

**Course Prefix/Number/Title:** BIOL 280 – Conservation Biology

**Number of Credits:** 3 semester credits

**Course Description:**

This course is an introduction to conservation biology. Topics covered in this course include aspects of molecular biology, species diversity, ecology, economics, and politics. This course will examine issues pertaining to conservation biology from a local to global perspective.

**Pre-/Co-requisites:** BIOL 151 or instructor approval

**Instructor:** Kenneth C Cabarle

**Office:** NSC 111

**Office Hours:** 10-11 AM on M, T, & W and 11-12 on T

**Phone:** (701) 228-5463

**Email:** [kenneth.cabarle@dakotacollege.edu](mailto:kenneth.cabarle@dakotacollege.edu)

**Lecture Schedule:** This is an online course.

**Textbook:** Principles of Conservation Biology 3<sup>rd</sup> Edition; Groom, Meffe and Carroll

**Course Requirements:**

Grading is based on a standard college curve, where students earn a grade based upon the percent of total possible points they obtain. Although subject to slight modification based on the discretion of the instructor, the lecture component of this course will consist of approximately 850 points (three lecture exams worth 100 points each, one final exam worth 150 points, a conservation plan worth 200 points, and 200 points of assignments). There is a one week grace period to make up any missed exam or assignment. Any missed exam/assignment not made up within the allotted time will be given a zero. Makeup exams may be of an essay nature and are usually considered more difficult. Final letter grades are assigned based on the following criteria:

- A = 89.5-100% of the total points
- B = 79.5 - <89.5% of the total points
- C = 69.5 - <79.5% of the total points
- D = 59.5 - <69.5% of the total points
- F = <59.5% of the total points

**Attention students, completion of online course material has to adhere to the course schedule as outlined below. Course materials are offered as word documents and as pdf files.**

**To get a free pdf viewer please visit the following site.**

<http://get.adobe.com/reader/>

**Tentative Lecture Outline:**

<u>DATE</u>	<u>TOPIC</u>	<u>READING</u>
1-15	Introduction to Conservation Biology	Chpt. 1
1-17	History of Conservation Biology	Chpt. 1
1-20	NO CLASSES MARTIN LUTHER KING HOLIDAY	
1-22	Global Biodiversity	Chpt. 2
1-24	Global Biodiversity	Chpt. 2
1-27	Threats to Biodiversity	Chpt. 3
1-29	Threats to Biodiversity	Chpt. 3
1-31	Conservation Values and Ethics	Chpt. 4
2-3	Conservation Values and Ethics	Chpt. 4
2-5	Ecological Economics and Nature Conservation	Chpt. 5
2-7	EXAM I	
2-10	Habitat Degradation and Loss	Chpt. 6
2-12	Habitat Degradation and Loss	Chpt. 6
2-14	Habitat Fragmentation	Chpt. 7
2-17	NO CLASSES PRESIDENTS DAY	
2-19	Overexploitation	Chpt. 8
2-21	Overexploitation	Chpt. 8
2-24	Species Invasion	Chpt. 9
2-26	Species Invasion	Chpt. 9
2-28	Species Invasion	Chpt. 9
3-3	Biological Impact of Climate Change	Chpt 10
3-5	Biological Impact of Climate Change	Chpt 10
3-7	Biological Impact of Climate Change	Chpt 10
3-10	Conservation Genetics	Chpt. 11
3-12	Conservation Genetics	Chpt. 11
3-14	EXAM II	
3-17-21	NO CLASSES SPRING BREAK	
3-24	Species- and Landscape-Level Conservation	Chpt. 12
3-26	Species- and Landscape-Level Conservation	Chpt. 12
3-28	Ecosystem-Level Conservation	Chpt. 13
3-31	Ecosystem-Level Conservation	Chpt. 13
4-2	Protected Areas: Goals, Limitations, & Design	Chpt. 14
4-4	Protected Areas: Goals, Limitations, & Design	Chpt. 14
4-7	Damaged Ecosystems: Endangered Population	Chpt. 15
4-9	Damaged Ecosystems: Endangered Population	Chpt. 15

4-11	EXAM III	
4-14	Introduction to Conservation Planning	
4-16	Conservation Plans	
4-18-21	NO CLASSES HOLIDAY	
4-23	Sustainable Development	Chpt. 16
4-25	Sustainable Development	Chpt. 16
4-28	Sustainable Development	Chpt. 16
4-30	Integrating Conservation Science into Policy	Chpt. 17
5-2	Meeting Conservation Challenges	Chpt. 18
5-5	Meeting Conservation Challenges	Chpt. 18
5-7	The Future of Conservation Biology	
5-9	Final Exam Review and Conservation Plan Due	
5-14	FINAL EXAM	

## **Course Objectives**

1. To learn and retain information essential to a broad knowledge and understanding of conservation biology.
2. To learn to critically analyze ideas, issues, and points of view related to conservation biology.
3. To learn to obtain information from various sources, to evaluate critical issues and to help develop data-driven and factual-based decisions.

## **General Education Goal and Objectives**

### **Goal:**

One of the goals of this course as it applies to general education is to help students understand the interrelationships between humans and their environment and to understand the roles of science in their lives. (General Education Goal 1)

### **Objectives:**

- 1) Demonstrate the application of the scientific methods of inquiry. (Objective 1)
- 2) Demonstrate an appreciation of the natural environment. (Objective 2)
- 3) Demonstrate an awareness of the role of science in everyday life (Objective 3)

## **Relationship to Campus Theme: *Nature, Technology and Beyond***

This course addresses the campus theme by exploring technological advances in the science of conservation biology and how these advances will help create a more diverse and sustainable environment.

## **Classroom Policies**

- 1) Cell phones, iPods, and related technology are prohibited in the classroom at all times. It is recommended that you do not bring your cell phone into the classroom or, at the very least, turn it off.
- 2) Food and beverages are permitted in accordance with classroom policies.
- 3) Be respectful of other students, technicians, instructors, and guests.

## **Academic Integrity**

All students are expected to adhere to the highest standards of academic integrity. Dishonesty in the classroom or laboratory and with assignments, quizzes and exams is a serious offense and is subject to disciplinary action by the instructor and college administration. For more information, refer to the Student Handbook.

## **Disabilities and Special Needs**

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact your instructor and Jan Nahinurk in the Learning Center (228-5479) as early as possible during the beginning of the semester.