

College of Micronesia – FSM

COURSE MODIFICATION REQUEST

**SC255 GENERAL ZOOLOGY (with lab)**

Course Number and Title

Math and Science

Department

No Change

Course Number and Title

Department

**New Course Objectives:**

None

**New Course Description:**

..... 4 credits

**Prerequisite:** C or better in SC 120 or MR 120

Provides a general survey of the basic principles of animal biology with emphasis on the invertebrates and vertebrate groups, classifications, structure, physiology, -life histories; ecology, evolution and genetics.

**Justification for Revising the Course:**

Changes are required to make prerequisites consistent with, updates in marine science courses and major. Changes are also required to make the course description better reflect what is currently taught.

\_\_\_\_\_  
Division Chairperson

\_\_\_\_\_  
Date

**SPENSIN JAMES**  
Chairperson, Curriculum Committee

**5/28/99**  
Date

**SUSAN MOSES**  
President, COM-FSM

**6/10/99**  
Date

Community College of Micronesia

Course Outline Cover Page

General Zoology

Course Title

SC 255

Department and Number

Course Description:

Provides a general survey of the basic principles of animal biology with emphasis on the invertebrates and vertebrates groups, classifications, structure, physiology, life histories, ecology, evolution and genetics.

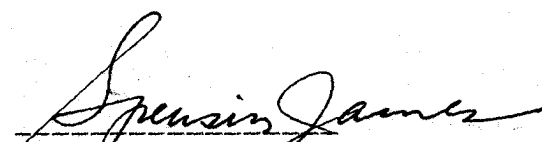
Course Prepared by: Spensin James

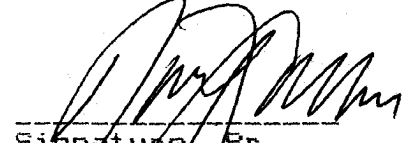
State: \_\_\_\_\_

	Hours per week		Number of Weeks	=	Total Hours	=	Semester Credits
Lecture	<u>3</u>	x	<u>16</u>	=	<u>48/16</u>	=	<u>3</u>
Laboratory	<u>3</u>	x	<u>16</u>	=	<u>48/48</u>	=	<u>1</u>
Workshop	_____	x	_____	=	<u>x</u>	=	_____
					<u>x</u>	its	<u>4</u>
					<u>x</u>		
					<u>x</u>		
					_____		
					_____		
					_____		

Purpose of Course: Degree Requirement  
 Degree Elective  
 Certificate  
 Remedial  
 Other

Prerequisite Courses; SC 120 Biology

  
 Signature, Chair

  
 Signature, Pr

October 1, 1992  
 approved by Committee  
 Date

11/16/92  
 Date Approved by President

## COURSE OBJECTIVES

### General Objectives

1. The course will introduce the students to the procedures/methods used by zoologist in classifying animals.
2. The course will also expose the students to the scientific methods of looking at a problem and attempting to come up with problem solutions.
3. The course will also introduce the students to theories that have been accepted and proven in the origin of life position in relationships of an organism to other animals.

### Specific Objectives

1. After given a lecture on history and define zoology the students should be able to define and list the subdivision of zoology;
2. After given a lecture on general characteristics of life the students should be able to list at least 4 characteristics of life;
3. After given a lecture on maintenance and existence of an individual and species the students should be able to explain in their own Words how an individual/species continue to exists.
4. Given a lecture on cell morphology the students should be able to list and explain factors that effect the morphology of animal cells
5. Given a lecture on cell physiology the students should be able to list chemical substances in the cell and explain how chemical substances move in/out of the cell.
6. Given a lecture on cell and its structures the students should be able to name all structures of an animal cell and give the function of each. The students should be able to explain the differences between animal and plant cell.
7. After given a lecture on tissues the students should be able to list types of tissues and their locations and functions.
8. After given a lecture on organs the students should be able to list organs in higher animals and give their functions.
9. The students should be able to demonstrate their ability in identifying the types of tissues on animals.
10. After given a lecture on taxonomy the students should be able to - list the taxonomical systems that have been used in classifying animal. Students should also be able to explain the purpose of taxonomy.
11. After given a lecture on taxonomic system the students should be able to list rules of nomenclature.

12. After given another lecture on taxonomic system the students should be able to list characteristics/morphology, etc. taxonomists looked at when classifying animals.

13. After given lectures on phylum mesozoa the students should be able to list examples of this phylum, distinguishing characteristics, etc.

14. After given lectures on phylum mesozoa the students should be able to list examples of this phylum, distinguishing characteristics, etc.

15. After given lectures on phyla coridaria and ctenophores the students should be able to list examples of this phylum, distinguishing characteristics etc.

16. After given lectures on Arthropods the students should be able to list examples of arthropods, their distinguishing characteristics etc.

17. After given lectures on molluscs, reptiles echinodermata and chordata the students should be able to list examples of each group, list their general characteristics, and explain their relations to man.

## II. COURSE CONTENT

### A. An Approach to Zoology

1. Introduction
2. Cell Chemistry and Morphology
3. Tissues and Organs
4. Taxonomy and Phylum Synopsis

### B. Animal Diversity: Invertebrates

1. Phylum Protozoa
2. Phylum Porifera
3. Phylum Cnidaria
4. Phylum Anthropodus
5. Phylum Mullusk
6. Phylum Echinoderms

### C. Animal Diversity: Vetebrates

1. Chordates
2. Lampreys, Sharks, and Bony Fish
3. Frogs and Other Amphibians
4. Reptiles
5. Birds
6. Mammals

## III. TEXTBOOK

Zoology: An Introduction to the Study of Animals Boolootian, Richard A.

## IV. METHODS OF INSTRUCTION

- Lectures

- Discussions
- Quest Speakers
- Films
- Labs

## V. EVALUATION

Test -----	50%
Lab -----	25%
Final Exam -----	25%