



Zoo Science and Management 2022

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.

Please note:

While at the zoo, students must follow COVID-19 safety measures outlined by the zoo for groups of this size, including wearing a face mask anytime you are indoors and social distancing at all times.

Location

Cleveland Metroparks Zoo

Dates and times

Monday – Friday, June 6 – June 17, 2022; 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 Assistants: **Kaylin Tennant**

Graduate Research Associate

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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	25%
Project Introductions	10%
Final Presentation	25%
Final Papers	40%

Participation **25%**

- Each student is expected to engage in course lectures and discussions by coming prepared 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.

Project Introduction Presentation **10%**

- 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 **25%**

- 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 Paper **40%**

- Each student will be required to complete one paper that will be due the week following the course.
- This paper will be focused on the design and evaluation of an enrichment item for the species which the students conduct their respective behavior project on. The items will be developed to focus on eliciting specific natural behaviors. Rubric will be provided.

Course Schedule

Day 1 – Monday, June 6

Time	Speaker	Topic
9:00-9:30	Dr. Diana Koester	Course Overview and Welcome
9:30-10:30	Dr. Chris Kuhar	Zoo Leadership and Conservation
10:30-12:00	Instructors	Introduction to Research Methods
1:00-2:00	Dr. Noah Dunham	Conducting and Evaluating Research in Zoos
2:00-4:30	Instructors	Introduction to Research Projects/ Enrichment Paper/ Study Species & Visit Habitats

Day 2 –Tuesday, June 7

Time	Speaker	Topic
9:00-9:30	Instructors	Selection of Study Species
9:30-10:30	Sarah Crupi	Cleveland Zoological Society
10:30-11:30	James Blucher	Zoo Volunteer Services
12:30-1:30	Dr. Mike Selig	Veterinary Medicine at Cleveland Metroparks Zoo
1:30-2:30	Dr. Mike Selig	Veterinary Hospital Tour
2:30-4:30	Instructors	Sampling and Recording Methods Practice Activity

Day 3 –Wednesday, June 8

Time	Speaker	Topic
9:00-10:00	Dr. Charles Ritzler	Measuring Welfare in Non-mammalian Species
10:00-11:00	Initial Observation Practice/ Ethogram Development	
11:00-12:00	Dr. Elena Less	Nutrition Walking Tour: Primates, Cats, & Aquatics
1:00-2:00	Tiffany Mayo	Trumpeter Swan SSP and Conservation
2:00-3:00	Dr. Noah Dunham and Maura Plocek	Feeding Ecology, Nutrition, and Energetics
3:00-4:00	Independent presentation work time	

Day 4 – Thursday, June 9

Time	Speaker	Topic
9:00-11:00	Project Introduction Presentations	
11:00-12:00	Dr. Elena Less	Population Management in Zoos
1:00-2:00	Vicki Searles	Conservation Education Overview
2:00-4:30	Data collection	

Day 5 – Friday, June 10

Time	Speaker	Topic
9:00-9:30	Instructors	Answering Data Collection Questions
9:30-10:30	Gloria Rivera/ Pam Krentz	Record Keeping at a Zoo
10:30-11:30	Dr. Diana Koester	Endocrinology and Reproduction in Zoos
12:30-1:30	Kaylin Tennant	Applied Welfare Research: Gorilla R/R
1:30-4:30	Data collection	

End of First Week

Day 6 - Monday, June 13

Time	Speaker	Topic
9:00-10:00	Kaylin Tennant	Data Analysis
10:00-11:00	Kym Gopp	Talking About Conservation: International Conservation Strategy
11:00-12:00	Dr. Pam Dennis	Epidemiology I
1:00-2:00	Andi Kornak	Managing Animals in a Zoological Setting
2:00-3:00	Jen DeGroot	Behavior Management
3:00-4:30	Data collection	

Day 7 – Tuesday, June 14

Time	Speaker	Topic
9:00-10:00	Instructors	How to Design an Oral Presentation
10:00-11:00	Tad Schoffner	Careers in Zoo Animal Care
11:00-12:00	Nancy Hughes	Resource Sustainability
1:00-2:00	Laura Klutts	American Association of Zoo Keepers
2:00-4:30	Data collection	

Day 8 – Wednesday, June 15

Time	Speaker	Topic
9:00-9:30	Instructors	Answering data analysis/ presentation questions
9:30-11:30	Instructors	Animal Welfare & the Cleveland Metroparks Zoo Welfare Process
12:30-1:30	Dr. Pam Dennis	Epidemiology II
1:30-2:30	Kym Gopp	Illegal Wildlife Trade and AZA WTA/IFAW Pet Trade Campaign Project
2:30-4:30	Last day of data collection	

Day 9 – Thursday, June 16

Time	Speaker	Topic
9:00-9:30	Instructors	Answering data analysis/ presentation questions
9:30-10:30	Chris Peterson	Managing Elephants
10:30-11:30	Chris Peterson	African Elephant Crossing Tour
12:30-1:30	Kaylin Tennant	Elephant Behavior Monitoring
2:00-2:30	Travis Vineyard	Wilderness Trek: Habitats
2:30-3:30	Dr. Diana Koester	Tree Kangaroo Conservation
3:30-4:30	Presentation Work Time	

Day 10 – Friday, June 17

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 inside the Main Gate to the left side, in front of the public resource center building. Your instructor(s) will meet you there, and we will cross the ticket-taker line under the tents as one group once the entire class has arrived (you do not need a ticket).



What to Bring

There will be a one-hour lunch break each afternoon. You can bring or buy your lunch. McDonald's, Pizza Hut, and Dave's Cosmic Subs are located on zoo grounds, as well as the Rain Forest dining hall which provides a variety of food options. Lunch can be eaten at any of the seating areas throughout the Zoo, or back at the classroom, if desired, if appropriate social distancing can be maintained between individuals. 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. Masks are required while in any indoor space, which is the case for most guest and instructor lectures.