



**Syllabus:** Environmental Biology Lecture

**Course Number:** BIOL 2306

**Semester & Year:** Fall, 2014

**Instructor:** Professor Delores McCright

**Office:** Biology 118

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**Office Hours:** Friday 7:30-8

### **Textbook and Lab Manual Information and Required Reading**

**Environment:** The Science Behind the Stories, 5th edition by Jay Withgott and Matthew Laposata, ISBN-13:978-0-321-89742-8

Various articles found on the internet or write-ups provided by Professor McCright

### **Student Learning Outcomes for the Course:**

Upon successful completion of this course, students will:

1. Explain the structure and impact of biogeochemical cycles.
2. Describe energy transformations across trophic levels.
3. Illustrate abiotic/biotic interactions and symbiotic relationships.
4. Identify various types of natural resources, human impact on these resources, and common resource management practices.
5. Quantify and analyze the impact of lifestyle on the environment.
6. Depict evolutionary trends and adaptations to environmental changes.
7. Describe environmental hazards and risks and the social and economic ramifications.
8. Describe ecological and statistical techniques and approaches used in the study of environmental biology.

### **Student Requirements for Completion of the Course and Due Dates:**

Chapters 1-24

1. Science and sustainability
2. Earth's physical systems: matter, energy and geology
3. Evolution, biodiversity and population ecology
4. Species interactions and community ecology
5. Environmental systems and ecosystem ecology
6. Ethics, economics, and sustainable development
7. Environmental policy: making decisions and solving problems
8. Human population
9. Soil and agriculture
10. Agriculture, biotechnology and the future of food
11. Biodiversity and conservation biology
12. Forests, forest management and protected areas
13. Urban environment: creating sustainable cities
14. Environmental health and toxicology

15. Freshwater systems and resources
16. Marine and coastal systems and resources
17. Atmospheric science and air quality, and pollution control
18. Global climate change
19. Fossil fuels, their impacts and energy conservation
20. Conventional energy alternatives
21. New renewable energy alternatives (select parts)
22. Managing our waste (select parts)
23. Minerals and mining (select parts)
24. Sustainable solutions

### **Student Assessment**

Lecture Grade:

- |                               |            |
|-------------------------------|------------|
| (1) 5 lecture tests           | 500 points |
| (2) 1 final exam              | 300 points |
| (3) 1 notebook (required)     | 100 points |
| (4) Attendance, participation | 100 points |
- (Handout given for list of activities and point values for notebook)

Lab is a separate class but is **required** to go along with the lecture. They overlap a great deal. Some days will be all lab work, and some days will be all lecture work or field trips.

A participation grade for lecture and lab will be 10% of the total grade and includes oral communication, sharing current biology publication articles, special assignments and especially attendance to class without tardiness. Lecture and lab tests will mainly cover material presented in the text and lab manual, but will include extra materials presented by Professor McCright, as well as information presented in handouts. Tests will be objective, short answer, essay, labeling drawings, fill in blank, list, matching, etc. All tests are based on the 100 point scale. All tests must be taken! If one is missed, it must be taken the next class attended, or a zero will be recorded unless specific plans have been made otherwise. Free tutoring is available to any student at Student Support Services in the Library. Although there is not a designated tutor for this class, study groups should be formed and meet in the library to question each other. McCright will tutor as time permits and will be in the library for tutoring prior to major lecture tests for one hour on designated days.

<b>Grading Rubrics</b>	
<b>A</b>	90-100
<b>B</b>	80-89
<b>C</b>	70-79
<b>D</b>	60-69
<b>F</b>	59-below

### Class Schedule

Week by week account of topics, exams, due dates. These dates may vary slightly according to class discussions and campus meetings, field trips and projects.

<b>Date</b>	<b>Material to be covered</b>	<b>Assignment</b>
WEEK 1	Go over class syllabus, pre-test	Read chapter 1
WEEK 1	Chapter 1 lecture	Read chapter 2
WEEK 2	Chapter 2 lecture	Study for chs. 1 & 2 test
WEEK 3	Chs. 1&2 test in TC, Ch.3 lecture	Read chapters 3 & 4
WEEK 3	Chapter 4 lecture	Read chapter 5
WEEK 4	Chapter 5 lecture	Study for chs. 3-5 test
WEEK 4	Chs. 3-5 test, begin chapter 6	Read ch. 6
WEEK 5	Ch. 6 lec	Read ch. 7
WEEK 5	Ch. 7 lecture	
WEEK 6	Field trip	Read ch. 8
WEEK 6	Chapter 8 lecture	Study for chs. 6-8 test
WEEK 7	Field trip	Read ch. 9
WEEK 7	Chs. 6-8 test, ch. 9 lec.	
WEEK 8	Field trip	Read ch. 10
WEEK 9	Chapter 10 lec.	
WEEK 9	Field trip	Read ch. 11
WEEK 10	Ch. 11 lec.	
WEEK 10	Field trip	Read chapter 12
WEEK 11	Ch. 12 lecture	Study for chs. 9-12 test
WEEK 12	Field trip	Read ch. 14
WEEK 13	Chapter 9-12 test, ch. 14 lec	
WEEK 13	Chapter 14 lecture	Read ch. 15
WEEK 14	Chapters 14 lecture	Read chapter 24
WEEK 14	Chapter 15 lecture	
WEEK 15	Chapter 24 lecture	Study for chs. 14, 15, 24 test
WEEK 15	Chs. 14, 15, 24 test	Read chapter 17
WEEK 15	Ch. 17 lecture	Read chapters 18 & 20
WEEK 16	Ch. 18 & 20 lecture	Study for chs. 17-20 test
WEEK 16	Chs. 17, 18, 20 test	Study for final exam
Dec. 12-17	FINAL EXAMS	

**THANKSGIVING BREAK: NOV. 24-28**

### **Attendance Policy**

**Lecture absences allowed: 2, and the same with lab.** Absences due to college trips or activities will not be counted against the allowable number. Before dropping a class for any reason, contact your instructor. After allowable absences, to avoid receiving the grade of “F”, the student must drop the class in the Admissions Office. Two tardies equal an absence. In an effort to curb tardies, the door will be closed and locked about 5 minutes after class begins. You will not be permitted to enter unless you have called me before class with a valid reason. Absences are not recommended as points will be deducted from participation grades, which is 10% of lecture. Pregnant students need to speak with Professor McCright the first week of class. If you do not drop yourself, on the 3rd absence the teacher will drop you IMMEDIATELY! Absences are submitted by instructors daily on the computer. Administration will be contacting you if you are in danger of being dropped due to absences/tardies.

### **Make-up Policy**

All tests must be taken or you will receive a zero! The test must be taken during the next class attended, unless specific plans have been made otherwise. In case of an emergency, and you know you must miss a lecture or lab, email me at least 24 hours ahead of time so that provisions can be made. If it is an unforeseen emergency, call or email as soon as possible. After discussion with Professor McCright, the missed lecture or lab may be made up by assigned films or written work, if appropriate. This must be done by the next Friday. Proof of the emergency must be provided at the time the notes are submitted.

### **Academic Integrity Statement**

Scholastic dishonesty, involving but not limited to cheating on a test, plagiarism, collusion, or falsification of records will make the student liable for disciplinary action. Proven violations of this nature will result in the student being dropped from the class with an “F”. This policy also applies campus wide, including the TC Testing Center, as well as off-campus classroom or lab sites, including dual credit campuses. This information can be found in the Student Handbook at <https://texarkanacollege.edu>

### **Disability Act Statement:**

Texarkana College complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. Please contact the Recruitment, Advisement and Retention Office in the Administration Building for personal assistance.

### **Financial Aid:**

Attention: Dropping this class may affect your funding in a negative way! You could owe money to the college and/or federal government. Please check with the Financial Aid Office before making a decision. Most of you CANNOT drop any classes because your health and car insurance say you must be full time students. Also, if you are on any grant or scholarship or loan, you may be REQUIRED to pay it back if you drop below full time. Stay in college and do well. Develop good study habits. Go to our free tutoring at Student

Support Services early in the semester if you need help. **YOU CANNOT DROP MY CLASS WITHOUT TALKING TO ME AND OUR RETENTION OFFICER AND FINANCIAL AID FIRST.**

**Policies for Dismissal from Class:**

Before you are dismissed from class, you will be given a warning unless it is a violent, unlawful or otherwise flagrant act. In this instance, the student will be asked to leave immediately. Professor McCright will talk to the student after class and determine the course of action. The student will be required to speak with the Dean of Students, as well. If the student does not comply, Security will be asked to escort the student out of class. The student will not be permitted in class again and risks being dropped from all classes at TC. If the student merits a warning, at that time a written record will be made of the warning. This will be recorded in the gradebook. If a 2nd problem should arise, the person will be expelled from class. General reasons why a person may be dropped from class are: disrupting class, dipping tobacco products, cursing, use of electronics, disrespectful attitude, suspected drug or alcohol abuse resulting in abnormal behavior, cheating, excessive absences and tardies, being loud and disruptive, working on another class during designated biology time.

**Course Overview and Description:**

Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research

**Special Requirements:**

You are **REQUIRED** to have an email address and **REQUIRED** to check it daily. Always put a topic in your email, including name and class time. Please use correct grammar in emails. TC provides email accounts for all students. You must sign in and provide your password. You are required to do the outdoor labs, recycle paper on campus, pick up trash to take care of the environment, and go on all field trips. You must wear closed toe shoes and long pants when doing outdoor activities. It is suggested you put extra clothes in your car in case you forget these items on field trips and for outdoor experiments.

**Electronic Devices in the Classroom:**

Since the classroom needs to be free from interruption or interference, all electronic devices are banned from the classroom and labs. Devices capable of generating noise such as cellular phones, pagers, palm pilots, beepers, laptops, watches, etc., are considered a distraction to the learning process and will be turned off prior to entering the classroom. Such devices will also be kept out of sight and not accessed during the class period. A student who has an unauthorized electronic device activated during an exam will not be permitted to continue the exam and will be asked to leave the classroom. The exam will be turned in at that time and the student will not be permitted to complete the exam. Due to the circumstance, the instructor may question the validity of any portion of the exam completed prior to the violation and may elect not to grade the exam. In such a situation, the student will not receive credit for the exam and a zero will be recorded in the grade book. If there are extenuating circumstances where one of these devices must be

on silent or vibrate during class, permission must be granted before class is started. During lecture or lab times, if your electronic device makes any noise, including vibrating, you will leave class immediately. Some of the exams may be taken in the Testing Center. Take nothing in there except a pen. Your TC ID must be showed as you check in. Wear no coat or sweater in Testing Center. Always have your TC ID on you. You are required to be there an hour before the exam is due or the Testing Center is closing. The center hours are online and posted.

**General Information:**

I believe this class is an important part of your overall education and that the broad based science/biology education you get will be beneficial to you in many ways during your walk in life. You will learn much!

I pledge to be prepared for class, so I expect the same from you. I expect you to act respectful to me and to your classmates. I also expect you to conduct yourself according to the college guidelines in the student handbook and general catalog. All students will be treated the same, without prejudice in any form. I care very much for my students and hope that you each get the maximum you can out of your education here at TC!

I want to help you if you are struggling with your studies. Please feel free to come to my office and talk to me about that if you need to.

It is important that you get your education, get that Associate's Degree and get your life goals met. I would love to help you if you need help. You can get career counseling on the 2<sup>nd</sup> floor of the library with our licensed professional counselor, Dr. Joan Strutton.

Please sign the lab safety sheet with the pledge form that you understand the rules and that you will obey them. It is on a separate page.

I am wishing you a great and productive semester.