

**ANSCI 65 Course Outline as of Fall 2014****CATALOG INFORMATION**

Dept and Nbr: ANSCI 65 Title: INTRO TO ZOO BIOLOGY

Full Title: Introduction to Zoo Biology

Last Reviewed: 12/8/2008

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	17.5	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

The science of managing wild animals in captivity, including relevant information on nutrition, reproductive biology, veterinary medicine and captive animal welfare, as well as information on exhibit and enclosure design, the roles of public education and research at zoos, and the role of zoos in wildlife conservation.

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:****Schedule of Classes Information:**

Description: The science of managing wild animals in captivity, including relevant information on nutrition, reproductive biology, veterinary medicine and captive animal welfare, as well as information on exhibit and enclosure design, the roles of public education and research at zoos, and the role of zoos in wildlife conservation. (Grade Only)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>		Effective:	Inactive:
<b>UC Transfer:</b>		Effective:	Inactive:

**CID:**

**Certificate/Major Applicable:**

Not Certificate/Major Applicable

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon completion of this course, student will be able to:

1. Define the role of zoos in wildlife conservation today.
2. Identify career requirements and potential opportunities leading to successful employment working with captive wild animals.
3. Explain historical influences that have shaped the role of zoo keeping and zoo biology today.
4. Apply information learned in class to the design of an animal exhibit.
5. Analyze the role of education and research at zoos in conservation.
6. Identify and define specific animal behaviors (reproductive, social, parental) as they relate to husbandry needs.
7. Compare species-specific animal behavior as a result of reproductive changes in individuals or groups of animals.
8. Collect animal observations and input and analyze behavioral data.
9. Define and recall protocols for preventive animal medicine.
10. Evaluate methods of animal training for improved captive care and identify species-specific training methods.
11. Formulate appropriate exhibit-specific programs to minimize zoonotic disease transmission.
12. Identify appropriate species-specific capture and handling techniques.
13. Analyze and discuss species-specific dietary requirements.
14. Analyze wildlife legislation as it relates to zoos and conservation programs.

### **Topics and Scope:**

1. History of Zoos
  - a. Zoos and captive animal management prior to 1980

- b. Zoos and captive animal management from 1980 to present
- c. Ethical and animal welfare issues as they relate to modern zoos
- 2. Exhibits and Off-exhibit Enclosures
  - a. Designs with consideration for species-specific behavior
  - b. Designs for optimum education
  - c. Horticulture in modern zoos
- 3. Ethology - The Science of Animal Behavior
  - a. Behavior of captive, wild animals
  - b. Developmental behavior
  - c. Reproductive behavior
  - d. Social and solitary behavior
  - e. Training animals for better care
- 4. Basic Animal Husbandry
  - a. Animal keeping and the roll of curators and other zoo managers
  - b. Safety for guests, zoo personnel, and animals
  - c. Animal capture and handling
  - d. Neonatal care
- 5. Nutritional Considerations
  - a. Pellets versus whole foods
  - b. Diets for optimal health and reproduction
  - c. Diets and growth rates
  - d. Diets for geriatric animals
  - e. Species-specific considerations for nutrition
- 6. Veterinary Medicine for Exotic Animals
  - a. Preventive medicine
  - b. Chemical capture and anesthesia
  - c. Physical restraint and handling
  - d. Birth control, artificial insemination
  - e. Zoonosis
- 7. Record Keeping
  - a. International Species Inventory System (ISIS)
  - b. Studbooks
  - c. Identification and marking of individual animals
- 8. Educating the Public
  - a. Conservation education in schools and at the zoo
  - b. Education through exhibits
  - c. Education through signage
- 9. Research
  - a. Research at the zoo
  - b. Field research
  - c. Applications of zoo research to field projects and visa versa
- 10. Conservation of Wildlife
  - a. Wildlife conservation through zoo programs
  - b. Wildlife rehabilitation, release and reintroduction programs
- 11. Wildlife Legislation
  - a. Federal, state, and local laws and required wildlife permits
  - b. American Zoo and Aquarium Association rules and regulations

**Assignment:**

- 1. Read an average of 60 pages per week, from textbook, journals and instructor prepared materials.

2. Write a 6-10 page term paper.
3. In-class activities may include: participate in verbal problem solving exercises about zoo management situations; work in teams to build model animal enclosures; collect animal observations from video tapes, inputting and analyzing data.
4. Formal assessment: multiple choice quizzes, midterm exams with objective and essay questions.

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Term papers

Writing  
10 - 30%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

In class activities

Problem solving  
20 - 30%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Build model animal enclosure

Skill Demonstrations  
5 - 20%

**Exams:** All forms of formal testing, other than skill performance exams.

Quizzes, midterm exams: objective & essay question

Exams  
30 - 60%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation

Other Category  
0 - 10%

### Representative Textbooks and Materials:

Mammals in Captivity: Principles and Techniques, by Kleiman, D.G., Allen, M.E., Thompson, K.V., Lumpkin, S., Harris, H. The University of Chicago Press: 1996 (Classic in the field.)