NORTH CENTRAL TEXAS COLLEGE
COURSE SYLLABUS

Course Title:	BIOL 2406 Environmental Biology				
Course Prefix & Number:	BIOL2406	*Section Number:*	340	*Semester/Year:*	FA 2017
Semester Credit Hours:	4	*Lecture Hours:*		*Lab Hours:*	

Course Description (NCTC Catalog):

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):

Required or Recommended Course Materials:

Principles of Environmental Science 8th., Cunningham

ISBN 9780078036071

INSTRUCTOR INFORMATION

Name of Instructor:	Jessica Sharp
Campus/Office Location:	Online
Telephone Number:	
E-mail Address:	jsharp@nctc.edu

OFFICE HOURS

Monday	*Tuesday*	*Wednesday*	*Thursday*	*Friday*
Online	**Online**	**Online**	**Online**	**online**

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

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.

GRADING CRITERIA

# of Graded Course Elements	*Graded Course Elements*	*Percentage or Point Values*
2	Exams	28%
12	Lecture quizzes	29%
12	Lab quizzes/discussions	27%
1	Greenbuilt town project	15%

2 exams @ 100 and 86 points each = 186 points
13 lecture quizzes 15X13 = 195 points
Lab assignments 12X15 = 180 points
Greenbuilt towns project = 100 points

TOTAL POSSIBLE POINTS = 661

A = 661 - 592 points B = 526 - 591 points C = 460- 525 points D =395- 459 points F = <395 points

Weekly Schedule of Lecture & Lab

*The Weekly Quizzes are always due the Monday night of the last date of the week by midnight. No exceptions.

Date	Chapters/quiz due	Lab& lab quizzes due
Lesson 1 (August 28 - September 4)	Chapter 1 Understanding our Environment; Chapter 1 quiz	Rachel Carson Lab; lab quiz 1
Lesson 2 (September 5 - 11)	Chapter 2: Environmental Systems and Chapter 2 quiz	Lab 2 – Plant ID lab outside - using a dichotomous key
Lessons 3 and 4 combined module (September 12-25) ***You get 2 weeks for this module**	Chapter 3: Species Populations, Interactions, and Communities and Chapter 3 quiz - 30 pts	Lab 3 – Evolution NPR discussion Lab 4: Evolution lab
Lesson 5 (September 26 - October 2)	Chapter 4: Human Populations Lab and Chapter 4 quiz	Lab 5 - Population lab looking at histograms
Exam 1: Chapters 1 to 4 Wednesday, October 11	Wednesday from 3pm to 11pm open time frame	Exam covers Chapters 1 to 4 on October 11
Lesson 6: (October 3 - 9)	Chapter 5: Water Biomes sections, pages 103 to the end (Marine Ecosystems to the end of the chapter) and Chapter 5 quiz	Lab 6: Water biomes
Lesson 7 (October 10 - 16)	Chapter 6: Environmental conservation and Chapter 6 quiz	Lab 7: Ecobarons PPT about the book titled "Ecobarons" and Discussion forum on this topic
Lesson 8 (October 17 - 23)	Chapter on Water part 1; Read all notes and powerpoint slides 1- 49	Lab 8: Eutrophication Lab Quiz on Eutrophication

Lesson 9 (October 24 - 30)	Chapter on Water Part II ; Study PPT slides 50-84 Water part II quiz	Lab **9**: study the virtual tour of WWTP and then take the quiz
Lesson 10 (October 31-November 6)	Chapter 13: Solid and Hazardous Waste; Chapter 13 quiz	Lab 10: Watch and take notes on all the online landfill video tours in lab folder; **quiz on** **landfills**
Lesson11 (November 7 -13)	Chapter 7: Food and Agriculture	Lab 11: Environmental Nutrition and Precycling discussion forum
Lesson 12 (November 14 - 20)	Chapter 12: Energy part 1: "old energy"; Chapter 12 part1 Quiz	Lab 12**:** Global warming lab: slideshow/NPR news
Lesson 13 (November 21 - 27)	Chapter 12 part II: Revewables and take the Quiz	Lab13: Wind Energy lab and lab quiz **start greenbuilding** **projects**
Lesson 14: (November 28 - December 4)	Greenbuilding Lecture and work on your town No lab today	Greenbuilding Projects continued
Lesson 15: (December 5 - 11)	Turn in Greenbuilding Projects	**Greenbuilding project DUE** **by December 11; upload your** **video or photo/paper to the drop box**
Exam 2: Covers all content after lesson 5	Exam is from 10am to midnight open time frame	**Wednesday, December 13**

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 9, 2017_____.

DISABILITY SERVICES (Office for Students with Disabilities)

The Office for Students with Disabilities (OSD) provides support services for students with disabilities, students enrolled in technical areas of study, and students who are classified as special populations (i.e. single parents).

Support services for students with disabilities might include appropriate and reasonable accommodations, or they may be in the form of personal counseling, academic counseling, career counseling, etc. Furthermore, OSD Counselors work with students to encourage self-advocacy and promote empowerment. The Counselors also provides resource information, disability-related information, and adaptive technology for students who qualify.

If you feel you have needs for services that the institution provides, please reach out to either Wayne Smith (940) 498-6207 or Yvonne Sandman (940) 668-3300. Alternative students may stop by Room 170 in Corinth or Room 111 in Gainesville.

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

- ☐ Communication
- ☐ Mathematics
- ☐ 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)

- ☐ Critical Thinking
- ☐ Communication
- ☐ Empirical and Quantitative
- ☐ Teamwork
- ☐ Personal Responsibility
- ☐ Social Responsibility

COURSE TYPE

- ☐ Academic General Education Course (from ACGM but not in NCTC Core)
- ☐ 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)]".

Consequences for academic dishonesty may include:

1) Zeros on the assignment or exam
2) Suspension or withdrawal from course

QUESTIONS, CONCERNS, or COMPLAINTS

Name of Chair/Coordinator:	Dr. Lisa Bellows
Office Location:	Gainesville Science Building Office 408
Telephone Number:	940-668-4252
E-mail Address:	lbellows@nctc.edu

Important notes:

*Please be responsible for adding up your own points that you earn throughout the semester. Sometimes the gradebook can be unreliable. I try to fix problems as soon as they arise, but many times, after adding in zeros to a grade, this changes your points or % in the course. The best way to not be surprised at your grade at the end of the semester, is to take a record of your own points for the semester. You add them up and divide them by how many points you could have earned so far in this course. This is so important to know!

- Q: What is the best way to contact the instructor and when can I expect a response?
- A: The best way to contact the instructor is through course mail. You must write in complete sentences, spelling your words correctly, and being as courteous and respectful as possible. I will check the course periodically throughout the day. You can expect a response within 48 hours during the week. DO NOT PANIC and be patient and any issues can be resolved without incidence or penalty. I am here to help you in this course.

- You should NOT rely on the calendar for due dates and times. Only focus on the syllabus. Assignments are due at midnight and this shows on the calendar that assignments are due the next day, which is very misleading.

- Q: What is the best way to find out due dates and or possible changes with the course?
- A: Make it a habit to check the following places to stay on top of due dates and new information: Inbox and Announcements, which are located on the home page . It is the student's responsibility to stay on top of this course. I will make an announcement for any changes each week and help you stay up to date with due dates.

- Make sure to not follow the Calendar in the Canvas area. Just use your syllabus. Print out your syllabus and follow it at all times. The calendar in Angel will make anything due at Midnight, appear to be due the next day, which is very deceptive. Make sure to just use your syllabus

It is also important that you write to me in a positive, respectful manner. Anyone who is threatening or gets angry in an email can be DROPPED from the course immediately.

All quizzes and exams are expected to be taken on the day assigned. If there is an issue, you must email me AHEAD OF TIME to take it at an alternate time.

All weeks open on Tuesdays and those week's quizzes are due on the following Monday nights.

No student’s grade will be discussed with any other individual without explicit instruction from the student.

I check email every 24 to 48 hours. I will always respond back to your email within 48 hours.

The GREENBUILT TOWN project is a collaborative project that you can do with other students in your class. If you can not meet with anyone, you can choose to the assignment by yourself. We will talk about this more in week 12. You will have the option of using video to present to me and other groups or individual presentation using youtube.