I. CATALOG INFORMATION

A. Discipline: ANIMAL SCIENCE

B. Subject Code and Number: ANSC M17

C. Course Title: Animal Diversity

D. Credit Course units:

Units: 3.5

Lecture Hours per week: 3

Lab Hours per week : 1.5

Variable Units : No

E. Student Learning Hours:

Lecture Hours:

Classroom hours: 52.5 - 52.5

Laboratory/Activity Hours:

Laboratory/Activity Hours 26.25 - 26.25

Total Combined Hours in a 17.5 week term: 78.75 - 78.75

F. Non-Credit Course hours per week _____

G. May be taken a total of: [X] 1 [ ] 2 [ ] 3 [ ] 4 time(s) for credit

H. Is the course co-designated (same as) another course: No [ ] Yes [X]
If YES, designate course Subject Code & Number: EATM M17

I. Course Description:

Surveys invertebrate and vertebrate animals, both terrestrial and marine. Focuses on classification, general characteristics, adaptations, animal recognition, evolutionary history, and basic concepts of ecology.

J. Entrance Skills

*Prerequisite: No [X] Yes [ ] Course(s)

_____

*Corequisite: No [X] Yes [ ] Course(s)

_____

Limitation on Enrollment: No [X] Yes [ ]

_____

Recommended Preparation: No [X] Yes [ ] Course(s)

_____

Other: No [X] Yes [ ]

_____

K. Other Catalog Information:

(Same as EATM M17.)(Formerly ANSC M07 and ANSC M07L.)

II. COURSE OBJECTIVES

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

		Methods of evaluation will be consistent with, but not limited by, the following types or examples.
1	explain the classification and evolutionary relationships of the different animal groups.	Objective exam
2	identify the characteristics of major phyla of invertebrates and the classes of vertebrates.	Objective exams and demonstration of ability to identify members of taxa
3	describe the characteristics of the major orders and families of amphibians, reptiles, birds, and mammals including characteristics of morphology and behavior of various representative species.	Objective exam
4	explain major concepts of taxonomy, evolution, physiology, genetics, ecology.	Objective exam
5	recognize and be able to identify animal species commonly exhibited in zoos and oceanariums and important domestic and non-domestic species.	Identification of species by image or live or dead specimen

III. COURSE CONTENT

Estimated %	**Topic**	**Learning Outcomes**
Lecture (must total 100%)		
6.00%	Invertebrates	1, 2, 5
3.00%	Fish	2, 5
3.00%	Amphibians	1, 2, 3, 5
6.00%	Reptiles	1, 2, 3, 5
6.00%	Birds	1, 2, 3, 4, 5
6.00%	Mammals	1, 2, 3, 4, 5
9.00%	Monotremes, Marsupials, Insectivora, Scandentia, Dermoptera, Chiroptera	1, 2, 3, 4, 5
9.00%	Primates	1, 2, 3, 4, 5
9.00%	Subungulates: • Proboscidia • Hyrocoidea • Sirenia	1, 2, 3, 4, 5

4.00%	Ecology	4
6.00%	Introduction to course • Taxonomy • Evolution • Genetics	1, 4
9.00%	Xenartha, Lagomorpha, Rodentia	1, 2, 3, 4, 5
12.00%	Carnivores	1, 2, 3, 4, 5
12.00%	Perissodactyla Artiodactyla Cetacea	1, 2, 3, 4, 5
Lab (must total 100%)		
5.00%	Invertebrates	2, 5
5.00%	Fish	1, 2, 5
3.00%	Amphibians	1, 2, 3, 5
12.00%	Reptiles	1, 2, 3, 5
21.00%	Birds	1, 2, 3, 5
8.00%	Monotremes, Marsupials, Xenarthra, Chiroptera, Rodentia, Lagomorpha, Tubulidentata, subungulates	1, 2, 3, 5
8.00%	Primates	1, 2, 3, 5
16.00%	Carnivores	1, 2, 3, 5
16.00%	Ungulates	1, 2, 3, 5
6.00%	Cetaceans	1, 2, 3, 5

IV. TYPICAL ASSIGNMENTS

A. Writing assignments

Writing assignments are required. Possible assignments may include, but are not limited to:	
1	write a paper on the life history of a species.
2	write a paper describing range of adaptations of a family.
3	write a paper dealing with a concept such as adaptive radiation with an example of a group which illustrates the concept.

B. Appropriate outside assignments

Appropriate outside assignments are required. Possible assignments may include, but are not limited to:	
1	read scientific journal articles on concepts of taxonomy, evolution, physiology, genetics, ecology.
2	observe animals in the teaching zoo to identify family characteristics.
3	participate in group projects illustrating evolutionary relationships of families.

C. Critical thinking assignments

Critical thinking assignments are required. Possible assignments may include, but are not limited to:	
1	compare and contrast research projects described in scientific journal articles.

2	debate problems with various species concepts in classroom.
3	analysis of evolutionary trends within families.

V. METHODS OF INSTRUCTION

Methods of instruction may include, but are not limited to:

- [ ] Distance Education – When any portion of class contact hours is replaced by distance education delivery mode (Complete DE Addendum, Section XV)
- [X] Lecture/Discussion
- [X] Laboratory/Activity
- [X] Other (Specify) Instructor-led group discussions, and in-class demonstrations.
- [X] Optional Field Trips
- [X] Required Field Trips

VI. METHODS OF EVALUATION

Methods of evaluation may include, but are not limited to:

[X] Essay Exam	[X] Classroom Discussion	[X] Skill Demonstration
[ ] Problem Solving Exam	[X] Reports/Papers/ Journals	[ ] Participation
[X] Objective Exams	[ ] Projects	[X] Other (specify)

Students will explain rationales for alternative classification schemes, and analyze methods of scientific research.

VII. REPRESENTATIVE TEXTS AND OTHER COURSE MATERIALS

Hickman, Cleveland, et al. Animal Diversity. 7th ed. McGraw-Hill, 2014.

Miller, Stephen, and John Harley. Zoology. 9th ed. McGraw-Hill, 2012.

Hickman, Cleveland, et al. Integrated Principles of Zoology. 16th ed. McGraw-Hill, 2013.

Identification slides of animals

VIII. STUDENT MATERIALS FEES

[X] No [ ] Yes

IX. PARALLEL COURSES

College	*Course Number*	*Course Title*	*Units*
San Diego State University	BIOL 101	World of Animals	3
Santa Barbara City	Zoology 122	Animal Diversity	3

College			
San Diego State University	BIOL 101L	World of Animals Laboratory	1
Santa Barbara City College	ZOOL 123	Animal Diversity Laboratory	1
MiraCosta College	BIO 103	Animal Diversity	3

X. MINIMUM QUALIFICATIONS

Courses in Disciplines in which Masters Degrees are not expected:
Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.

XI. ARTICULATION INFORMATION

A. Title V Course Classification:

1. This course is designed to be taken either:

   ☐ Pass/No Pass only (no letter grade possible); or
   ☒ Letter grade (P/NP possible at student option)

2. Degree status:
   Either ☒ Associate Degree Applicable; or ☐ Non-associate Degree Applicable

B. Moorpark College General Education:

1. Do you recommend this course for inclusion on the Associate Degree General Education list?
   Yes: ☒ No: ☐ If YES, what section(s)?

   ☒ A1 - Natural Sciences - Biological Science
   ☐ A2 - Natural Sciences - Physical Science
   ☐ B1 - Social and Behavioral Sciences - American History/Institutions
   ☐ B2 - Social and Behavioral Sciences - Other Social Behavioral Science
   ☐ C1 - Humanities - Fine or Performing Arts
   ☐ C2 - Humanities - Other Humanities
   ☐ D1 - Language and Rationality - English Composition
   ☐ D2 - Language and Rationality - Communication and Analytical Thinking
   ☐ E1 - Health/Physical Education
   ☐ E2 - PE or Dance
   ☐ F - Ethnic/Gender Studies

C. California State University(CSU) Articulation:

1. Do you recommend this course for transfer credit to CSU? Yes: ☒ No: ☐

2. If YES do you recommend this course for inclusion on the CSU General Education list?
   Yes: ☒ No: ☐ If YES, which area(s)?

   A1 ☐ A2 ☐ A3 ☐ B1 ☐ B2 ☒ B3 ☒ B4 ☐

   ☐ ☐ ☐ ☐ ☐ ☐

C1 ☐ C2 ☐ D1 ☐ D2 ☐ D3 ☐ D4 ☐ D5 ☐
D6 ☐ D7 ☐ D8 ☐ D9 ☐ D10 ☐ E ☐

D. University of California (UC) Articulation:

1. Do you recommend this course for transfer to the UC? Yes: ☐ No: ☒
2. If YES do you recommend this course for the Intersegmental General Education Transfer Curriculum (IGETC)? Yes: ☐ No: ☒

IGETC Area 1: English Communication

- ☐ English Composition
- ☐ Critical Thinking-English Composition
- ☐ Oral Communication

IGETC Area 2: Mathematical Concepts and Quantitative Reasoning

- ☐ Mathematical Concepts

IGETC Area 3: Arts and Humanities

- ☐ Arts
- ☐ Humanities

IGETC Area 4: Social and Behavioral Sciences

- ☐ Anthropology and Archaeology
- ☐ Economics
- ☐ Ethnic Studies
- ☐ Gender Studies
- ☐ Geography
- ☐ History
- ☐ Interdisciplinary, Social & Behavioral Sciences
- ☐ Political Science, Government & Legal Institutions
- ☐ Psychology
- ☐ Sociology & Criminology

IGETC Area 5: Physical and Biological Sciences (mark all that apply)

- ☐ Physical Science Lab or Physical Science Lab only (none-sequence)
- ☐ Physical Science Lecture only (non-sequence)
- ☐ Biological Science
- ☐ Physical Science Courses
- ☐ Physical Science Lab or Biological Science Lab Only (non-sequence)
- ☐ Biological Science Courses
- ☐ Biological Science Lab course
- ☐

☐ First Science course in a Special sequence
☐ Second Science course in a Special Sequence
☐ Laboratory Activity
☐ Physical Sciences

IGETC Area 6: Language other than English

☐ Languages other than English (UC Requirement Only)
☐ U.S. History, Constitution, and American Ideals (CSU Requirement ONLY)
☐ U.S. History, Constitution, and American Ideals (CSU Requirement ONLY)

XII. REVIEW OF LIBRARY RESOURCES

A. What planned assignment(s) will require library resources and use?

The following assignments require library resources:
Research a paper, using the Library's print and online resources, on a concept such as adaptive radiation with an example of a group which illustrates the concept.

B. Are the currently held library resources sufficient to support the course assignment?

YES: [X] NO: [ ]

If NO, please list additional library resources needed to support this course.

XIII. PREREQUISITE AND/OR COREQUISITE JUSTIFICATION

ANSC M17: Not Applicable

XIV. WORKPLACE PREPARATION

Required for career technical courses only. A career technical course/program is one with the primary goal to prepare students for employment immediately upon course/program completion, and/or upgrading employment skills.

Detail how the course meets the Secretary of Labors Commission on the Achievement of Necessary Skills (SCANS) areas. (For a description of the competencies and skills with a listing of what students should be able to do, go to: http://www.ncrel.org/sdrs/areas/issues/methods/assment/as7scans.htm)

The course will address the SCANS competency areas:

1. Resources: the students will plan and organize resources in order to accomplish the term projects.
2. Interpersonal: the students will work with others in many cooperative learning experiences.
3. Information: the students will acquire and use information through a variety of assignments and practical applications.
4. Systems: the students will acquire an understanding of the manner in which zoological systems work together.

5. Technology: the students will access online databases containing current taxonomic information.

The course also addresses the SCANS skills and personal qualities:

1. Basic Skills: the students will read, write, listen, and speak in this course in written assignments and classroom exercises.

2. Thinking Skills: the students will think critically, make decisions, solve problems, know how to learn, and to reason by satisfactorily completing the objectives of this course.

3. Personal Qualities: the students will display responsibility, self-management, integrity and honesty throughout their assignments.

XV. DISTANCE LEARNING COURSE OUTLINE ADDENDUM

ANSC M17: Not Applicable

XVI. GENERAL EDUCATION COURSE OUTLINE ADDENDUM

ANSC M17: Not Applicable

XVII. STUDENT MATERIALS FEE ADDENDUM

ANSC M17: Not Applicable

XVIII. REPEATABILITY JUSTIFICATION TITLE 5, SECTION 55041

ANSC M17: Not Applicable

XIX. CURRICULUM APPROVAL

Course Information:

Discipline: ANIMAL SCIENCE

Discipline Code and Number: ANSC M17

Course Revision Category: Technical Course Revision

Course Proposed By:

Originating Faculty Carmen Leiva 03/01/2015

Faculty Peer: _____

Curriculum Rep: _____

Department Chair: _____

Division Dean: _____

Approved By:

Curriculum Chair: Jerry Mansfield 03/06/2015

Executive Vice President: Lori Bennett 03/16/2015

Articulation Officer: _____

Librarian: _____

Implementation Term and Year: Fall 2015

Approval Dates:

Approved by Moorpark College Curriculum Committee: 03/03/2015

Approved by Board of Trustees (if applicable): _____

Approved by State (if applicable): _____