

I. CATALOG INFORMATION

A. Discipline: ZOOLOGY

B. Subject Code and Number: ZOO M01

C. Course Title: Introduction to Zoology

D. Credit Course units:

Units: 5

Lecture Hours per week: 3

Lab Hours per week : 6

Variable Units : No

E. Student Learning Hours:

Lecture Hours:

Classroom hours: 52.5 - 52.5

Laboratory/Activity Hours:

Laboratory/Activity Hours 105 - 105

Total Combined Hours in a 17.5 week term: 157.5 - 157.5

F. Non-Credit Course hours per week _____

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

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

I. Course Description:

Covers the comparative structure, function, evolution, and a survey of animal phyla. Includes development, morphology and physiology, microevolution and macroevolution, taxonomy and systematics, molecular and morphological phylogeny, and animal behavior.

J. Entrance Skills

*Prerequisite: No Yes Course(s)

*Corequisite: No Yes Course(s)

Limitation on Enrollment: No Yes

Recommended Preparation: No Yes Course(s)
BIOL M02A or BIOL M02AH

Other: No Yes

K. Other Catalog Information:

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	recognize characteristics of major animal taxa and their phylogenetic relationships.	Examination Quizzes Papers Projects
2	identify and describe the diversity of animal structures and relate them to their functions.	Examination Quizzes Papers Projects Lab practicals
3	illustrate and exemplify physiological functions across the animal phyla.	Examination Quizzes Papers Projects
4	understand differences in animal development and life cycles.	Examination Quizzes Papers Projects
5	identify examples of animal behavior and explain their functions.	Examination Quizzes Papers Projects
6	construct and interpret phylogenies.	Examination Quizzes Papers Projects Worksheets
7	describe mechanisms of evolutionary change including speciation.	Examination Quizzes Papers Projects

8	provide evidence for evolution.	Examination Quizzes Papers Projects
9	acquire, use, and cite scientific literature when doing scientific writing.	Papers Projects
10	apply scientific methodology and reasoning through active experimentation and experiences.	Laboratory experiments Lab reports Lab practicals

III. COURSE CONTENT

Estimated %	Topic	Learning Outcomes
Lecture (must total 100%)		
14.00%	Animal systems structure: Anatomy	1, 2, 6, 7, 8, 9, 10
13.00%	Animal systems function: Physiology	2, 3, 4, 5, 9, 10
12.00%	Animal behavior	2, 5, 7, 8, 9, 10
14.00%	Animal development and life cycles	1, 4, 6, 7, 8
1.00%	Animal-like/non-photosynthetic protists	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
14.00%	Survey of animal phyla	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
11.00%	Mechanisms of evolutionary change and population ecology	1, 2, 4, 6, 7, 8, 9, 10
6.00%	Systematics and taxonomy classification schemes	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
9.00%	Phylogeny/Evolutionary history of animal taxa	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
6.00%	Overview of tree of life and position of Animalia	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
Lab (must total 100%)		
2.00%	Overview of tree of life and position of Animalia	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
		1, 2, 3, 4,

2.00%	Animal-like/non-photosynthetic protists	5, 6, 7, 8, 9, 10
13.00%	Survey of animal phyla	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
19.00%	Animal systems structure: Anatomy	1, 2, 6, 7, 8, 9, 10
14.00%	Animal systems function: Physiology	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
16.00%	Animal development and life cycles	1, 4, 6, 7, 8, 9, 10
12.00%	Animal behaviour	7, 9, 10
4.00%	Mechanisms of evolutionary change and population genetics	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
16.00%	Systematics and taxonomy: Classification schemes	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
2.00%	Phylogeny/Evolutionary history of animal taxa	1, 2, 3, 4, 5, 6, 7, 8, 9, 10

IV. TYPICAL ASSIGNMENTS

A. Writing assignments

Writing assignments are required. Possible assignments may include, but are not limited to:	
1	research and write term papers on such topics as animal behavior and its functions.
2	complete homework problems.
3	write lab reports and complete of lab practica.

B. Appropriate outside assignments

Appropriate outside assignments are required. Possible assignments may include, but are not limited to:	
1	completion of readings from scientific literature on topics concerning evolution.
2	participation in cooperative group planning for oral presentations on topics such as the characteristics of a major animal taxon.

C. Critical thinking assignments

Critical thinking assignments are required. Possible assignments may include, but are not limited to:	
1	analyze structure vs. function in animal physiology.
2	discuss mechanism of evolutionary change.
3	compare different animal phyla.

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)

Lecture/Discussion

Laboratory/Activity

Other (Specify) Dissections

Optional Field Trips

Required Field Trips

VI. METHODS OF EVALUATION

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

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Essay Exam | <input checked="" type="checkbox"/> Classroom Discussion | <input checked="" type="checkbox"/> Skill Demonstration |
| <input checked="" type="checkbox"/> Problem Solving Exam | <input checked="" type="checkbox"/> Reports/Papers/Journals | <input checked="" type="checkbox"/> Participation |
| <input checked="" type="checkbox"/> Objective Exams | <input checked="" type="checkbox"/> Projects | <input checked="" type="checkbox"/> Other (specify) |

Labs

Laboratory practicals

VII. REPRESENTATIVE TEXTS AND OTHER COURSE MATERIALS

Hickman, Cleveland, et al. Integrated Principles of Zoology. 17th ed. McGraw-Hill, 2016.

Urry, Lisa A., et al. Campbell Biology. 11th ed. Pearson, 2017.

Sadava, David, et al. Life: The Science of Biology. 11th ed. Freeman, 2017.

Smith, David G., and Michael P. Schenk. Exploring Zoology in the Laboratory. 2nd ed. Morton, 2014.

VIII. STUDENT MATERIALS FEES

No Yes

IX. PARALLEL COURSES

<i>College</i>	<i>Course Number</i>	<i>Course Title</i>	<i>Units</i>
Santa Monica College	ZOOL 5	Introductory Zoology	4
Fresno City College	BIOL 4	Principles of Zoology	35
Humboldt State	ZOOL 110	Introductory Zoology	4
Fullerton College	BIOL 266 F	General Zoology	5

X. MINIMUM QUALIFICATIONS

Courses Requiring a Masters Degree:

Master's degree in any biological science OR bachelor's degree in any biological science AND master's degree in biochemistry, biophysics, or marine science OR the equivalent.

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 (non-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:

Use of the Library's print and online resources for research projects or papers on topics such as physiological adaptations of different taxa.

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

YES: NO:

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

XIII. PREREQUISITE AND/OR COREQUISITE JUSTIFICATION

ZOO M01: Not Applicable

XIV. WORKPLACE PREPARATION

ZOO M01: Not Applicable

XV. DISTANCE LEARNING COURSE OUTLINE ADDENDUM

ZOO M01: Not Applicable

XVI. GENERAL EDUCATION COURSE OUTLINE ADDENDUM

General Education Division of Learning [check all applicable boxes]:

Natural Sciences

Biological Science

Physical Science

Social and Behavioral Sciences

American History/Institutions

Other Social Science

Humanities

Fine or Performing Arts

Other Humanities

Language and Rationality

English Composition

Communication and Analytical Thinking

Health/Physical Education

Ethnic/Women's Studies

Check either Option 1 or Option 2

- OPTION #1:** Moorpark College has already received approval from the CSU and/or UC systems for this course to fulfill a GE requirement. Note: This option applies only to technical revisions and updated courses.
- OPTION #2:** Moorpark College has not received approval from the CSU and/or UC systems for this course to fulfill a GE requirement. This option applies to all new and substantively revised courses.

XVII. STUDENT MATERIALS FEE ADDENDUM

ZOO M01: Not Applicable

XVIII. REPEATABILITY JUSTIFICATION TITLE 5, SECTION 55041

ZOO M01: Not Applicable

XIX. CURRICULUM APPROVAL

Course Information:

Discipline: ZOOLOGY

Discipline Code and Number: ZOO M01

Course Revision Category: Outline Update

Course Proposed By:

Originating Faculty Jana Johnson 09/12/2018

Faculty Peer: Sandy Bryant 09/13/2018

Curriculum Rep: Beth Miller 09/15/2018

Department Chair: Audrey Chen 09/12/2018

Division Dean: Carol Higashida 09/13/2018

Approved By:

Curriculum Chair: Jerry Mansfield 02/08/2019

Executive Vice President: _____

Articulation Officer: Letrisha Mai 02/06/2019

Librarian: Mary LaBarge 02/05/2019

Implementation Term and Year: Fall 2019

Approval Dates:

Approved by Moorpark College Curriculum Committee: 02/19/2019

Approved by Board of Trustees (if applicable): _____

Approved by State (if applicable): 02/27/2019