

Approval Chart for Curriculum Changes

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

Course Number BIOL 203 or Degree Plan(s) _____

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

This is an application to have this course added to the Life and Physical Sciences menu of the ACU General Education curriculum. See the attached application and 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.

Approval Chart for Curriculum Changes

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

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

Approval Chart for Curriculum Changes

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

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)	
<u>Jennifer Huddleston</u>	<u>09/09/2022</u>
<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:	BIOL 203 Basic Biology for teachers
Terms offered:	Spring Even Years
Catalog description:	Survey of the plant and animal kingdoms and life processes; interactions with the environment and ecosystems and the ecology of life; includes laboratory work. Laboratory graded and credited with the course. For non-biology majors; only for students seeking teacher certification in an area other than biology.
Course prerequisites:	Prerequisite: MATH 237 or Math ACT score of 20 or MATH SAT (prior to March 1, 2016) score of 500 or MATH SAT (after March 1, 2016) score of 530.
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:	
---	--

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).

BIOL 203 is a general non-majors biology course designed to give students a broad experience in biology from molecules to ecosystems. The course includes an introduction to cells, metabolism, cellular division, genetics, evolution, ecology, biodiversity, and animal and plant structure and function. These topics are very similar to the same topics in the BIOL 121/123 sequence for science majors but administered in less detail as appropriate. Compared to BIOL 101, BIOL 203 covers the same breadth of the discipline. This course also incorporates a biology lab, which has simplified variations of similar labs in the major lab courses BIOL 122/124. The major content area is not specific to one profession and encourages students to connect biology to parts of their life.

In addition to the biology content, this course also applies that content to an elementary classroom setting. Education-specific assignments in this course help students make relevant connects with the material; however, they are not required for education students to be prepared for their teacher content certification exams. Currently Elementary Education

students have the option of completing BIOL 203 or BIOL 101 to gain the biological knowledge necessary for their certification exams.

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).

BIOL 203 includes 2 hours of laboratory work through which students observe biological phenomena. Labs often require students to take measurements of variables and observe data trends to make conclusions. For example, to investigate respiration, students complete physical tasks and then observe changes in the CO₂ expelled using a pH indicator. As often as possible, labs are designed to be inquiry-based so that students test a hypothesis to a question.

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

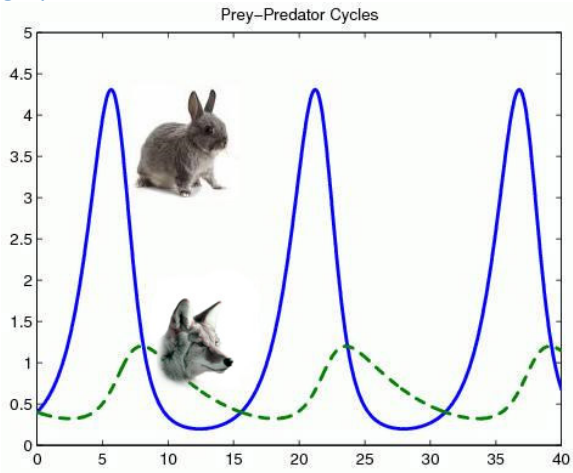
In the lab and lecture portions of BIOL 203 students are required to interpret graphical data and models and use mathematical formulas. Examples of graphical data or formulas include but are not limited to population tables and genetic probabilities. Examples of models or schematics encountered in BIOL 203 include but are not limited to food webs, metabolic chemical equations, and phylogenetic trees.

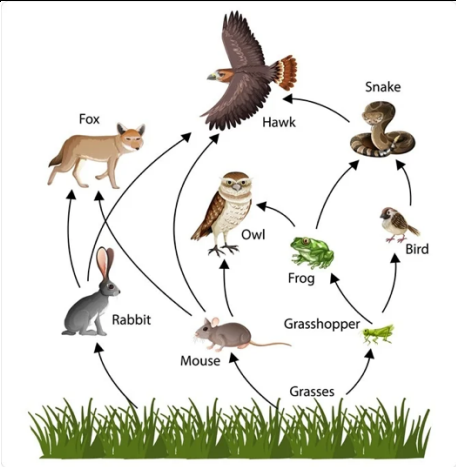
Describe how the course meets the C4 outcome (100 words or less).

BIOL 203 presents biological information in a hierarchical construct, building from the smallest units of life to relationships between organisms and their environments. As students progress through the content, they must build upon the information they have previously learned. For example, an understanding of basic genetics is necessary to understand natural selection. Moreover, students are encouraged to consider how biology fits into their everyday life, which prepares them as future educators and responsible citizens.

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	Daily Questions Ex. What can you conclude about the effect of exercise on the amount of carbon dioxide that is present in your exhaled breath? Why is this so?

	Ex. When you shined the UV light onto a sample of original pGLO plasmid DNA, it did not glow. What is the source of glowing color inside of the bacteria then? How is the plasmid connected to the glowing substance?
Outcome C3	Daily Questions Ex. Following owl pellet dissection, “Upload a file/picture of the food chain you constructed from the data you obtained from your owl pellet.” Ex. Following a community ecology simulation, “In the Rabbits and Wolves simulation, at which iteration did the rabbit population peak? At which iteration did the wolf population peak? Why is there a difference?” Unit 3 Test Ex. Which conclusion about the predator-prey relationship in the following graph is correct?  A. When the rabbit population peaks, then the wolf population begins to increase. Ex. In this food web, which of the following is a secondary consumer?

	 A. Frog	
Outcome C4	Daily Questions Ex. Following a lab investigating water properties with celery, “When water beads up on the window of your car, is that due to adhesion, cohesion, or capillary action? Explain your answer.” Ex. Following an evolution lab simulating beak size in birds, “How does the allele frequency of the B allele change over time for East Clipland compared to West Clipland? What is driving this change?”	

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.
---	---	--	---



"Worthy are you, our Lord and God, to receive glory and honor and power, for you created all things, and by your will they existed and were created." Revelation 4:11

BIOL 203.01 Basic Biology for Teachers
Onstead Science Center (OSC) 361 ([#51 on Campus Map](#))
MW 8:00-09:50a
XXX TERM

Catalog Description (2 lecture hrs, 2 lab hrs, 3 credit hrs): Survey of the plant and animal kingdoms and life processes; interactions with the environment and ecosystems and the ecology of life; includes laboratory work. Laboratory graded and credited with the course. For non-biology majors; only for students seeking teacher certification in an area other than biology.

Purpose: To train non-biology majors in molecular and cellular processes, plant and animal kingdoms and systems, and organisms' interactions with the environment and ecosystems, and apply this biological information to an EC-6 education context to meet the Core Subjects EC-6 Science Standards as set forth by the Texas Education Agency.

Course prerequisites: MATH 237 or Math ACT score of 20 or MATH SAT (prior to March 1, 2016) score of 500 or MATH SAT (after March 1, 2016) score of 530.

Instructor Information

Course Instructor: Jennifer Hennigan, Ph.D, Associate Professor of Biology
Office: Halbert-Walling (HAL) Room 222
Phone: 325-674-2747
Email: jah20c@acu.edu , *email is the best way to contact me outside of class*

Office Hours: MW 1-4p, Th 2:30-3:30p, and by appointment outside of these times.
*Office hours may be conducted via Zoom or in person at your preference. Please indicate your choice when you book an appointment [here](#).



Mission Statements

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

College of Arts and Sciences Mission: The mission of the College of Arts and Sciences is 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.

Biology Department Mission: The Department of Biology educates students for Christian service and leadership by preparing them to become biological scientists, pre-college teachers, and health care professionals.

About this Course

Course Learning Outcomes:

Students in this course will demonstrate knowledge of:

1. Cellular components and metabolism
2. Basic genetic and molecular biology of inheritance
3. Ecological dynamics and biomes
4. Evolutionary theory and classification of organisms
5. Plant and animal structures and functions

Students will:

1. Analyze quantitative data and observable biological phenomena to draw conclusions.
2. Interpret graphs and schematics displaying biological data
3. Connect biological concepts to daily life

Additionally, this course is aligned with Core Subjects EC-6 Science Standards set forth by the Texas Education Agency. Standards that are addressed in this course are as follows:

- Standard II: The science teacher understands the correct use of tools, materials, equipment, and technologies (2.1s-2.2s)
- Standard III: The science teacher understands the process of scientific inquiry and its role in science instruction. (3.2s, 3.11s)
- Standard IV: The science teacher has theoretical knowledge and practical knowledge about teaching science and about how students learn science. (4.3k, 4.4k, 4.12k, 4.13k, 4.3s)
- Standard V: The science teacher knows the varied and appropriate assessments and assessment practices to monitor science learning. (5.1k)
- Standard IX: The science teacher knows and understands the science content appropriate to teach the statewide curriculum [TEKS] in life science. (9.1k-9.11k, 9.1s-9.22s)

Course materials

1. *Concepts of Biology* by OpenStax. Click [here](#) for the publisher's website. Note that the online, PDF, and Kindle versions are **free**. All reading assignments will reference the chapter and section numbers. [Click here for a PDF of the book.](#) DO NOT PRINT THIS BOOK OUT USING ACU

PRINTING. If you choose to use a physical copy, it may be rented or purchased online. All options can be found [here](#).

2. Lecture slides and videos will be posted on Canvas in the respective Units prior to our scheduled class time. Grades, announcements and additional assignments will be posted on Canvas throughout the course. **It is VITAL that you check it every day.**
3. A computer is HIGHLY recommended for this course since we will be working collaboratively during EVERY class period. You must have regular access to a computer that is compatible with Lockdown Browser to take exams. *LockDown Browser is not compatible with Linux, Windows 10S or ChromeBooks.* Here is the LockDown Browser website if you want more info; scroll down and look under 'System Requirements for LockDown Browser':
<https://web.respondus.com/he/lockdownbrowser/resources/>

Course Format

This course is composed of a laboratory and a lecture. Labs will be incorporated into our MW class periods. The lecture portion will contain guided lecture and group activities.

Assessments and Grading:

Grades will be earned from the following categories with the indicated weight.

Category	Skill/Outcomes Assessed	Weighted Percentage of Final Grade
Exams	Biological Knowledge; TEA Standard IX	44%
Final Project and Presentation	Biological Knowledge; TEA Standard II-V & IX	20%
Daily Questions	Biological Knowledge, Analyzing Quantitative Data and observable phenomena; Integration of new information and connection to daily life; TEA Standard II and III	15%
Unit Experiment/Activity Design	Biological Knowledge, TEA Standard II-V & IX	16%
Service Learning	TEA Standard IV	5%

Final letter grades will be assigned using the following scale:

A	89.5-100%
B	79.5-89.4%
C	69.5-79.4%
D	59.5-69.4%
F	< or = 59.4%

Exams

There will be four exams covering content material; please carefully note exam dates on the course schedule, as they **will not** change. Please contact the professor within 24 hours of a missed exam to arrange for a make-up. Approved absences for an exam include 1) documented illness, 2) documented death in the immediate family (parents, siblings, grandparents), 3) official university business with prior approval, and 4) COVID-19 related approved absence through Student Life. If you would like to take a make-up exam, please give the original or a copy of the documentation to the professor for her records. Exams and quizzes will be given through Canvas and **Respondus LockDown Browser**. You must follow these guidelines:

- Bring a device with a LockDown Browser already installed.
- Make sure your device is fully charged. Do not expect to be able to plug into power during the exam or expect that the power outlets are working properly.
- If your device malfunctions even when not using Lockdown Browser, take it to Team55 to fix the problems beforehand.
- Take the practice quiz. Make sure you know how to access the Lockdown Browser from your device. Bring this device to the exam.
- If you have a Windows computer, make sure your updates are completed before the exam.
- Restart your device and close all programs before the exam, leaving only Lockdown Browser running.
- Arrive early and make sure your device is connected to WiFi.
- If your device malfunctions during the exam,
 1. Don't panic. Your answers are saved even if you have not yet completed and submitted the exam.
 2. Raise your hand and your instructor will assist you.
 3. If your device still malfunctions, again, don't panic. We will work together to get you an alternative device and additional time to finish your exam.

Unit Experiment/Activity Design

For each Unit you will design an activity or experiment that explores the content at an EC-6 grade level. Your lesson should be unique and not copied from an activity that we have completed in class, nor directly taken from a paid-for-use teacher education service. Original thought and connections should be evident in your submission.

Service Learning

Our class will participate in a service learning project, STEM for Girls which will be hosted by ACU on **DATE TO BE DETERMINED**. The event is from **TBD**. There are three different ways that you can fulfill your credit for this portion of your grade:

1. You may sign up to serve as a host for a group of 10-12 middle school girls to take them to their different stations. Your job is to keep them excited and engaged in the science activities. Your participation will be accompanied by a reflection on your experience.
 2. You may help develop a station and/or run a station during the event. This would require that you assist in preparing materials and instructing the girls at the station. Your participation will be accompanied by a reflection on your experience.
 3. In the event that you are not able to complete the service learning with STEM for Girls, you may substitute 3 hours of observation of elementary science lessons and reflections. You must provide documentation and make arrangements.
-

University Policies

Anti-Harassment Policy

One of my responsibilities is to help create a safe learning environment at ACU. I will seek to keep any information you share with me private to the greatest extent possible. When I am not able to keep your information confidential, I will only share it with responsible administrators who can provide you with 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 at ACU's [policy](#).

Academic Integrity

Rationale for Policy

The most powerful motive for integrity and truthfulness comes from one's desire to imitate God's nature in our lives. As a community of Christian students and scholars, we are each responsible to expect behaviors from each other consistent with the nature of God, to respect the community, and to respect ourselves.

Expectations of academic honesty and integrity extend to both university employees and students. Every member of the community is responsible for protecting the integrity of learning, scholarship, and research. Being responsible requires action against violations in spite of peer pressure, loyalty, or compassion. Individuals must take responsibility for their own conduct and discourage misconduct by others.

Definition of Academic Integrity

Academic integrity is defined as academic work completed as assigned for each class by the individual or group responsible for the work. Academic work includes but is not limited to reading assignments, homework assignments, assessments, examinations and tests, attendance at required out-of-class activities, written or oral presentations, and laboratory experiments and research.

Violations of academic integrity and other forms of cheating involve the intention to deceive or mislead or misrepresent and therefore, are a form of lying. Specific examples of academic dishonesty in this course include, but are not limited to, the following:

- Submitting for credit, in whole or in part, the work of others.
- Receiving, giving, or using unauthorized aid on an examination or quiz.
- Failure to give credit to sources used in a work in an attempt to present the work as one's own.
- Submission of paper(s) or project(s) obtained from any source, such as a friend, research service, or club paper file, as one's own.
- Allowing other members of a group to provide a disproportionate fraction of a required group project or activity.
- Claiming credit for an attendance or service activity without attending or performing the activity.
- Written or oral presentation of falsified materials and facts, including but not limited to the results of interviews, laboratory experiments, and field-based research.
- Providing false information and/or documentation regarding an absence in an effort to have the absence excused.
- Thwarting an academic integrity investigation or providing information deemed to be false during an investigation.

Consequences of Breach

Academic dishonesty may result in, but is not limited to, the following:

- A first offense will result in a 0 for the assignment.
- A second violation in a class will result in an automatic F in the course.
- All instances of academic dishonesty will be reported to Dean of the College of Arts and Sciences and the Dean of Students in the Student Life Office.

Appeal Process

If you would like to appeal a decision, then please follow this link to learn about how to file an appeal: <http://www.acu.edu/academics/provost/policies/index.html>.

ADA Compliance Policy

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 email alpha@acu.edu call their office directly at 325-674-2667.

Dress Code

See ACU's full [dress code policy here](#). If your attire does not comply, I will have to ask you to leave class for that day.

Course Policies

Attendance Policy

Each student is required to attend class promptly and consistently. Each class period contains labs and activities that must be completed to answer the Daily Question assignments. If you must miss class for an **excused** reason, please notify in advance or ASAP so that we can coordinate makeup arrangements or an alternative method of obtaining the information necessary.

Late Assignment Policy

Daily Questions are due **by 11:59p on the day of class**, unless otherwise indicated. LATE WORK WILL NOT BE ACCEPTED!! ANY ASSIGNMENTS THAT ARE TURNED IN AFTER THE ANNOUNCED DUE DATES AND TIMES WILL RECEIVE NO CREDIT. NO EMAIL SUBMISSIONS. ALL WORK MUST BE SUBMITTED THROUGH CANVAS.

Please note that while there are firm course policies in place for a reason, I am always happy to work with students that find themselves in extraordinary circumstances. Communicating early and often is critical if you believe you are in this situation.

Audio/video recordings of the lectures

Neither audio nor video recording of lectures is permitted except through written permission from the professor. Exceptions can be made through the Alpha Scholars Program for qualifying students.

Course schedule

Week	Day	Unit	Topic	Reading Assignment
1	Jan 10		Introductions/ Why Teach Science? Scientific Inquiry and the Elementary Classroom	5E Model of Instruction
	Jan 12		Inquiry Lab Part 2/Themes of Biology	OpenStax 1.1, 2.1-2.3
2	Jan 17		MLK Holiday	
	Jan 19		Microscope Lab	OpenStax 3.1
3	Jan 24		Organization of Cells/ Cell City Activity	OpenStax 3.2-3.3
	Jan 26		Powering Animal Cells/ Nutrition and Respiration Lab	OpenStax 4.1-4.4
4	Jan 31		Powering Plant Cells/ Photosynthesis Lab	OpenStax 5.1-5.3
	Feb 2		Unit 1 Test/ Unit 1 Activity Due	
5	Feb 7		Reproduction of Cells/ Cell Cycle Modeling	OpenStax 6.2, 7.1, 7.2
	Feb 9		Mendelian Genetics	OpenStax 8.1-8.2
6	Feb 14		Molecular Inheritance Part 1: Genes and DNA replication/ pGLO lab 1	OpenStax 9.1-9.2
	Feb 16		Molecular Inheritance Part 2: Transcription and Translation/ pGLO lab 2	OpenStax 9.3-9.4
7	Feb 21		Evolutionary Mechanisms	OpenStax 11.1-11.3
	Feb 23		Speciation	OpenStax 11.4

8	Feb 28		Organization of Life/ Phylogeny Lab	OpenStax 12.1-2
	Mar 2		Unit 2 Test/ Unit 2 Activity Due	
9	Mar 7		Population and Community Ecology/ Ecology Lab	OpenStax 19.2-4
	Mar 9		Ecosystems and Biomes	OpenStax 20.1-20.3
March 14-18		Spring Break!!		
10	Mar 21		Biodiversity and Conservation	OpenStax 21
	Mar 23		Plant Diversity Part 1/ Plant lab 1	OpenStax 14.1-14.2
11	Mar 28		Plant Diversity Part 2/ Plant lab 2	OpenStax 14.3-14.4
	Mar 30		Plant Diversity Part 3	
12	April 4		Unit 3 TEST/Unit 3 Activity Due	
	April 6		Animal Diversity Part 1	OpenStax 15.1-15.3
13	April 11		Animal Diversity Part 2	15.3-15.5
	April 13		Animal Diversity Part 3	OpenStax 15.6
14	April 18		Overview of Human Body Systems and Digestive System	OpenStax 16.1-16.3
	April 20		Musculoskeletal, Endocrine and Reproductive Systems	OpenStax 16.4; 18.1-18.3
15	April 25		Unit 4 Test/ Unit 4 Activity Due	
	April 27		Final Project Work Day	

Friday May 6 8-9:45a		Final Curriculum Project Presentation	
---------------------------------	--	--	--

NOTE: This schedule is subject to modification by the instructor. Any changes in assignment due dates will be announced in class and posted to Canvas. It is important to check Canvas daily.