College of San Mateo Official Course Outline

1. COURSE ID: BIOL 184 TITLE: Wildlife Biology

Units: 3.0 units Hours/Semester: 48.0-54.0 Lecture hours; and 96.0-108.0 Homework hours Method of Grading: Letter Grade Only

2. COURSE DESIGNATION:

Degree Credit

Transfer credit: CSU; UC AA/AS Degree Requirements:

CSM - GENERAL EDUCATION REQUIREMENTS: E5a. Natural Science

CSU GE:

CSU GE Area B: SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING: B2 - Life Science IGETC:

IGETC Area 5: PHYSICAL AND BIOLOGICAL SCIENCES: B: Biological Science

3. COURSE DESCRIPTIONS:

Catalog Description:

Study of wildlife species of North America, with emphasis on common mammals of the Pacific states. Additional selected and appropriate vertebrate species: identification, characteristics, life histories, abundance, and distribution. Basic biological and ecological principles directly applicable to wildlife issues of species and habitat conservation. One or more field trips may be required.

4. STUDENT LEARNING OUTCOME(S) (SLO'S):

Upon successful completion of this course, a student will meet the following outcomes:

- 1. Demonstrate knowledge of wildlife diversity and conservation.
- 2. Explain scientific and biological principles as they pertain to wildlife.
- 3. Explain the concepts of wildlife, wildlife management, and sustainable use of natural resources.
- 4. Explain the interactions of humans and wildlife.

5. SPECIFIC INSTRUCTIONAL OBJECTIVES:

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

- 1. To orient the student to the history and philosophy of the human relationship at the individual, local, state and federal levels.
- 2. To introduce the characteristics, life histories, abundance, distribution, biology, ecology, economic importance and habitat interrelationships of the most common of the wildlife species of North America, with emphasis upon those vertebrates of the Pacific states, mainly the mammals and selected birds.
- 3. To involve the student with critical thinking issues, such as habitat destruction, endangered species, wildlife management practices, conservation and public awareness and positive ethics and support.

6. COURSE CONTENT:

Lecture Content:

- 1. Introduction to wildlife biology; a historical view.
- 2. Introduction to basic wildlife ecology; includes energetics of energy production, transfer and flow through food chains of ecosystems, interrelationships within species, communities biomes.
- 3. Identification and characteristics of selected species; scientific and common names, descriptions, field identification, geographical range, habitats, signs, habits, reproduction, enemies, special problems, economic importance.
- 4. Abundance, distribution and human impact; dynamics of productivity, carrying capacity, population dynamics, regulatory mechanism, habitat alteration, human economics and over population, habitat destruction, endangered species.
- 5. Hierarchy and history of the human relationship to wildlife; wildlife conservation movement, political impact at local, state, federal and international levels, economic exploitation laws and regulations.
- 6. Future of wildlife; balancing of human and wildlife needs, preservation, conservation, change of attitudes, values, economics, consciousness-raising efforts in areas of scientific and moral awareness, critical thinking, suggestions, support and involvement in positive ethical activities to help give wildlife a fair chance.

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Activity
- C. Discussion
- D. Field Trips
- E. Guest Speakers

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following: Writing Assignments:

Representative assignments are:

1. Short essays on a species of the students' choice. As biology topics are studied in class, students explore these concepts as they apply to the species of their choice.

- 2. Reflection assignments on wildlife biology, wildlife conservation or endangered species topics.
- a. Students explore human impacts on the diversity of wildlife.

b. After an extensive study of human impacts and a range of wildlife management solutions, students develop a personal pledge on how they can lower their impact on biodiversity and promote conservation of wildlife.

Reading Assignments:

Students read chapters in the textbook, current issues and articles relating to the weekly topics are posted on the web site. Students may be assigned to complete reading logs.

Other Outside Assignments:

Students participate in forums or discussion groups, where they debate wildlife conservation topics and compare and contrast life histories of wildlife species.

To be Arranged Assignments:

Not Applicable.

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
- B. Class Work
- C. Field Trips
- D. Group Projects
- E. Homework
- F. Papers
- G. Quizzes
- H. Written examination

I. Objective exams (true/false, multiple choice, fill-in blanks), essay, term paper, take-home exams, and oral presentations.

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- A. Pough, F. Harvey, C. M. Janis, and J. B. Heiser. Vertebrate Life, 10th ed. New Jersey: Benjamin cummings/Pearson, 2018
- B. Bolen, Eric. G. and William Robinson. *Wildlife Ecology and Management*, 5th ed. New Jersey: Benjamin Cummings/Pearson, 2003
- C. Multiple Senior Contributing Authors. OpenStax Essential Biology is licensed under a Creative Commons Attribution 4.0 International (CC BY) license prepared by Rice University., ed. OpenStax Rice University, 2019
- D. University of California University of California College Prep. *OpenStax AP Environmental Science*, ed. University of California, 2019

Origination Date: September 2019 Curriculum Committee Approval Date: January 2020 Effective Term: Fall 2020 Course Originator: Linton Bowie