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|  NORTH CENTRAL TEXAS COLLEGECOURSE SYLLABUS |

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| Course Title: Environmental Biology |
| Course Prefix & Number: Biol. 2406 | Section Number: 340 | Term Code: Fall 2021 |
| Semester Credit Hours: 4 | Lecture Hours: 48 | Lab Hours: 32 |
| 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.  |
| Course Prerequisite(s):  |
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**INSTRUCTOR INFORMATION**

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| Name of Instructor: | Belinda H. Anderson |
| Campus/Office Location: | Bowie, Room 132 |
| Telephone Number: | (940) 872-4002 ext. 5217 |
| E-mail Address: | banderson@nctc.edu |

**OFFICE HOURS by Appointment**

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| --- | --- | --- | --- | --- |
| *Monday* | *Tuesday* | *Wednesday* | *Thursday* | *Friday* |
| Bowie | Graham | Online |  |  |
| 12:30-3:00 | 8:00-9:15 Drive | 9:00-1:00 |  |  |
| Online | 11:30-12:30 |  |  |  |
| 9-10 | 12:30-1:45 Drive |  |  |  |
| 3-5 | Online 2-3 |  |  |  |

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| Name of Chair/Coordinator:  | **Jaime Noles** |
| Office Location: | **Gainesville Rm. 408**  |
| Telephone Number: | **940-668-4252** |
| E-mail Address: | **jnoles@nctc.edu** |

**REQUIRED OR RECOMMENDED COURSE MATERIALS**

**Required text** *Required Course Materials:*

*Principles of Environmental Science* 9th., Cunningham

ISBN 9780078036071

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**STUDENT LEARNING OUTCOMES** (From Academic Course Guide Manual/Workforce Education Course Manual/NCTC Catalog

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| *At the successful completion of this course the student will be able to:* |
|  | **Lecture Learning Outcomes**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.

**Lab Learning Outcomes**Upon successful completion of this course, students will:1. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem solving to make informed decisions in the laboratory.
3. Communicate effectively the results of scientific investigations.
4. Explain the structure and impact of biogeochemical cycles.
5. Describe energy transformations across trophic levels.
6. Illustrate abiotic/biotic interactions and symbiotic relationships.
7. Identify various types of natural resources, human impact on these resources, and common resource management practices.
8. Quantify and analyze the impact of lifestyle on the environment.
9. Depict evolutionary trends and adaptations to environmental changes.
10. Describe environmental hazards and risks and the social and economic ramifications.
11. Describe ecological and statistical techniques and approaches used in the study of environmental biology.
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**COURSE REQUIREMENTS, EVALUATION METHODS AND GRADING CRITERIA**

**GRADING CRITERIA**

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| **# of Graded Course Elements** | **Graded Course Elements** | **Percentage or Point Values** |
| 3 | Lecture Exams @ 180 points each | 540 |
| 13 | Lab Exercises | 230 |
| 1 | Lab Final | 100 |
| 13 | Lecture Discussions | 130 |
|  | Total Point Value | 1000 |

900 to 1000 points=A, 800 to 899.99 points=B, 700 to 799.99 points=C, 600 to 699.99 points=D and below 600 points=F

Final grades will be determined on the basis of academic performance in both lab and lecture.

Exams will be evaluated and grades determined as quickly as possible and posted on Canvas. Grades WILL NOT be given out over the phone, nor will grades be discussed with any individual other than the student.

**Attendance is required**. Students are expected to log in at least once a week. Nine hours of absence from class/lab may result in dismissal from this course.

**Tentative Schedule**

**COURSE SUBJECT OUTLINE** (Major Assignments, Due Dates, and Grading Criteria)

**Week of**  **Chapter and Corresponding Module**

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| --- | --- |
| 08/23-08/27 | 1 (Module 1) |
| 08/28-09/03 | 2 (Module 2) |
| 09/04-09/10 | 3 (Module 3) |
| 09/11-09/17 | 4 (Module 4) |
| 09/18-09/24 | 5, **Exam 1** (Module 5) |
| 09/25-10/01 | 6 (Module 6) |
| 10/02-10/08 | 7 (Module 7) |
| 10/09-10/15 | 8 (Module 8) |
| 10/16-10/22 | 9-10 (Module 9) |
| 10/23-10/29 | 11, **Exam 2** (Module 10) |
| 10/30-11/05 | 12 (Module 11) |
| 11/06-11/12 | 13 (Module 12) |
| 11/13-11/19 | 14 (Module 13) |
| 11/20-11/26 | 15-16 (Module 14) |
| 11/27-12/03 | **Exam 3** (Module 15) |
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**Lab Grades**

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| --- | --- | --- | --- |
| Module 2 | Microscope Study | Quiz | 10pts. |
| Module 3 | Vermiculture Study | Quiz | 10pts |
| Module 4 | Ecological Footprints | Quiz | 10pts |
| Module 5 | Climate Change/Biomes | Quiz | 10pts |
| Module 6 | National Park Contest | Discussion/Vote | 20pts |
| Module 7 | How We Eat | Survey | 10pts |
| Module 8 | Light Pollution | Survey | 10pts |
| Module 9 | Landfill Tour | Quiz | 10pts |
| Module 10 | Waste Water Treatment Tour | Quiz | 10pts |
| Module 11 | Plastics  | Discussion | 10pts |
| Module 12 | Slum Tourism | Discussion | 10pts |
| Module 13 | Environmental Topic | Power Point Presentation | 100pts Due November 19 |
| Module 14 | Agrihood | Discussion | 10pts |
| Module 15 | Comprehensive Lab Final | Multiple Choice | 100pts |

The lab Modules (2-14) are worth a total of 230 points. The lab final will be worth 100 points and will consist of multiple choice questions over the topics and information learned in lab this semester. The total points you can earn for lab is 330 points.

**No Classes Labor Day, September 6th.**

**Last day to Drop class with a W, November 1st.**

**Thanksgiving Break November 24th-November 28th. Classes resume November 29th.**

**Final Exam week December 6th-11th.**

**Syllabi Statements** COVID-19 Specific Syllabi Statements Fall 2021

**Syllabi statement regarding potential Conversion of Onsite Classes to Online/Remote Format:** North Central Texas College students should be aware that in the event of a college closure due to COVID-19 or other health related crisis, onsite classes will be converted to an online/remote format. Students should plan ahead to ensure they have access to the computer equipment (either PC, MAC, or tablet), webcam, and internet connectivity to continue their classes in an online/remote format. Please read all your official North Central Texas College student emails as the transition from onsite to online/remote might require a reorganization in your personal situation. Students will be granted a 72-hour transition and grace period. Online classes will continue as scheduled without disruption. Contact your Instructor as the situation arises. These policies and procedures were updated on July 27, 2021 and are subject to change as conditions change.

**Syllabi Statement Regarding Face Coverings:** Per the North Central Texas College guidance on face coverings on campus, in the instructional setting, faculty and students are not required to wear face coverings, such as masks or face shields. In May, Texas Governor Gregg Abbott released an Executive Order prohibiting Government entities from mandating the use of masks. As a political subdivision of the State of Texas, NCTC will follow the Governor’s Executive Order for Government entities and effective immediately NCTC is no longer mandating the use of masks while on campus. This order does not mean that you cannot choose to wear a mask, rather it is no longer allowed to be mandated. These policies and procedures were updated on May 19, 2021 and are subject to change.

**Return to Standard Attendance Protocol for Face-to-Face Meetings:** In spring 2020, we faced an unprecedented situation in which all of us had to be flexible and make prudent decisions in the best interest of our families, our campus, and our community. In light of this, North Central Texas College is temporarily establishing the requirement that faculty keep records of student attendance for face-to-face course meetings as well as a documented seating chart. In addition, students who are sick or need to quarantine should not attend classes. Students will not be required to provide formal documentation from a health care provider and will not be penalized for COVID-19 related absences when proper notification to campus health officials is made in accordance with the guidelines stated below.

Faculty will:

* Notify students about important course information and delivery changes through Canvas and campus email.

Students should:

* Provide notification to campus officials if they have tested positive for COVID-19 or have to quarantine so we can confirm reported absence with instructors, monitor, and assist the campus community.
* Notify instructors in advance of the absence.
* Connect with that class through Webex if the class session is being transmitted in a hybrid fashion.
* Keep up with and/or make up missed classwork or assignments.
* Submit assignments digitally through Canvas or other means as announced by your instructor.
* Work with their instructors to reschedule exams, labs, and other critical academic activities described in the course syllabus.
* Check Canvas and campus email daily to receive important announcements pertaining to the course.

During the fall 2021 semester, faculty with face-to-face meetings will establish assigned seating/work stations to facilitate roll-taking, and, if necessary, contact tracing. Additionally, we ask all members of the College community to be attentive to their health, and safeguard others, by following the CDC’s guideline to “stay home when you are sick.” You should stay home if you have symptoms. More information on what to do if you are sick is available at the CDC’s website.

Additional NCTC information is available at <http://www.nctc.edu/coronavirus/index.html>

**ATTENDANCE POLICY**

Regular and punctual attendance is expected of all students in all classes for which they have registered. All absences are considered to be unauthorized unless the student is absent due to illness or emergencies as determined by the instructor. It is the student responsibility to provide documentation as to the emergency for approval and judgement by the faculty member. Approved college sponsored activities are the only absences for which a student should not be held liable and only when provided by a college official ahead of the absence. Valid reasons for absence, however, do not relieve the student of the responsibility for making up required work. Students will not be allowed to make up an examination missed due to absence unless they have reasons acceptable to the instructor. A student who is compelled to be absent when a test is given should petition the instructor, in advance if possible, for permission to postpone the exam. Student will be dropped from a class by the Registrar upon recommendation of the instructor who feels the student has been justifiably absent or tardy a sufficient number of times to preclude meeting the course’s objectives. Persistent, unjustified absences from classes or laboratories will be considered sufficient cause for College officials to drop a student from the rolls of the College. From Board Policy FC (LOCAL)

Last day to withdraw from a course with a “W” is \_\_\_\_\_November 1st, 2021\_\_\_\_\_\_\_\_.

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[**Affinity Groups**](http://www.nctc.edu/affinity-groups/index.html)

Staff and faculty representing the Employee Resource Groups (ERG’s), along with academic advisors, counselors and success coaches, serve as mentors for NCTC’s student-centered ​Affinity Groups​.

An ​Affinity Group​ is a population of students who have specific needs, barriers or systems they are needing to navigate not only within college, but within life. Providing mentorship, support and resources for identified Affinity Groups such as Black/African American students, veterans and active military, single parents, students with disabilities, adult learners, Latinx, LGBTQ+ and students who have experienced foster care and/or homelessness, enables us to make more impactful, meaningful connections with students who are in dire need of equity and understanding.

[**Career Services Center**](https://www.nctc.edu/career-services/index.html)

In need of employment? NCTC Career Coaches meet one-on-one to provide training in writing resumes, job searches, interviewing, and more. The Skills to Succeed Academy is also a free interactive, online employability training program focused on building the skills and confidence you need to find the best career.

[**Completion Center**](http://www.nctc.edu/student-services/completion-center/index.html)

The Completion Center provides a variety of services for first-time in college students. These include academic success coaching, goal setting, course planning, student resources, career development, and job placement services for all new college students. Free online Success Seminars are also available through [Student Lingo](https://studentlingo.thoughtindustries.com/nctc/tye5arkyzk5k3wt4) and new students will also enroll in a First Year Experience (NCTC 1001) course to get started on the right track!

[**Counseling and Advising**](http://www.nctc.edu/counseling-advising/index.html)

Academic Advisors and Counselors help students explore majors and programs offered, how to take the best combination of classes to meet your goals, assist with questions related to university transfer, and guide students towards academic and personal success, and more. At NCTC, you are assigned to a specific advisor or success coach based on your major or career interests. You can locate our advisors and their majors, along with **contact information on the Meet Your Advisor page-and even schedule an appointment with them through their online calendar!**

**Early Alert and** [**CARES**](https://www.nctc.edu/cares-team/index.html)

The NCTC Early Alert program assists students who are at risk of failing or withdrawing from a course. Faculty and staff may refer students through the Early Alert process at any point in the semester in an effort to provide appropriate intervention and access to support services. Examples of behaviors that could prompt an Early Alert referral could be missing assignments, failing tests, excessive absences, or personal circumstances impacting academic performance. A student submitted as an Early Alert will be contacted by an [academic advisor or success coach](http://www.nctc.edu/counseling-advising/index.html) through text, phone, and/or via their NCTC e-mail address to discuss any current challenges as well as helpful resources and success strategies-we want our students to finish strong and know that education is a partnership!

The [NCTC CARES Team](http://www.nctc.edu/cares-team/index.html) is concerned not only about our students' academic success, but also their emotional and physical well-being. As a student, you have the ability to report concerning behavior which could impact your own safety or the safety of another NCTC student, such as stalking, harassment, physical or emotional abuse, violent or threatening behavior, or self-harm. Visit the NCTC CARES site to also locate [campus and community resources](https://www.nctc.edu/counseling-advising/community-resources.html), or email counseling@nctc.edu.  As always, if you feel there is an immediate threat to your own safety or welfare (or to another student), please call 911 immediately.

[**Equity, Diversity and Inclusion (EDI)**](http://www.nctc.edu/equity-diversity-inclusion-division/index.html)

EDI partners with the entire campus community to create, maintain and demonstrate NCTC’s commitment to an equitable, diverse and inclusive learning environment where NCTC students succeed. NCTC defines equity as encompassing the practice of acknowledging individual differences and systemic disparities when developing new programs and resources for our campus community, which may sometimes challenge our own beliefs and assumptions, in order to ensure balanced educational opportunities toward completion. Everyone Included. Everyone Belongs. Everyone Valued. Everyone Inspired.

[**Financial Aid**](http://www.nctc.edu/financial-aid/index.html)

The Office of Financial Aid provides students with information and guidance with applying for eligible types of financial assistance, such as the FAFSA (Free Application for Federal Student Aid). Students who have any types of exemptions or tuition waivers will also work with the Financial Aid Office to have these funds applied to their accounts. Additionally, the [Scholarship Office](http://www.nctc.edu/external-affairs/scholarships/index.html) provides local scholarship opportunities through an online application process, and tips on how to secure other types of scholarship awards which can help finance educational goals.

[**Student Success Center**](http://www.nctc.edu/student-services/student-success/tutoring/index.html)

The Student Success Center is designed to help all students at NCTC develop tools to achieve their academic goals. The center links students to FREE tutoring, including a Writing Center, a Math Lab, and free online tutoring. Student Success offers academic coaching, tutoring, including a Writing Center, and a Math Lab to assist new students acclimate to college by providing computer lab services for prospective students. First generation students can also participate in [TRIO](http://www.nctc.edu/student-services/trio-student-support-services/index.html) which offers specialized services.

[**Testing Services**](http://www.nctc.edu/testing-center/index.html)

The mission of NCTC Testing Services is to provide high-quality testing services that adhere to the professional standards and guidelines to meet the needs of students, faculty, and community members.

**CORE CURRICULUM FOUNDATIONAL COMPONENT AREA** (For classes in the Core)\_\_\_\_\_\_\_\_

 Communication

 Mathematics

X Life and Physical Science

 Language, Philosophy & Culture

 Creative Arts

 American History

 Government/Political Science

 Social and Behavioral Sciences

 Component Area Option

**REQUIRED CORE OBJECTIVES** (For classes in the Core)

X Critical Thinking

X Communication

X Empirical and Quantitative

X Teamwork

 Personal Responsibility

 Social Responsibility

**COURSE TYPE**

X Academic General Education Course (from ACGM but not in NCTC Core)

**X** Academic NCTC Core Curriculum Course

WECM Course

**STUDENT HANDBOOK**

Students are expected to follow all rules and regulations found in the student handbook and published online.

**ACADEMIC DISHONESTY**

Scholastic dishonesty shall include, but is not limited to cheating, plagiarism, academic falsification, intellectual property dishonesty, academic dishonesty facilitation and collusion. Faculty members may document and bring charges against a student who is engaged in or is suspected to be engaged in academic dishonesty. See Student Handbook, “Student Rights & Responsibilities: Student Conduct ([FLB (LOCAL)]”.