

I. CATALOG INFORMATION

- A. Discipline: ENVIRONMENTAL SCIENCE
- B. Subject Code and Number: ENSC M122
- C. Course Title: Independent Study-Environmental Science

- D. Credit Course units:
 Units: 0.5 – 3
 Lecture Hours per week: 0
 Lab Hours per week : 1.5 – 9
 Variable Units : No

- E. Student Learning Hours:
 Lecture Hours:
 Classroom hours: 0 - 0
 Laboratory/Activity Hours:
 Laboratory/Activity Hours 26.25 - 157.5

Total Combined Hours in a 17.5 week term: 26.25 - 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:

Allows independent study for students who wish to extend their knowledge of a particular area of environmental science through research and study. Utilizes an approved independent project. Includes one-on-one work with instructor.

J. Entrance Skills

*Prerequisite: No Yes Course(s)
Completion of one course in Environmental Science and instructor approval.

*Corequisite: No Yes Course(s)

Limitation on Enrollment: No Yes

Recommended Preparation: No Yes Course(s)

Other: No Yes

K. Other Catalog Information:

Interested students should contact an environmental science instructor for assistance in developing a contract for learning about a specific topic. May be taken for a maximum of 6 units. Formerly ENSC M22A/B. Transfer credit: CSU; UC (determined after admission).

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	identify environmental problems and develop testable hypotheses.	Successful completion of a course project, i.e., portfolio, paper, performance, presentation, or lab research. Evaluation methods will be determined by the instructor in consultation with the student.
2	formulate statements designed to assess the applicability of their knowledge to other related topics.	Successful completion of a course project, i.e., portfolio, paper, performance, presentation, or lab research. Evaluation methods will be determined by the instructor in consultation with the student.
3	analyze new data and conduct further research to assess the accuracy of their research and findings.	Successful completion of a course project, i.e., portfolio, paper, performance, presentation, or lab research. Evaluation methods will be determined by the instructor in consultation with the student.
4	collect environmental data in a lab and/or field setting and maintain a record of it for analysis.	Successful completion of a course project, i.e., portfolio, paper, performance, presentation, or lab research. Evaluation methods will be determined by the instructor in consultation with the student.

III. COURSE CONTENT

Estimated %	Topic	Learning Outcomes
Lecture (must total 100%)		
Lab (must total 100%)		
100.00%	Project content and specific topics will be determined by the student in consultation with the supervising faculty member.	1, 2, 3, 4

IV. TYPICAL ASSIGNMENTS**A. Writing assignments**

Writing assignments are required. Possible assignments may include, but are not limited to:	
1	writing essays, research reports, fieldwork reports, and literature reviews.
2	keeping of field notebooks and/or lab notebooks.
3	to be determined in consultation between the instructor and the student.

B. Appropriate outside assignments

Appropriate outside assignments are required. Possible assignments may include, but are not limited to:	
1	researching and writing literature reviews.
2	projects to be determined in consultation between instructor and student.

C. Critical thinking assignments

Critical thinking assignments are required. Possible assignments may include, but are not limited to:	
1	projects to be determined in consultation between instructor and student.

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)
The specific methods to be used will be determined by the supervising faculty

member in consultation with the student.

- Optional Field Trips
- Required Field Trips

VI. METHODS OF EVALUATION

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

- | | | |
|--|---|---|
| <input type="checkbox"/> Essay Exam | <input 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 type="checkbox"/> Objective Exams | <input checked="" type="checkbox"/> Projects | <input checked="" type="checkbox"/> Other (specify) |

Evaluation methods will be determined by the supervising faculty member in consultation with the student.

VII. REPRESENTATIVE TEXTS AND OTHER COURSE MATERIALS

Selected contemporary readings consistent with the assignment. Specific books, articles, or other reference materials will be determined by the supervising faculty member in consultation with the student.

VIII. STUDENT MATERIALS FEES

- No Yes

IX. PARALLEL COURSES

College	Course Number	Course Title	Units
Santa Barbara City College	ERTH 299	Independent Study in Earth Science	1-3
De Anza College	ESCI 77	Special Projects in Environmental Science	1
Fullerton College	ENVS 197 F	Internship in Environmental Sciences/Environmental Concerns	2

X. MINIMUM QUALIFICATIONS

Courses Requiring a Masters Degree:
 Master's in ecology or environmental studies OR the equivalent OR see interdisciplinary studies.

XI. ARTICULATION INFORMATION

- A. Title V Course Classification:
- 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)
 - 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 <input type="checkbox"/> | A2 <input type="checkbox"/> | A3 <input type="checkbox"/> | B1 <input type="checkbox"/> | B2 <input type="checkbox"/> | B3 <input type="checkbox"/> | B4 <input type="checkbox"/> |
| C1 <input type="checkbox"/> | C2 <input type="checkbox"/> | D1 <input type="checkbox"/> | D2 <input type="checkbox"/> | D3 <input type="checkbox"/> | D4 <input type="checkbox"/> | D5 <input type="checkbox"/> |
| <input type="checkbox"/> | | | | | | |
| D6 <input type="checkbox"/> | D7 <input type="checkbox"/> | D8 <input type="checkbox"/> | D9 <input type="checkbox"/> | D10 <input type="checkbox"/> | E <input type="checkbox"/> | |

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:

Literature review or other research using the library's print or online resources.

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

ENSC M122: Not Applicable

XIV. WORKPLACE PREPARATION

ENSC M122: Not Applicable

XV. DISTANCE LEARNING COURSE OUTLINE ADDENDUM

ENSC M122: Not Applicable

XVI. GENERAL EDUCATION COURSE OUTLINE ADDENDUM

ENSC M122: Not Applicable

XVII. STUDENT MATERIALS FEE ADDENDUM

ENSC M122: Not Applicable

XVIII. REPEATABILITY JUSTIFICATION TITLE 5, SECTION 55041

ENSC M122: Not Applicable

XIX. CURRICULUM APPROVAL

Course Information:

Discipline: ENVIRONMENTAL SCIENCE

Discipline Code and Number: ENSC M122

Course Revision Category: Outline Update

Course Proposed By:

Originating Faculty Brian Swartz 03/06/2016

Faculty Peer: Michael Walegur 03/07/2016

Curriculum Rep: Robert Keil 03/08/2016

Department Chair: Robert Keil 03/06/2016

Division Dean: Howard Davis 03/07/2016

Approved By:

Curriculum Chair: Jerry Mansfield 04/11/2016

Executive Vice President: Lori Bennett 04/11/2016

Articulation Officer: _____

Librarian: _____

Implementation Term and Year: Fall 2016

Approval Dates:

Approved by Moorpark College Curriculum Committee: 04/05/2016

Approved by Board of Trustees (if applicable): _____

Approved by State (if applicable): 04/12/2016