



Zoo Science and Management 2025

Cleveland Metroparks Zoo with
Cleveland State University

Course Description

Using Cleveland Metroparks Zoo as a living laboratory and classroom, students will learn many aspects of zoo management, from animal care to administration. Through lectures, tours, and discussions, students will identify the roles of the modern zoo, review the many aspects of professional zoo management and study how zoos have contributed to conservation, education, recreation, and research. The main thematic concepts of this course will focus on zoos as conservation organizations, animal management in a zoological setting, animal welfare, the guest experience and education, and creating opportunities for community involvement.

Location

Cleveland Metroparks Zoo

Dates and times

Monday – Friday, May 12 – May 23, 2025; 9:00 am – 4:30 pm

Contact Information

Professor: **Dr. Diana Koester**
Research Curator
Conservation and Science
(216) 635-2522
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CSU contact: **Dr. Julie A. Wolin, PhD**
Associate Chair & Environmental Science
Undergraduate Program Director
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Teaching Assistant: **Christopher Jackson**
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Addresses: **Cleveland Metroparks Zoo**
3900 Wildlife Way
Cleveland, Ohio 44109

Cleveland State University
2121 Euclid Avenue
Cleveland, Ohio 44115

Course Materials

Materials:

- Data collection sheets or laptops.
Forms will be provided as Word documents. They can be printed for your own convenience, however, all data collection, both for in-class practice and for your project, can be done on regular paper, a tablet, or a laptop without the need of a printer.

Grading

Grades will be determined as follows:

Participation	10%
Project Introductions	20%
Final Presentation	30%
Final Exam	40%

Participation **10%**

- Each student is expected to engage in course lectures and discussions by coming to class and posing insightful questions to course speakers and facilitators.
- Your instructors will be paying attention to who regularly interacts with speakers and who does not and your participation grade will reflect this. This is an easy way to pad your grade in the course.

Project Introduction Presentation **20%**

- Each student will prepare and deliver a 3-slide presentation on their study species' background, question, and research methodology. Rubric will be provided.

Final Presentation **30%**

- Each student will be required to complete an animal observation project and present their results to their classmates on the final day of the course. Rubric will be provided.

Final Exam **40%**

- Several questions will be pulled from each lecture given throughout the 10 days of the course to develop an exam reflecting overall course content.
- Exam will be primarily multiple choice and given via Blackboard during the week following the final meeting day.

Course Schedule

Day 1 – Monday, May 12

Time	Speaker	Topic
9:00-9:30	Dr. Diana Koester	Course Overview and Welcome
9:30-11:00	Dr. Diana Koester	Animal Welfare
11:00-12:00	Dr. Diana Koester	Cleveland Metroparks Zoo Animal Welfare Process
1:00-2:00	Dr. Diana Koester	Introduction to Research Methods
2:00-4:30	Instructors	Introduction to Research Projects/Study Species & Visit Habitats

Day 2 –Tuesday, May 13

Time	Speaker	Topic
9:00-9:30	Instructors	Selection of Study Species
9:30-10:30	Nancy Hughes/Laura Amendolagine	Sustainability at the Zoo/Nitrile glove recycling program
10:30-11:30	Chris Peterson	Managing Elephants
11:30-12:30	Chris Peterson	African Elephant Crossing Tour
1:30-2:30	Dr. Chris Kuhar	Zoo Leadership and Conservation
2:30-4:30	Instructors	Sampling and Recording Methods Practice Activity

Day 3 –Wednesday, May 14

Time	Speaker	Topic
9:00-10:00	Tad Schoffner	Careers in Zoo Animal Care
10:00-11:00	Katie Corr	Education & Engagement Overview
11:00-12:00	Initial Observation Practice/ Ethogram Development	
1:00-2:00	Dr. Elena Less	Nutrition walking tour of PCA
2:00-3:00	Kim Jansen/Amanda Dailey	AAZK/Zookeeper
3:00-4:00	Kym Gopp	Zoos and Conservation – Future for Wildlife Program

Day 4 – Thursday, May 15

Time	Speaker	Topic
9:00-10:00	Dr. Diana Koester	Tree Kangaroo Research and Conservation
10:00-12:00	Project Introduction Presentations	
1:00-4:30	Making final ethogram changes and data collection	

Day 5 – Friday, May 16

Time	Speaker	Topic
9:00-9:30	Instructors	Answering Data Collection Questions
9:30-10:30	Dr. Noah Dunham	Conducting and evaluating research in zoos
10:30-11:30	Andi Kornak	Managing Animals in a Zoological Setting
12:30-1:30	Dr. Diana Koester	Endocrinology and Reproduction in Zoos
1:30-2:30	Chris Jackson	The importance of light for welfare considerations
2:30-4:30	Data collection	

End of First Week

Day 6 - Monday, May 19

Time	Speaker	Topic
9:00-10:00	Instructors	Data Analysis – Video Posted
10:00-11:00	Brady Parlato	Puerto Rican Crested Toad / Amphibian Research
11:00-12:00	Sarah Crupi	Cleveland Zoological Society
1:00-2:00	Kym Gopp & Cindy Saldana Moreno	Andean Bear Conservation & Bird-friendly Coffee
2:00-3:00	Dr. Pam Dennis	Epidemiology
3:00-4:30	Data collection	

Day 7 – Tuesday, May 20

Time	Speaker	Topic
9:00-10:00	Christopher Jackson	How to Design an Oral Presentation
10:00-11:00	Gloria Rivera	Record Keeping at a Zoo
11:00-12:00	James Blucher	Volunteer Services
1:00-2:00	Dr. Kaylin Tennant	Applied Welfare Research: Gorilla Regurgitation and Reingestion
2:00-4:30	Data collection	

Day 8 – Wednesday, May 21

Time	Speaker	Topic
9:00-9:30	Instructors	Answering data analysis/presentation questions
9:30-10:30	Dr. Debra Barbarits	Veterinary Medicine at Cleveland Metroparks Zoo
10:30-11:30	Dr. Debra Barbarits	Hospital tour
12:30-1:30	Tiffany Mayo	Trumpeter Swan SSP and Conservation-walk to swans after
1:30-4:30	Last day of data collection/data analysis time	

Day 9 – Thursday, May 22

Time	Speaker	Topic
9:00-9:30	Instructors	Answering data analysis/ presentation questions
9:30-10:30	Dr. Noah Dunham	Feeding ecology, nutrition, and energetics
10:30-11:30	Dr. Kristen Lukas	Gorilla SSP and SAFE Overview
12:30-1:30	Laura Klutts	Behavior Management
2:00-2:30	Dr. Pam Dennis	Nutrition/gut microbiome
2:30-4:30	Presentation Work Time	

Day 10 – Friday, May 23

Time	Speaker	Topic
9:00-11:30	Final student presentations	
12:30-1:30	Instructors	Population Sustainability Exercise
1:30-3:30	Instructors	Discussion: Zoos and the Media

Please note:

The schedule of speakers may be subject to change, but the content will remain the same. There will be a one-hour lunch break each day, and regular short breaks between talks (which are not currently noted on the schedule). If you have any questions or difficulties accessing the course, please email the instructors.

Where to Go

Traffic around the Zoo is expected to be heaviest on weekends, Mondays, and holidays from Memorial Day to Labor Day. Parking is free of charge.

From I-71: Exit at West 25th Street and follow Zoo signs.

From I-90: Take I-71 South, exit at West 25th Street and follow Zoo signs.

From I-480: Two options. Exit State Road north to Pearl Road and follow Zoo signs. Or, exit Ridge Road north to Memphis Avenue and follow Zoo signs.

From Akron: Take I-77 North to I-480 West. Exit State Road north to Pearl Road, or, exit Ridge Road north to Memphis Avenue and follow Zoo signs.

Once you arrive at the Zoo, please meet just to the left of the Main Gate, in front of the Reinberger Education Center doors. Your instructor(s) will meet you there, and we will enter the building together and proceed to the classroom.



What to Bring

There will be a one-hour lunch break each afternoon. You can bring or buy your lunch. There are a variety of food options located on grounds, and there are a handful of fast-food options on streets immediately adjacent to the Zoo. Lunch can be eaten at any of the seating areas throughout the Zoo, or back at the classroom, if desired. Students will be spending time on grounds (rain or shine) at the zoo so wearing comfortable clothing and shoes are recommended. **CLOSED-TOED SHOES ARE REQUIRED.** Remember to bring a poncho, raincoat, or umbrella if there is a chance of rain.