depending on the nature of the issue.

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		COUNCIL ³										
	Change to a Degree Plan	Dept./School	College Academic	Deans	TEC	UGEC	UUAC	GRAD	Provost	Faculty	President	Board of Trustees
1.	University Requirements — Change in approved course content ⁶	A	A	A	A				A	--	A	--
2.	University Requirements — Add or drop a required course from the University Requirements chart ⁶	A	A	A	A				A	A	A	--
3.	University Requirements — Add or drop a course from a menu within the University Requirements ⁶	A	--	--	A				A	--	A	--
4.	University Requirements — Change hours within a menu on the University Requirements chart ⁶	A	A	A	A				A	A	A	--
5.	Major — Revision of major ^{4,5}	A	A	A	A				A	--	A	--
6.	Major — Adopt or change admission requirements	A	A	A	A				A	--	A	--
7.	Major — Add ^{4,5}	A	A	A	A				A	A	A	I
8.	Major – Discontinue (proposed by the department or college)	A	A	A	A				A	A	A	I
9.	Major – Discontinue (proposed by the Provost)	See below.										
10.	GPA — Revise major or cumulative requirement	A	A	A	A				A	A	A	--
11.	Minor — Revise course selection	A	A	A	I				I	--	I	--
12.	Minor — Add	A	A	A	A				A	--	A	--
13.	Minor – Discontinue (proposed by the department or college)	A	A	A	A				A	--	A	--
14.	Minor – Discontinue (proposed by the Provost)	See below.										
15.	Degree — Add	A	A	A	A				A	A	A	I
16.	Degree – Discontinue (proposed by the department or college)	A	A	A	A				A	A	A	I
17.	Degree – Discontinue (proposed by the Provost)	See below.										
18.	Any change to a graduate degree program	A	A	A	A				A	--	A	--

COUNCIL ³										
	Provost-Proposed Change	Provost	Department	Dean	TEC	UUAC	Graduate	Faculty	President	Board of Trustees
1.	Major/Graduate Program – Discontinue (proposed by the Provost)	A	R	R	A			A	A	I
2.	Minor – Discontinue (proposed by the Provost)	A	R	R	A			--	A	--
3.	Degree – Discontinue (proposed by the Provost)	A	R	R	A			A	A	I

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COUNCIL³

	Change to the Catalog Information	Dept./School	College Academic	Deans	UGEC	UUAC	GRAD	Provost	Faculty	President
1.	General requirements for graduation including course requirements that are common to all majors for all degrees ⁷	--	--	--		A		A	A	A
2.	Admission requirements	--	--	--		A		A	A	A
3.	Policies governing academic probation and suspension	--	--	--		A		A	A	A
4.	Requirements for graduating with honors	--	--	--		A		A	A	A

¹ Councils may request additional information about “Information” items. These items are approved as “Consent Agenda.”

² The Dean and Department should respond to the Provost’s recommendation to close a program in writing. Advise & Respond (R) requires that the voting body should receive the written responses at least one week prior to the vote.

³ All courses that meet University Requirements for general education must go through UGEC. Courses or degrees offered only to students seeking teacher certification must go through the Teacher Education Council. All undergraduate changes must go before the UUAC. All graduate degree plan changes must go through the Graduate Council.

⁴ A minimum of 30 hours is required for a major. A maximum is specified for each degree (e.g., BA, BS). The university minimum for elective hours is 6, unless the requirements of external accrediting bodies make it impossible.

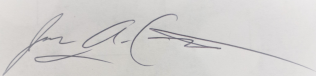
⁵ Program or course changes that apply to any major that includes Teacher Certification will be reviewed by the college, the Teacher Education Council (TEC), and then the UUAC.

⁶ Courses that satisfy ACU’s University Requirements (General Education) will normally have lower-level numbering, be free of prerequisites and co-requisites, appeal to more than one or two majors, and “not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession” (SACS 2.7.3). Departments may request exceptions to the first three criteria.

⁷ The UUAC approved the clarification that “general requirements for graduation” means the enumerated items in the “General Requirements for Bachelor’s Degrees” section of the catalog.

Revised 8-26-19

Curriculum/Catalog Changes Signature Page

	Department/School Chair(s)
_____	08/15/22
<i>Signature</i>	<i>Approval date</i>
_____	_____
<i>Signature</i>	<i>Approval date</i>

College Academic Council(s)	
_____	_____
<i>Signature</i>	<i>Approval date</i>
_____	_____
<i>Signature</i>	<i>Approval date</i>

Dean(s)	
_____	_____
<i>Signature</i>	<i>Approval date</i>
_____	_____
<i>Signature</i>	<i>Approval date</i>

Teacher Education Council	
_____	_____
<i>Chair's signature</i>	<i>Approval date</i>

General Education Council	
_____	_____
<i>Chair's signature</i>	<i>Approval date</i>

Undergraduate Academic Council	
_____	_____
<i>Chair's signature</i>	<i>Approval date</i>

Graduate Council	
_____	_____
<i>Chair's signature</i>	<i>Approval date</i>

Provost	
_____	_____
<i>Signature</i>	<i>Approval date</i>

Faculty	
_____	_____
<i>Chair of faculty senate</i>	<i>Approval date</i>

President	
_____	_____
<i>Signature</i>	<i>Approval date</i>

Application for Life and Physical Sciences Menu

Guidelines For All General Education Courses

1. All general education courses must be 100-level or above.
2. General education courses should present a breadth of knowledge, not focusing on skills, techniques, and procedures specific to a particular occupation or profession.
3. Individual courses will fulfill only a single general education requirement.
4. Courses free of prerequisites are preferred. Applications to add courses with prerequisites must provide additional evidence that the course contributes to a student's breadth of knowledge and is not specific to a particular occupation or profession.
5. Each course may appear on a maximum of two menus that accept applications (arts and humanities, cultural literacy, life and physical sciences, and social and behavioral sciences).

Life and Physical Sciences Description

Courses within this domain use the methods and models of the natural sciences to describe, explain, and predict phenomena in the physical world; they employ empirical evidence, scientific principles, and interactions among natural phenomena to understand the world around us.

Instructions

Complete this form and submit it with a course syllabus and approval chart to the University General Education Council. Faculty submitting an application should be prepared to perform annual assessment for their course. The assessment will be conducted with the rubric included in this course application.

Subject code, course number, and title of course:	AENV 130: Environmental & Technological Science
Terms offered:	Fall, Spring, Summer
Catalog description:	A study of environmental and technological sciences including natural resources and the impact of modern technology on the human environment. May be used to satisfy Science University Requirements. This course is for non-science majors.
Course prerequisites:	None
Cross-listed courses: *Note: Many gen ed courses are cross-listed between the Abilene and Dallas campuses.	None
Other general education menus on which the course appears or you are applying for:	N/A

Prerequisites

The council understands that many of the courses on this menu will have corequisites and that the second course in a sequence may also have a prerequisite.

1. Is the course a lower-division (100- to 200-level) course in astronomy, biology, chemistry, physics, agricultural science, environmental science, or geology?
☒ Yes ☐ No

If yes, continue to 2. If no, please explain how this course meets the description of life or physical sciences above. Applications for courses originating in other disciplines will be considered.

2. Does the course have more than one prerequisite and/or more than one corequisite?
☐ Yes ☒ No

If no, continue to 3. If yes, please explain why an exception should be made to include this course in the Life and Physical Sciences menu.

3. If the course has prerequisites, provide evidence that the course contributes to a student's breadth of knowledge. Also provide evidence that the course content is not specific to a particular occupation or profession (200 words or less).

Relevant Outcomes

- C2: Analyze quantitative data, published writing, or observable phenomena to draw informed conclusions.
- C3: Interpret mathematical and/or logical models such as formulas, graphs, tables and schematics, and draw inferences from them; and
- C4: Integrate new data into their existing knowledge.

Describe how the course meets the C2 outcome (100 words or less).

AENV 130 meets the C2 outcome because it is a survey course of various components of environmental science. Specifically, the students will analyze quantitative data related to ecological principles, human population growth, natural resource consumption, agricultural production, environmental health, water resource management, energy resources, and changes in global climate systems. Students must draw informed conclusions about these topics through homework and writing assignments. Additional assessment is done in the final exam.

Describe how the course meets the C3 outcome (100 words or less).

In AENV 130, data are presented in the form of graphs and tables throughout the course. Students are periodically required to engage with data presented in homework assignments. These data are often found in graphs, tables, and figures, which the students need to interpret before completing the homework assignments. Students are assessed using weekly quizzes to gauge their ability to comprehend and interpret key course concepts. Additional assessment is done in the final exam.

Describe how the course meets the C4 outcome (100 words or less).

Students are presented with new data throughout the course. Exercises in and out of class involve analyzing information new to the students and drawing conclusions. In addition to the assignments themselves, the ability to integrate new data into existing knowledge is assessed in the final exam.

Outcomes assessment should occur within one or two exams/assignments. Please indicate which exams or assignments will be used for each outcome. Provide assignment prompts if available.

Area to Be Assessed	Assessment Artifact
Outcome C2	Questions on the comprehensive final exam.
Outcome C3	Questions on the comprehensive final exam.
Outcome C4	Questions on the comprehensive final exam.

Please use the following rubric to perform assessment each year.

Student Learning Outcome C2

Students will be able to:	Shortcomings	Meets Expectations	Points of Excellence
Analyze data to draw conclusions	Lacks sufficient analysis of data or published writing.	Analyzes data and/or published writing in an effective manner.	Analyzes data and/or published writing in an exemplary manner.

Student Learning Outcome C3

Students will be able to:	Shortcomings	Meets Expectations	Points of Excellence
Interpret mathematical and/or logical models such as formulas.	Little to no demonstrated ability to interpret relationships and/or data in models.	Demonstrates ability to interpret relationships and/or data in models.	Exceptional ability to interpret relationships and/or data in models.

Student Learning Outcome C4

Students will be able to:	Shortcomings	Meets Expectations	Points of Excellence
Integrate new data into their existing knowledge	Shows little to no grasp of new information and/or does not demonstrate adequate connection to previous learning.	Grasps new information and makes connections to previous learning.	Exceptional grasp of new information and/or demonstrates outstanding ability to connect to previous learning.

ENVIRONMENTAL AND TECH. SCIENCE (AENV 130.W1, 3 credit hours) Spring 2022

Class time & place: Online

Required course materials:

- (1) Text: D.J. Sherman & D.R. Montgomery. Environmental Science and Sustainability. 1st ed. Norton. 2020. ISBN-13: 9780393428674
- (2) Norton Digital Resources Access

*Instead of purchasing the required course materials through the ACU bookstore, you will be able to access the materials through the AENV 130 Canvas page. The cost of the course materials will be included in your student bill, and they are available at a discounted price. Although this arrangement should be more cost-effective, you will have the opportunity to opt-out once the semester begins. If you chose to opt-out, then you will be responsible for purchasing the required course materials elsewhere.

Course Prerequisite: None

Instructor: Dr. Kendra Jernigan, PhD
Email: kendra.jernigan@acu.edu
Office: Onstead Science Center 145C
Phone: 325-674-2101
Office Hrs: Monday: None
Tuesday: 9:30am-11am
Wednesday: 8am-10am
Thursday: 9:30am-11am & 1pm-3pm
Friday: None

* I am happy to meet with you in-person or virtually (Zoom or Google Meet), please let me know what you would prefer whenever you schedule a meeting with me. You are also welcome to send me an email or a Canvas message too.

ACU Mission Statement

The mission of ACU is to educate students for Christian service and leadership throughout the world.

College of Arts and Sciences Mission

To educate students for worldwide Christian service and leadership through programs of study and other learning experiences that blend a liberal arts education with professional and career education.

Agricultural & Environmental Sciences Mission Statement

To educate students for Christian stewardship of sustainable agricultural and environmental systems throughout the world.

Course Description

A study of environmental and technological sciences, including natural resources and the impact of modern technology on the human environment. May be used to satisfy University Requirements.

Christian Perspective

“God blessed them and said to them, ‘Be fruitful and increase in number fill the earth and subdue it. Rule over the fish of the sea and the birds of the air and over every living creature that moves on the ground.’ Gens 1:28. What do these words mean? Are they a license or a responsibility? What should our role in creation be? In this course, we examine issues caused by humans that impact all of creation. What should the Christian ethic be concerning these issues? We all have an ethical stance, whether we recognize it or not, and we will be digging into the different ethical positions.

Course Format

All online. The format in class will be a mixture of video voice over lectures, multimedia presentations, discussion, class activities, and group projects as assigned.

Course Goal and Specific Learning Objectives

By the end of the course, students will be able to:

	Course Outcome	Measurement Instrument
1.	Describe what science is and explain its distinctive characteristics.	Exams Homework assignments
2.	Explain the concepts of environmental science and sustainability.	Exams Homework assignments Writing assignments
3.	Explain the basic components of a number of different environmental issues.	Exams Writing assignments
4.	Describe how technological advances have both contributed to and helped to mitigate or resolve environmental problems.	Writing assignments

Other Learning Outcomes: Several learning outcomes and transferable skills are incorporated into this course. By the end of the course, students will have improved skills in:

- Critical thinking through reading and discussion of principle concepts of the course.
- Communication through writing and oral presentation.
- Collaboration through cooperation in group projects.

Assessment and Grading

InQuizitive assignments (usually 15 points each)	210 pts
Personal video responses (5 points each)	70 pts
Class online discussions (14 total; 10 points each; 1-2 per week)	140 pts
2 writing assignments (25 points each)	50 pts
14 module quizzes (25 points each; top 13 scores kept)	325 pts
Free-range assignment	55 pts
Group video presentation	125 pts
Comprehensive final exam (125 points total)	<u>125 pts</u>
	Total 1100 pts

Grading Scale in points:	990-1100	A
	880-989	B
	770-879	C
	660-769	D
	0-659	F

Assignments received late will be assessed a penalty, the severity of which will depend on the degree to which the assignment is late. Typically, 10% of the total possible grade will be deducted for each day the assignment is late (i.e., a 50 point report would be docked 5 pts. per day). No late assignments will be accepted after the Friday of finals week.

Makeups: It is the student's responsibility to make up all missed work. Any make-up work (**including for excused absences**) must be completed **within one week of the original due date**. Please be in communication with the professor if an issue arises related to makeup work.

Extra Credit: There may be random extra credit points available throughout the semester. **These will be the only opportunities for extra credit in this course.**

Details about course assessments:

InQuizitive homework assignments: Each week, you will have a homework assignment from Norton's InQuizitive, which is accessed through Norton Digital Resources. These homework questions will help you engage with the course material.

Personal video responses: Throughout the semester, you will complete short activities related to the course content, then you will make a 2-4 minute video response that you will upload to the course Canvas page. **It is the student's responsibility to make sure that the video uploads correctly.**

Class online discussions: Each week, there will be a class discussion. It is an opportunity for you to interact with your classmates and see some practical examples of the course material. Please note that class discussion forums are part of our academic environment. Therefore, grammar appropriate to an academic setting is expected. If there is disagreement, then it should be respectful and constructive.

Writing assignments: During the semester, there will be two 25 point writing assignments. To allow you to explore various aspects of the course materials, you will be able to choose from different prompts for the writing assignments.

Quizzes: Quizzes will be given approximately once per week. They will consist of a mixture of questions such as multiple choice and true/false, and they will be completed using Lockdown Browser. The top 13 quiz scores will be added into a student's final grade. Quizzes may only be made up due to University approved reasons.

Free-range assignment: Each student will select a topic in environmental science to research in more detail. The assignment will allow students to engage with these topics creatively.

Group video presentation: Each group will make an 8-10 minute video concerning various topics in environmental science. Even though many students may be at the ACU campus, it is not necessary to complete the project by physically meeting. There are plenty of electronic tools available to you to assist you in the completion of the video project.

Final exam: The final exam is **cumulative** and is worth 125 points. The questions will consist of a mixture of questions such as multiple choice, true/false, and short answer. It will be completed using Lockdown Browser.

Example of a typical week with due days & times

All due dates will be listed in **Central Time (CST)**. If you happen to be in a different time zone, then plan accordingly. Please note that many assignments are due at 11:59 pm, and I will generally not be able to assist you as promptly late in the evenings. You may need to avail yourselves of the help resources on the course Canvas page instead.

Weekly assignment	Open day & time	Due day & time
InQuizitive assignments	Saturdays at 8 am	Wednesdays at 11:59 pm CST
Weekly class discussion forums	Saturdays at 8 am	Initial discussion post due: Wednesdays at 11:59 pm CST Comments on classmates' posts due: Fridays at 11:59 pm CST
Personal video responses	Saturdays at 8 am	Fridays at 11:59 pm CST
Weekly quizzes	Wednesdays at 8 am	Fridays at 11:59 pm CST

* Assignment due dates may slightly change when there are academic or holiday breaks.

Technologies that you will need to be familiar with

Technology	Purpose	Description	Where to go for help?
Canvas	Class & weekly assignments.	Most of our course will be available on Canvas. It is the ACU learning management software.	https://guides.instructure.com/m/4212
Lockdown Browser	Quizzes	You will need to install lockdown browser to your computer to take quizzes & exams.	http://blogs.acu.edu/adamscenter/lockdown-browser/students/
Norton Digital Resources	Accessing e-textbook & InQuizitive assignments	Access to the course e-textbook. InQuizitive homework assignments that cover the textbook materials. Once they are set up, the Norton resources will integrate with the course Canvas page.	https://wwnorton.knowledgeowl.com/help/lms-students

There are videos in **Module 0** on the course Canvas page about how to use and set up these technologies. First, please watch the videos and search for answers to your questions in the help sites provided. Team 55 and Norton support staff are available to assist you. If you still have questions, I am also available to help you troubleshoot some of these issues.

Other resources available to assist you

- Video lectures course will be posted on the course Canvas page so that you can review them at your convenience. Additionally, there are guided handouts for the video lectures, which may assist you.

University Policies

ADA compliance: Abilene Christian University is dedicated to removing barriers and opening access for students with disabilities in compliance with ADA and Section 504 of the Rehabilitation Act. The Alpha Scholars Program facilitates disability accommodations in cooperation with instructors. To receive accommodations, you must be registered with Alpha Scholars Program, and you must complete a specific request for each class in which you need accommodations. If you have a documented disability and wish to discuss academic accommodations, please call 325-674-2667.

Academic integrity: Academic integrity is defined as academic work completed as assigned for each class by the individual or group responsible for the work. Violations of academic integrity and other forms of cheating involve the intention to deceive, mislead, or misrepresent and, therefore, are a form of lying. Such actions are contrary to behavioral norms that flow from the nature of God. Academic misconduct includes, but is not limited to, the following: 1) Failure to give credit to sources used in a work in an attempt to present the work as one's own, 2) Submission of papers or projects obtained from another source (e.g., research service or club paper file) as one's own, and 3) Falsifying information orally or in writing. Academic misconduct may result in, but is not limited to, a zero on the assignment and/or an F in the course. Additionally, the department chair, Dean of your school, and the Dean of Student Life will be notified. See the College of Arts & Sciences policy, including how to appeal a decision, at <https://www.acu.edu/content/dam/community/documents/cas/cas-academic-integrity.pdf>.

Harassment policy: As a Christian community, Abilene Christian University has committed itself, unequivocally, to ensuring a working and learning environment in which the dignity of every individual is respected. Harassment is defined as unwelcome behavior or conduct based on sex, religion, race, age, color, national origin, veteran's status, disability, or any other characteristic protected by law when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, education, or participation in University programs or activities, (2) submission to, or rejection of, such conduct by an individual is used as the basis for a decision affecting an individual's employment, education, or participation in University programs or activities, or (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive environment for work, education, or participation in a University program or activity. See the full university policy at <https://www.acu.edu/titleix>.

Title IX: As a professor, one of my responsibilities is to help create a safe learning environment on our campus. I also have a mandatory reporting responsibility related to my role as a professor. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep the information you share private to the greatest extent possible. When I am not able to keep your information confidential, I will only share it with responsible administrators on campus who can provide you with services and resources. I am required to share with the Title IX Coordinator information regarding sexual misconduct or harassment, dating or domestic violence or stalking that you report to me. If you would prefer to share information in a confidential setting, I encourage you to speak with someone in the [ACU Counseling Center](#). All of your options are available for review by clicking on the link to ACU's [policy](#).

FERPA: "The Family Educational Rights and Privacy Act" affords the student certain rights concerning student records." Refer to the ACU course catalog for a more thorough discussion.

Course Policies

Professionalism

You should conduct yourself in a professional manner, similar to what will be expected of you in the workplace using professional communication skills, proper grammar and capitalization, and demonstrating respect towards your classmates, your professor, and yourself.

Expectations

This semester, we have the opportunity to explore various aspects of environmental science together. For us to work together and learn from one another, I want to delineate what is expected of students and what you can expect from me.

Expectations of Students:

- I expect you to put forth your best efforts and be prepared to learn.
- I expect you to be respectful of everyone in the class – fellow students as well as the professor. We are all human, and therefore all make mistakes, but we are also created in God's image. Please extend grace to everyone in our class when mistakes are made and be willing to consider viewpoints other than your own. We all approach the topic of environmental sciences from different viewpoints as well as have varied experiences. Please be mindful that not everyone will have the same life experiences or approaches as you do. We can heartily disagree with others, but still, afford them respect and courtesy.
- I expect you to spend the necessary time to complete your assignments and study for this class. The video lectures, assignments, discussion forums, group assignments, and quizzes are designed to further your understanding of course topics and help you earn your final class grade.
- I expect you to do your own work for this class and to not engage in any form of academic dishonesty or plagiarism.

Expectations of the Instructor:

- I will respond to your Canvas messages, emails, and other forms of communication promptly – generally within 24 hours. To allow for Sabbath rest and time with my family, I do not check my email past 7 pm on weekdays nor do I check my email on Sundays.
- I will respect you and your desire to learn. My role is to provide you with the resources to succeed and facilitate your learning in this class. Please do not hesitate to ask if you do not understand something; I will do my best to reword or spend additional time on a subject to ensure that all content is understood. You are enrolled in this class to learn. I am happy to provide you with resources and opportunities to be successful.
- I will be prepared and timely with course materials. It is disrespectful to you if I am not prepared with the course materials; as such, I will make every effort to be prepared just as I expect you to be.
- I will return assignments and quizzes to you within two weeks of the due date. To assist your learning, you need to have assignments returned to you promptly. Then you can assess what areas you need to spend more time studying and what areas you already have successfully mastered.

Online discussion forum ground rules:

All of our course content is online, and our interactions with one another will be electronic. Even though there are many advantages to online learning and communication, there are some unfortunate disadvantages. In a face-to-face discussion, there are tonal, visual, and auditory clues that inform meaning and intent in communication. These nonverbal cues are missing in an online environment, so it is more difficult to infer complete meaning and intent behind communication. Therefore, we will use the following etiquette rules with our online discussion forums.

- **Use proper writing style.** Write as if you are writing a term paper. Proper spelling, grammar construction, and syntax are expected in every other writing associated with academic scholarship. Our online discussion forums are no different.
- **Criticism must be well-intentioned, well-articulated, and constructive.** Our academic learning community is made of people with diverse backgrounds, experiences, and opinions. We will be exploring many aspects of environmental science that can be viewed from multiple perspectives. You may not always agree with everything that is presented or your classmates, which is perfectly acceptable. However, any disagreement must be respectful and soundly reasoned. It is unacceptable to engage in name-calling, insulting, or any other form of ad hominem attacks.

AENV 130 Tentative Class Schedule – Spring 2022

*This is subject to change – I will keep you updated if and what will change!

Date	Week	Homework	Quizzes	Subject	Module
1/10	1	Groups selection InQuizitive Intro HW due Wednesday Personal video response due Friday	Module 0 Quiz, Opens Wed. 1/12	Class Intro. / Chp 1 Environmental Science	0
1/14 – Last day to add/drop a class without penalty					
1/17 – Martin Luther King Jr. Day (No classes)					
1/17	2	InQuizitive Chp 1 HW due Wednesday Personal video response due Friday	Module 1 Quiz, Opens Wed. 1/19	Class Intro. / Chp 1 Environmental Science	1
1/24	3	InQuizitive Chp 4 HW due Wednesday Personal video response due Friday	Module 2 Quiz, Opens Wed. 1/26	Chp 4 Life & Biodiversity	2
1/31	4	InQuizitive Chp 5 HW due Wednesday Personal video response due Friday Writing assignment 1 due Friday	Module 3 Quiz, Opens Wed. 2/2	Chp 5 Conservation	3
2/7	5	InQuizitive Chp 6 HW due Wednesday Personal video response due Friday Group project annotated bibliography due Friday	Module 4 Quiz, Opens Wed. 2/9	Chp 6 Human Population	4
2/14	6	InQuizitive Chp 2 HW due Wednesday Personal video response due Friday	Module 5 Quiz, Opens Wed. 2/16	Chp 2 Ethics, Economics, & Policy	5
2/21	7	InQuizitive Chp 12 HW due Wednesday Personal video response due Friday Writing assignment 2 due Friday	Module 6 Quiz, Opens Wed. 2/23	Chp 12 Food & Agriculture	6
2/28	8	InQuizitive Chp 17 HW due Wednesday Personal video response due Friday Group project speaking outline due Friday	Module 7 Quiz, Opens Wed. 3/2	Chp 17 Environmental Health & Justice	7
3/7	9	InQuizitive Chp 7 HW due Wednesday Personal video response due Friday	Module 8 Quiz, Opens Wed. 3/9	Chp 7 Water Resources	8
3/14 to 3/18 – Spring Break (No classes)					
3/21	10	InQuizitive Chp 8 HW due Wednesday Personal video response due Friday Free-range assignment due Friday	Module 9 Quiz, Opens Wed. 3/23	Chp 8 Air Quality & Pollution	9
3/28	11	InQuizitive Chp 13 HW due Wednesday Personal video response due Friday Group project PowerPoint slides due Friday	Module 10 Quiz, Opens Wed. 3/30	Chp 13 Nonrenewable Energy Resources	10
4/1 – Last day to withdraw from a class					
4/4	12	InQuizitive Chp 14 HW due Wednesday Personal video response due Friday	Module 11 Quiz, Opens Wed. 4/6	Chp 14 Renewable Energy Resources	11
4/11	13	InQuizitive Chp 11 HW due Wednesday Personal video response due Thursday	Module 12 Quiz, Opens Tues. 4/12	Chp 11 Climate Change	12
4/15 – Good Friday (No classes)					
4/18	14	InQuizitive Chp 20 HW due Wednesday Personal video response due Friday Final group video presentation due Wednesday	Module 13 Quiz, Opens Wed. 4/20	Chp 20 Government	13
4/25	15	Individual reflection paper Group member evaluations		Group Video Projects	n/a
5/2	Dead Day, Monday, (5/2). COMPREHENSIVE FINAL EXAM: Opens Wed. (5/4) at 8am & closes Fri. (5/6) at 12pm *ACU policy is that NO final is to be taken early. *Be sure to double-check the ACU exam schedule web page here , since the date and time may be changed by the registrar during the semester.				

Spring 2022 ENVIRONMENTAL and TECHNOLOGICAL SCIENCE (AENV 130, 3 credit hours)

Class time & place: TR 9:30-10:50, Onstead Science Center, room 361

Text: D. J. Sherman & D. R. Montgomery. Environmental Science and Sustainability. Norton. 2019.

Course Pre-requisite: None

Instructor: Dr. James Carpenter

Office: Onstead Science Center 145A

Phone: 674-2277

Office Hrs: MWF 9:00-11:00; TR 8:00-9:00. Other times by appointment

email: Jac16d@acu.edu

This course is enrolled in the First Day program. In First Day courses you do not have to buy course materials. Your course materials, including an e-text, are part of your course costs. To access them follow the instructions below. There is also a module in Canvas with instructions on how to get your course materials. Abilene Christian University will bill you at the discounted price as a course charge for this course and this charge will appear on your student bill. It is NOT recommended that you Opt-Out, as these materials are required to complete the course. You can choose to Opt-Out on the first day of class, but you will be responsible for purchasing your course materials at the full retail price and access to your materials may be suspended. For more information and FAQs go to customercare.bncollege.com.

First Day Student Experience Video: <https://youtu.be/bNhSdKueifU>

INSTRUCTIONS FOR FIRST DAY SETUP

Click on the Course Materials link in Canvas and it will show all of the courses you have with First Day. From there you can read ebook, launch courseware, and if you desire to do so, opt out of First Day. You only have the first ten days of class to opt out. All of the charges for the First Day materials go directly on your student account, so if you opt out, that is where the refund will go as well.

You NEED TO USE CHROME as your browser. If you are having issues, the first questions that customer support- will ask is if you are using Chrome. Additionally, you need to disable your pop-up blocker and make sure your cache and cookies have been cleared before seeking further assistance. The courseware and books often launch in a new window, hence the need to disable the pop-up blocker. There will be a "Launch Courseware" green button in your Course Materials page. That is all you have to do! You only have to click on those links!

Common Student Issues

The two most common issues students will have:

“What is our student set ID?”

“I don’t see my Inquizitive grade in Canvas and I’ve completed the assignment!”

Universally, these issues are caused by the student not using the links to Inquizitive within Canvas.

When students use the Inquizitive links in Canvas, they are automatically passed into your student set for that section. They will not be prompted for a student set ID.

If the students use the Inquizitive links in Canvas, their grades automatically sync with the Canvas gradebook if the activity was completed before any Grade Accepted Until date passes.

The biggest takeaway is ALWAYS, ALWAYS, ALWAYS use the Inquizitive links within the Canvas course.

ACU Mission Statement

The mission of ACU is to educate students for Christian service and leadership throughout the world.

College of Arts and Sciences Mission

To educate students for worldwide Christian service and leadership through programs of study and other learning experiences that blend a liberal arts education with professional and career education.

Agricultural & Environmental Sciences Mission Statement

To educate students for Christian stewardship of sustainable agricultural and environmental systems throughout the world.

Course Description

A study of environmental and technological sciences including natural resources and the impact of modern technology on the human environment. May be used to satisfy University Requirements.

Christian Perspective

“God blessed them and said to them, ‘be fruitful and increase in number fill the earth and subdue it. Rule over the fish of the sea and the birds of the air and over every living creature that moves on the ground.’ Gens 1:28. What do these words mean? Are they a license or a responsibility? What should our role in creation be? In this course we examine issues caused by humans that impact all of creation. What should the Christian ethic be concerning these issues? We all have an ethical stance, whether we recognize it or not, and we will be digging into the different ethical positions. In order to better prepare us for this discussion, we will also spend time learning about how the creation works, and how we have impacted it.

Course Format

Class meets for 80 minutes, 2 times per week. Format in class will be a mixture of traditional lecture, multimedia presentations, discussion, and class activities.

Course Goals and Specific Learning Objectives

By the end of the course, students will be able to:

1. describe what science is and explain its distinctive characteristics
2. explain the concepts of environmentalism, environmental science, and sustainability
3. explain the basic components of a number of different environmental issues
4. describe how technological advances have both contributed to and helped to mitigate or resolve environmental problems

Assessment and Grading

Lecture

4 exams (50 points each)	200 pts
1 cumulative final exam (150 points)	150 pts
10 quizzes (10 points each)	100 pts
Individual and Group Activities	160 pts
Assignments in Inquisitive	130 pts
Participation	60 pts

Total = 800 pts

Assignments received late will be assessed a penalty, the severity of which will depend on the degree to which the assignment is late. Typically, 10% of the total possible grade will be deducted for each day the assignment is late (a 10 pt quiz would be docked 1 pt per day).

Makeups: It is the student's responsibility to make up all missed work. Any make-up work must be completed **within one week of the original due date**. Make up exams will be similar to the original in content and format, but will have no extra credit component. Exams, or in-class work missed due to an unexcused absence cannot be made up.

	<u>Percentage</u>	<u>Points</u>	<u>Letter Grade</u>
Grading Scale:	90.0-100	720+	A
	80.0-89.9	640-719	B
	70.0- 79.9	560-639	C
	60.0-69.9	480-559	D
	0-59.9	<480	F

Exams and Quizzes: Exams will consist of a mixture of multiple choice, true/false, matching, and short answer questions. Each exam is worth 50 points. The final exam is cumulative and is worth 150 points. Makeup exams are given (within 1 week of actual exam date) at the discretion of the instructor only when accompanied by a valid written note. Quizzes will be given approximately once/week, usually when there is no test. Quiz format will be similar to that of the exams. Quizzes and exams will be administered in Canvas, and will be done outside of class. You will have 2 attempts to take each quiz, with the highest score recorded. For exams you only have one attempt. The final exam will be taken in the classroom during the scheduled exam time. All quizzes and exams will use Respondus Lockdown Browser.

Extra Credit: There may be random extra credit quizzes throughout the semester. These quizzes will be 5 points or less each. In addition, each exam will include an extra credit short answer question. These will be the only opportunities for extra credit in this course.

University Policies

Face Mask Policy: Per ACU policy, stated on 1/05/22, "From Jan. 6-21, face coverings will be required in classrooms, labs, studios and other instructional spaces, and indoor Chapel gatherings. In all other common interior spaces, masks are strongly recommended but not required." This policy may change, based on circumstances.

ADA compliance: Abilene Christian University is dedicated to removing barriers and opening access for students with disabilities in compliance with ADA and Section 504 of the Rehabilitation Act. The Alpha Scholars Program facilitates disability accommodations in cooperation with instructors. In order to receive accommodations, you must be registered with Alpha Scholars Program, and you must complete a specific request for each class in which you need accommodations. If you have a documented disability and wish to discuss academic accommodations, please call 325-674-2667.

Academic integrity: Academic integrity is defined as academic work completed as assigned for each class by the individual or group responsible for the work. Violations of academic integrity and other forms of cheating involve the intention to deceive, mislead, or misrepresent and therefore, are a form of lying. Such actions are contrary to behavioral norms that flow from the nature of God. Academic misconduct includes, but is not limited to, the following: 1) Failure to give credit to sources used in a

work in an attempt to present the work as one's own, 2) Submission of papers or projects obtained from another source (e.g., research service or club paper file) as one's own, and 3) Falsifying information orally or in writing. Academic misconduct may result in, but is not limited to, a zero on the assignment and/or an F in the course. Additionally, the department chair, Dean of your school, and the Dean of Student Life will be notified. See the full university policy, including how to appeal a decision, by following [this link](#).

Harassment policy: As a Christian community, Abilene Christian University has committed itself, unequivocally, to ensuring a working and learning environment in which the dignity of every individual is respected. Harassment is defined as unwelcome behavior or conduct based on sex, religion, race, age, color, national origin, veteran's status, disability, or any other characteristic protected by law when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, education, or participation in University programs or activities, (2) submission to, or rejection of, such conduct by an individual is used as the basis for a decision affecting an individual's employment, education, or participation in University programs of activities, or (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive environment for work, education, or participation in a University program or activity. See the full university policy by following [this link](#).

FERPA: "The Family Educational Rights and Privacy Act" affords the student certain rights with respect to student records." Refer to the ACU course catalog for a more thorough discussion (p. 9 in the 2015-2016 catalog).

COURSE POLICIES

Professionalism: You should conduct yourself in a professional manner, similar to what will be expected of you in the workplace.

Class Attendance and Conduct: Attendance: Attendance of class is expected. It is the responsibility of the student to make sure that any missed work is made up, and to stay current with the covered material.

Participation and Tardiness: Discussion is an integral part of this class. Worthwhile discussion can only happen if people are prepared. If students have done the requested readings before class, this shouldn't be a problem. But you need to be willing to contribute to the discussions. Your participation grade will be based on your level of interactions in the class. Being late to class is unprofessional and disruptive. Chronic or severe tardiness (e.g. being more than 10 minutes late), as well as unexcused absences, will result in loss of participation points.

Conduct: Students are expected to conduct themselves in accordance with the standards given in the Student Handbook. I shall treat you with the same level of respect I expect from you. No electronic devices shall be turned on during class, except for those specifically being used for the class. The textbook is **required** for the course, and **readings** should be completed before the material is covered in class.

Technology Use: Inappropriate use of any electronic devices in a learning environment is disruptive and disrespectful of others. Unless the devices are approved as accommodations for persons with disabilities or have been designated for use in the classroom by the instructor, all such devices should be turned off and put away during class. Students violating this policy may be asked to leave the classroom immediately.

e-mail: I regularly check and answer e-mail (which is the best way to contact me with questions, comments, and concerns). Consider e-mails to be 'memos' and treat them as you would any communication in a professional, workplace environment. Texting shorthand and abbreviations are not appropriate for e-mails. Confirmation of e-mail replies is expected, professional, and is the standard in professional workplace environments.

Env & Tech Science Tentative Class Schedule Spring 2022

<u>Dates</u>	<u>Week</u>	<u>Subject</u>	<u>Chapter(s)</u>	<u>Module</u>
01/11 - 01/13	1	Introduction/Science & Env. Science	1	
Fri 01/14		Last day to add a class within a block		
Mon 01/17		MLK Jr. DAY. NO CLASSES		
01/18 - 01/20	2	Quiz 1 Ethics and Economics	2	
01/25 - 01/27	3	Quiz 2 Biodiversity	4	
02/01 - 02/03	4	Exam 1 Conservation	5	
02/08 - 02/10	5	Quiz 3 Conservation	5	
02/15 - 02/17	6	Quiz 4 Water	7	
02/22 - 02/24	7	Exam 2 Air	8	
03/01 - 03/03	8	Quiz 5 Climate	11	
03/08 - 03/10	9	Quiz 6 Land and Food	9, 12	
03/14 – 03/18		SPRING BREAK, NO CLASSES		
03/22 - 03/24	10	Exam 3 Land and Food	9, 12	
03/29 - 03/31	11	Quiz 7 Nonrenewable Energy	13	
04/05 - 04/07	12	Quiz 8 Nonrenewable/Renewable Energy	13, 14	
Fri 04/08		Last day to withdraw from class		
04/12 - 04/14	13	Exam 4 Renewable Energy	14	
Fri 04/15		GOOD FRIDAY, NO CLASSES		
04/19 - 04/21	14	Quiz 9 Waste	15	
04/26 - 04/28	15	Quiz 10 Environmental Health	17	
Mon 05/02		Dead Day		
Fri 05/06		COMPREHENSIVE FINAL EXAM (10:00-11:45)		