Zoo and Aquarium Biology and Management

PAZ 4234

3 Credit Hours

UNIVERSITY OF CENTRAL FLORIDA & NEW COLLEGE OF FLORIDA

**DISNEY’S ANIMAL KINGDOM**

**2024**

**Instructors**: Dr. Austin Leeds, Research Manager, Disney’s Animal Kingdom

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**When**: 9:00AM – 5:00 PM, May 6 – 10, May 13 – 17, 2024

**Where**: Disney’s Animal Kingdom, Animal Programs Building, Inspiration classrooms.

**Course Description**: This course covers the care and welfare, propagation, and display of wild animals in zoos and aquariums as well as the missions of accredited zoos and aquariums. The course focuses on the applied aspects of biology/zoology and what is involved in managing wild animals in a zoo/aquarium environment. It also covers the role of zoos and aquariums in conservation, education, and research. The course is taught in a zoological/aquarium setting and lectures are provided by professional zoo and aquarium staff that specialize in various areas of the field.

**Course Objectives:** Completion of this course will develop a student’s knowledge of the following topics.

1. Natural history and management of different taxonomic groups (fish, invertebrates, reptiles and amphibians, birds, primates, ungulates)
2. The role of enrichment and training for animals in managed care
3. Nutrition
4. Veterinary Care
5. Reproduction and Contraception
6. Record Keeping
7. Population Management (AZA Species Survival Plans, Taxon Advisory Groups, cooperative breeding programs)
8. Education (developing programs, interpretive graphics, guest experience)
9. Conservation Programs
10. Research in a zoo/aquarium setting
11. Careers in zoos and aquariums

**Course Prerequisites:** Undergraduates with senior standing that have completed 20 hours in Biology including Ecology (PCB 3044) are eligible to register for this course.

**Evaluation and Grading:**

Exam 1 100 points

Exam 2 100 points

Class and Project Participation 50 points

Quizzes (2 Total) 50 points

Research Exercise 50 points

Final Project 50 points

Total: 400 points

**Letter grades will be assigned using the following scale:**

|  |  |  |
| --- | --- | --- |
| A | 93%-100% | (371-400 pts) |
| A- | 90%-92% | (359-370 pts) |
| B+ | 87%-89% | (347-358 pts) |
| B | 83%-86% | (331-346 pts) |
| B- | 80%-82% | (319-330 pts) |
| C+ | 77%-79% | (307-318 pts) |
| C | 73%-76% | (291-306 pts) |
| C- | 70%-72% | (279-290 pts) |
| D+ | 67%-69% | (267-278 pts) |
| D | 63%-66% | (251-266 pts) |
| D- | 60%-62% | (239-250 pts) |
| F | 0%-59% | (< 239 pts) |

Quizzes – are scheduled on the syllabus. Questions will be true/false, matching, multiple choice, or short-answer and cover material covered in prior lectures.

Exams - will be composed of a combination of true/false, matching, multiple-choice, short-answer and essay questions. While the second exam will not be cumulative in regards to specific details, you will learn concepts in the first week of the course that you will need to apply throughout.

Research Exercise - will be distributed in-class following the lecture on Research Methodology. You will be required to apply the techniques that were discussed in the lecture and collect data on animal behavior during scheduled course time. After collecting the data, you will need to summarize it and answer questions about different data collection methods. **This exercise will be due by 11:59pm on Monday May 13th**. The assignment should be typed and submitted through the Webcourses (or through email with prior approval).

Final Project - is a group project that will be distributed during the final class period. This project will require that you apply all the concepts that you were exposed to in this course. All materials and resources that you will need to complete this project will be provided.

*Due to the tight schedule of this course, late assignments will not be accepted and makeup exams will not be given.*

**Attendance/Requirements**: Attendance to all classes is mandatory. Missing a full class day will result in a 100 point penalty. Missing a half of a class day will result in a 50 point penalty. Arriving more than 30 minutes late to more than one day will result in a 10 point penalty for each day of late arrival thereafter.

**Academic Integrity:** As reflected in the UCF creed, integrity and scholarship are core values that should guide our conduct and decisions as members of the UCF community. Plagiarism and cheating contradict these values, and so are very serious academic offenses. Penalties can include a failing grade in an assignment or in the course, or suspension or expulsion from the university. Students are expected to familiarize themselves with and follow the University’s Rules of Conduct (see https://scai.sdes.ucf.edu/student-rules-of-conduct/).

**Conduct:** Dress for the class is business casual. This means that you CANNOT wear any of the following: t-shirts, tank tops, flip flops, athletic shoes, ripped jeans, or shorts. Keep in mind that you will be in animal areas and thus you must wear close-toed shoes. The classroom can be rather chilly so we advise bringing a sweater or light jacket. Phone use will be limited to break times and are not permitted to be used during lectures or course activities in the classroom. Photographs and video of any kind are prohibited in all backstage areas, including use of phone cameras and video. **Violation of this rule will result in immediate dismissal from the course, assignment of a failing grade, and report of the violation to the UCF office of Student Conduct for further disciplinary action.**

**Lunch and Breaks:** You will be provided access to the cafeteria at Disney’s Animal Kingdom to purchase lunch. Alternatively, you may bring your lunch and eat in the classroom. However, you are not permitted to leave the property and you are not permitted to enter the park during the lunch hour.

**COURSE SCHEDULE**

**\*Please note that the schedule is subject to change at any time due to needs of the animals and operations of Disney’s Animal Kingdom.**

**Day 1, Monday, May 6**

9:00-9:30 Overview of Course, Expectations                                      Dr. Austin Leeds

9:30-10:15  (A Brief) History of & Modern Zoos and Aquariums            Dr. Austin Leeds

10:15-10:30 BREAK

10:30-11:30 Animal Welfare                Andrew Alba

11:30-12:30 LUNCH

12:30-2:00         Record Keeping, Permits, and Transactions                         Lynn McDuffie/Tricia Webster

2:00-5:00 Front of House Tour Dr. Austin Leeds/Andrew Alba

**Day 2, Tuesday, May 7**

9:00-10:15 Managing Reproduction                                                        Dr. Cat Wheaton/Jess Karan/Sam Shablin

10:15-10:30 BREAK

10:30-12:00       Zoo Animal Pathology                                                            Dr. Carlos Rodriguez/Dr. Ken Conley

12:00-1:00        LUNCH

1:00-2:15 Integrated Animal Health and Management Dr. Shana Lavin

2:15-2:30 BREAK

2:30-4:15           Zoo Animal Medicine                                                              Dr. Natalie Mylniczenko

4:15-5:00            Hospital Tour Hospital Team

**Day 3, Wednesday, May 8**

9:00-9:15 QUIZ #1

9:15-10:30 Safety with Animals Rebecca Phillips

10:30-10:45 BREAK

10:45-12:15 Large Terrestrial Mammal Management Sam Berner

12:15-1:15 LUNCH

1:15-2:00 Breeding Introductions in Practice Jamie Sincage/Jill Piltz

2:00-2:30 BREAK and Travel to Lodge

2:30-4:30 Back of House Tour DAKL DAKL Team

4:30-5:00 Travel back to DAK

**Day 4, Thursday, May 9**

9:00-10:30 Natural History/Management of Herps/Inverts Jamie Sincage and Tom Probst

10:30-10:45 BREAK

10:45-12:00 Herp/Invert Facility Tour Jamie Sincage/Tom Probst/SME Team

12:00-1:00 LUNCH

1:00-3:00 Research Methodology                                                          Andrew Alba/Dr. Austin Leeds

3:00-3:15 BREAK

3:15-5:00 Research Methodology Exercise                                Andrew Alba/Dr. Austin Leeds

**Day 5, Friday, May 10**

9:00-10:30 Education/Paid Programs/Outreach                                   Nadine Kocanjer/Bethany Dauner

10:30-12:00 Intro to Behavioral Husbandry and Training Angela Miller

12:00-1:00 LUNCH

1:00-2:00 Training Game/Activity Jose Bello

2:00-3:00 Animal Husbandry Training Demo Jose Bello/CS Team

3:00-3:15 BREAK

3:15-5:00 Intro to Enrichment and Enrichment Activity Angela Miller

**Day 6, Monday, May 13**

9:00-10:15 EXAM #1

10:15-10:30 Break

10:30-11:30 Hot Topic: Changes to AZA Accreditation Standards Angela Miller

11:30-12:00 Striped Newt Repatriation Project Patrick Stewart

12:00-1:00 Lunch

1:00-4:00 Animal Nutrition Lab and Tour ANC Team

4:00-4:15 Break

4:15-5:00 Visitor Studies Dr. Austin Leeds

**Day 7, Tuesday, May 14**

9:00-10:30 Sensory Environments: Sound and Light at the Zoo Dr. Joseph Soltis

10:30-10:45 BREAK

10:45-11:45 Pest Management Holly Hamilton & Dustin Bridges

11:45-1:00 LUNCH

1:00-2:00 Career Panel Disney Staff

2:00-3:00 Conservation Programs Dr. Jason Fischer

3:00-4:00 American Institute for Rhinoceros Science Jessica Rivera & Allie Richardson

4:00-5:00 GIS Analyses for Studying Zoo Animal Behavior Laura Stalter

**Day 8, Wednesday, May 15**

9:00-9:15 QUIZ #2

***9:15-10:45***  Primate Management Beth Richards

10:45-11:00 Break

11:00-12:00 Small Population Management Dr. Gina Ferrie

12:00-1:00 Lunch

1:00-2:30 Natural History and Management of Birds                         Paul Schutz

2:30-2:45 BREAK

2:45-5:00 Tour of Avian Research Center                                         Paul Schutz/Birds Team

**Day 9, Thursday, May 16**

9:00-10:30         Comparison b/t Terrestrial and Aquatic Animals - Husbandry and Medicine       Dr. Andy Stamper

10:30-10:45       BREAK

10:45-11:45       Water Quality                                                                           Nick Andrew

11:45-12:45       LUNCH

12:45-1:45 Management of Aquatic Animals: Cowtail Case Study Amanda Vaughan

1:45-2:45 Research at The Seas                                                    Dr. Julianna Kadar/Wendi Fellner

2:45-3:15            BREAK and Travel to The Seas

3:15-4:30 Tour of The Seas Seas Team

4:30-5:00 Travel back to DAK

**Day 10, Friday, May 17**

9:00-10:30         Exam #2

10:30-10:45       BREAK

10:45-11:00       Project Overview                                                                     Dr. Austin Leeds/Dr. Joseph Soltis

11:00-2:00          Group Time

2:00-4:00            Group Report-out Session                                                    Dr. Austin Leeds/Dr. Joseph Soltis

4:00-5:00            Wrap up