MRSC A287: INTRODUCTION TO MARINE MAMMAL RESCUE AND REHABILITATION

Item	Value
Curriculum Committee Approval Date	02/09/2022
Top Code	040100 - Biology, General
Units	1 Total Units
Hours	36 Total Hours (Lecture Hours 9; Lab Hours 27)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

Course Description

This course offers students the opportunity to survey marine mammal conservation through animal rescue, rehabilitation and re-sightings in a hands-on, field-based setting. In-class meetings will orient students to how and why marine mammals are rescued and rehabilitated. Additionally, it provides an understanding as to how those efforts fit in the big picture by learning what these sentinels of the sea are indicating about the health of the ocean. ADVISORY: MRSC A187. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Demonstrate basic procedures involved in the rescue and rehabilitation of marine mammals.
2. Justify reasons why response to stranding and rehabilitating these animals is important to ocean conservation.

Course Objectives

- 1. Understand how human activities are impacting the ocean and marine mammals.
- 2. Describe the health issues and their causes commonly found in marine mammals.
- 3. Identify the proper course of action to rescue or capture a stranded marine mammal under various scenarios and identify process of rehabilitation.
- 4. Recognize the necessary life support systems required to support marine mammal rescue operations and husbandry.
- 5. Understand the structure of marine mammal stranding networks as well as its responsibilities and constraints.

Lecture Content

Lecture Marine mammal law Evolution of the stranding network and marine mammal rescue Common illnesses, injuries, diseases and their treatments Medical Responses: intervention and Euthanasia in stranded cetaceans Human impact and conservation efforts Rehabilitation treatments and processes Release and resighting

Lab Content

Lab/Field Rehabilitation procedure observation Preparation of daily diets Animal health Cleaning pens and rescue/rehabilitation equipment Rescue observation (live experiences as available) Animal Release (live experiences as available) Animal Necropsies (live experiences as available) Veterinarian rounds

Method(s) of Instruction

- Lecture (02)
- Lab (04)
- Work Experience (20)
- Field Experience (90)

Instructional Techniques

This course includes brief lecture and a week-long lab at Pacific Marine Mammal Center where students will observe the animals and various rehabilitation procedures. Students will participate in mock rescue and rehabilitation exercises with PMMC equipment, prepare daily diets for the animals, assist with the animals health via cleaning pens and observe rescues, releases and necropsies and attend rounds with the veterinarian as available during the lab.

Reading Assignments

Reading assignments will be from current journal articles and relevant textbook material appropriate for the topic. 6 hours

Writing Assignments

Writing assignments will be based on research projects and logging their experiences in a scientific course journal. 6 hours.

Out-of-class Assignments

Conduct outside research literary project based on marine mammal rescue, rehabilitation or conservation. 6 hours

Demonstration of Critical Thinking

Journals and Exams will require students answering a prompt that requires analysis and problem solving. Their quizzes may include essays/brief responses in addition to multiple choice, true and false, and matching questions.

Required Writing, Problem Solving, Skills Demonstration

Journal entries will be completed for each skills-based activity that include summaries of what was done and the importance of what they learned with respect to the field of marine mammal rescue and rehabilitation. Students will be required to demonstrate various technical skills in a mock setting related to rescue and rehabilitation.

Eligible Disciplines

Biological sciences: Masters degree in any biological science OR bachelors degree in any biological science AND masters degree in biochemistry, biophysics, or marine science OR the equivalent. Masters degree required.

Textbooks Resources

1. Required by Joseph R. Geraci and Valerie J. Lounsbury. Marine Mammals Ashore a Field Guide for Strandings , 1st ed. A TEXAS AM SEA GRANT PUBLICATION, 1993 Rationale: This course is niche based and the techniques the students will learn are based on the techniques

developed decades ago and written about in this book. The techniques have not changed since this seminal book was written.