### Type of Action

**A. Addition**
- 1. Regular
- 2. Experimental
- 3. Other [specify]

**B. Deletion**
- NEW ALPHA, NUMBER AND TITLE
  - ZOOL 106: Hawaiian Marine Invertebrates
- OLD ALPHA, NUMBER AND TITLE
  - ZOOL 197: Hawaiian Marine Invertebrates

### New Description

Survey of marine invertebrate phyla; morphology, systematics, life histories, ecology, distribution; interactions with other organisms; identification and uses of Hawaiian marine invertebrates.

### Prerequisites or Recommended Preparation

No prerequisite

### Student Contact Hours per Week

| 8. Lecture | 3 |
| Lab | |
| Other (specify) | |

### Proposed Date of First Offering

- Fall 1980

### This Course is (Required) **Elective** for the MOP and Natl Sci Program

1. This course (increases) (decreases) [makes no change] in the number of credits required for the program.

2. Similar courses offered elsewhere

   - College(s): None

3. This course is (already articulated) (appropriate for articulation) (not appropriate for articulation)

   **Provide details of existing or desired articulation** (date, college(s), purposes, pre-major or major, etc.):

4. Reason for Initiating, Modifying or Deleting Course or Other Pertinent Comment:

   This course will present information concerning a large and diverse group of marine organisms often neglected in marine curricula; satisfies Marine Option Program as well as WCC Science requirements.

**Exhibited By**

Department/Division

Chairperson

Date

**Approved By**

Curriculum Committee

Date

[Other required campus signature]

Dean of Instruction

Date
WCC CURR. FORM 1

PROPOSAL FOR NEW COURSE.

Course ZOOL 106: Hawaiian Marine Invertebrates
Transfer X Nontransfer
Submitted by Jeffrey W. Hunt Date Feb. 27, 1980

1. COURSE OBJECTIVES:

(see attached)

2. COURSE RELATION TO EDP:

1. Supports on-going program, i.e., MOP, and diversifies NAT SCI offerings
2. Would support aquaculture or related programs.
3. Offers interested community members (fishermen, marine recreationists, etc.) opportunity to learn about organisms they encounter in the ocean.

3. PROGRAM COURSE IN:

1. Marine Option Program.
2. Natural Sciences requirements

4. STUDENT HOURS: 3 hours/week

5. INDEPENDENT WORK BY STUDENT:

Yes, if an optional project is developed.

6. ADDITIONAL SUPPORTS NEEDED:

Accumulation of reference collection; prepared microscope slides. (Majority of materials available presently through ZOOL 101 supplies).

7. SIMILAR COURSES IN SYSTEM:

NONE
Course ZOOL 106: Hawaiian Marine Invertebrates

8. IF COMPARABLE TO FOUR YEAR CAMPUS COURSE RELATE EVIDENCE:

NONE

9. RATIONALE (if appropriate) FOR ARTICULATION WITH UH:

NONE

10. PREREQUISITE:

NONE

Ability to swim recommended.

11. IF SIMILAR TO AN UPPER DIVISION COURSE EXPLAIN CC APPLICATION:

NONE

12. OTHER

Although some field trips are taken, this course does not satisfy the lab/field trip requirements of WCC.
ATTACHMENT

COURSE OBJECTIVES:

1. Have an understanding of the morphology, life-histories, ecology and distribution of Hawaiian marine invertebrates.

2. Be able to recognize and describe the characteristics of Hawaiian marine invertebrates phyla, and identify common Hawaiian marine invertebrates.

3. Be able to characterize the habitats of Hawaiian marine invertebrates, and describe the interrelationships between Hawaiian marine invertebrates the physical environment, other organisms and man.

4. Develop a heightened awareness of your environment and the roles that Hawaiian marine invertebrates play in it.
GENERAL OUTLINE FOR PROPOSED COURSE

Course: ZOOL 106: Hawaiian Marine Invertebrates
Transfer: Yes, Nontransfer: No, New: Yes, Modified: Yes
Submitted by: Jeffrey W. Hunt
Date: Feb. 27, 1980

1. COURSE DESCRIPTION:
Survey of marine invertebrate phyla; morphology, systematics, life-histories, ecology, distribution; interactions with other organisms; identification and uses of Hawaiian marine invertebrates.

2. HOURS PER WEEK: LEC 3, LAB, OTHER, TOTAL 48

3. PREREQUISITES: NONE
COREQUISITES: NONE
RECOMMENDED PREPARATION: NONE
Ability to swim recommended.

4. SPECIFIC COURSE OBJECTIVES:
(see attached)

5. TEXTBOOK AND MATERIALS:

6. REFERENCE MATERIAL SAMPLES:
Majority already in LLRC.

7. AUXILIARY MATERIALS: Majority already in use by ZOOL 101. Some materials will be needed to expand preserved collection and microscope slide collection.
GENERAL OUTLINE FOR PROPOSED COURSE

Course ZOOL 106: Hawaiian Marine Invertebrates

7. AUXILIARY MATERIALS:
   (see page 1)

8. METHODS OF INSTRUCTION: 1. Lectures
   2. Field trips
   3. Classroom observations and discussions
   4. Projects (elective)

9. EVALUATION: 1. Quizzes
   2. Examinations
   3. Field trips
   4. Observation/discussion notebook

10. OTHER
    1. Meets Marine Option Program requirements at WCC and UHM.
    2. Previously taught as ZOOL 197.

11. SYLLABUS: CONTENT AND TIME SCHEDULE:
    See attached outline and schedule
SPECIFIC COURSE OBJECTIVES:

1. Have an understanding of the morphology, life-histories, ecology and distribution of Hawaiian marine invertebrates.

2. Be able to recognize and describe the characteristics of Hawaiian marine invertebrates phyla, and identify common Hawaiian marine invertebrates.

3. Be able to characterize the habitats of Hawaiian marine invertebrates, and describe the interrelationships between Hawaiian marine invertebrates, the physical environment, other organisms and man.

4. Develop a heightened awareness of your environment and the roles that Hawaiian marine invertebrates play in it.
COURSE NAME: Hawaiian Marine Invertebrates
COURSE NUMBER: ZOOL 106
CREDIT HOURS: 03
CATALOG DESCRIPTION: Survey of marine invertebrate phyla; morphology, systematics, life-histories, ecology, distribution; interactions with other organisms; identification and uses of Hawaiian marine invertebrates.

REQUIREMENTS COURSE SATISFIES:

AT WCC: Meets Marine Option Program requirements; meets AA degree Science requirements.

AT UH, MANOA: Meets Marine Option Program requirements. May meet elective requirements.

PREREQUISITES: Ability to swim recommended.

RECOMMENDED SPECIAL PREPARATION:

RECOMMENDED BASIC SKILL LEVELS:

Reading Level of Text(s):

Other:

ACTIVITIES REQUIRED AT SCHEDULED TIMES OTHER THAN CLASS TIMES: Yes

INSTRUCTOR:

OFFICE:

TELEPHONE:

EFFECTIVE DATE:
A. Goals of the Course

Upon completion of this course, you should ..... 

1. Have an understanding of the morphology, life-histories, ecology and distribution of Hawaiian marine invertebrates.

2. Be able to recognize and describe the characteristics of Hawaiian marine invertebrates phyla, and identify common Hawaiian marine invertebrates.

3. Be able to characterize the habitats of Hawaiian marine invertebrates, and describe the interrelationships between Hawaiian marine invertebrates the physical environment, other organisms and man.

4. Develop a heightened awareness of your environment and the roles that Hawaiian marine invertebrates play in it.

B. Objectives of the Course

1. The student will describe and integrate basic information related to Hawaiian marine invertebrates as presented in lectures, readings, and field trips and/or essay. Minimum level of achievement: .60%

2. The student will demonstrate that he/she can identify basic morphological structures of Hawaiian marine invertebrates and also give the scientific and common or Hawaiian names of representative species in weekly quizzes. These weekly quizzes will also evaluate the student's understanding of the previous and upcoming course material and assignments. Selected references will be given, of which the student may select the best 10. Minimum level of achievement: 60%

3. The student will maintain a notebook (in accordance with guidelines) recording and detailing observations of Hawaiian marine invertebrates. The notebook will be collected at random two times for evaluation. Minimum level of achievement: 60%

4. The student will correctly and carefully use appropriate techniques and equipment in the study of Hawaiian marine invertebrates, including dissecting microscope use, the recording of class and field observations, and the collecting and preparing of Hawaiian marine invertebrates. The student will have many opportunities to master these skills in order to improve to a highly proficient level. These class and field skills and techniques are evaluated on a CR/F basis.

5. The student will apply appropriate techniques in identifying unknown Hawaiian marine invertebrates giving the scientific name of representative Hawaiian marine invertebrates in a timed laboratory exam. Selected references may be used in this exam. Minimum level of achievement: 60%
6. The student will complete the field trip exercises by attending field trips, doing the appropriate observations, deriving conclusions, and writing up the exercise in a short report. If unable to attend the field trip, the student will conduct the exercise on his/her own. Reports are due one week after the field trip; late reports will not receive maximum points. Minimum level of achievement: 60%

7. The student may choose to submit a typewritten and oral optional report or project. The optional report or project will be developed in consultation with the instructor. The optional work will be given a specified number of points to be added to the student's total point accumulation upon satisfactory completion of the work.

C. Mode of Instruction

The previously described objectives will be achieved through the aid of the following learning activities:

1. Assigned readings
2. Class lectures
3. Field trips

Assigned readings will serve to provide background and supplemental information to provide a broad base for a study of Hawaiian marine invertebrates in the Hawaiian environment. Class lectures will build upon this base and provide additional information more specifically dealing with the topics discussed. Field trips and field exercises will be utilized to expose the student first hand to the Hawaiian marine invertebrates of Hawaii. The material presented in all modes of instruction will be of an introductory nature but sufficient in content to allow serious study by the interested student.

D. Method of Grading

1. The student must meet the minimum level of achievement for Objectives 1-6 in order to receive a passing grade for the course. Failure to satisfy the minimum level of achievement for any one of the objectives will result in a grade of "F".

2. The assignment of points to the different objectives may vary each semester since the emphasis on the objectives is not always the same. However, the following is typical:

   Objective 1 (exams) 300 points
   Objective 2 (quizzes) 200 points
   Objective 3 (notebook) 50 points
   Objective 4 (observation and field techniques) CR/F
   Objective 5 (identification exam) 150 points
   Objective 6 (field trips) 250 points
   Objective 7 (optional work) 50 points

3. Letter grades will be assigned as follows:

   A -- 90% or above of total points; meets minimum level of achievement in Objectives 1-6; all assignments completed.

   B -- 80 - 89% of total points; meets minimum level of achievement in Objectives 1-6; all assignments completed.