#### I. CATALOG INFORMATION

- A. Discipline: ENVIRONMENTAL SCIENCE
- B. Subject Code and Number: ENSC M04
- C. Course Title: Environmental Regulations
- D. Credit Course units:

Units: <u>1.5</u>

Lecture Hours per week: 1.5

Lab Hours per week : 0

variable Units : No	
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E. Student Learning Hours:

Lecture Hours:

Classroom hours: 26.25 - 26.25

Laboratory/Activity Hours:

Laboratory/Activity Hours 0 - 0

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

- 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 X Yes If YES, designate course Subject Code & Number:
- I. Course Description:

Introduces current laws and regulations governing air and water pollution, solid waste, hazardous materials, and pesticides. Reviews federal, state, and local regulations as well as the roles of appropriate regulatory agencies.

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:

# 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		describe and highlight the basics of environmental law; use and apply both networking and goal-setting techniques; recognize common legal terms and environmental acronyms; and explain how the global environment works as a system and how human activities affect it.	essay, quizzes, in-class discussion, exams (including final)
2	2	identify the various federal, state, and local hazardous materials laws and regulations and their origins (i.e., where and how they came about); determine how and where to find specific hazardous materials regulations; learn to use the Emergency Response Guide (ERG); distinguish between a Department of Transportation (DOT) placard, label, National Fire Protection Association (NFPA) 704 diamond, and the dangers of the represented hazardous materials; respond to a "real life" Hazardous Materials (HazMat) event and develop appropriate decision-making skills when protecting one's health, environment, and property; and recognize the principles, role, and limitations of a First Responder at the "awareness" level.	essay, quizzes, in-class discussion, exams (including final)
3	3	explain HazMat tactical operation acronyms; recognize and properly approach a HazMat incident; identify what regulations are involved in an emergency response and where to find them; understand the components and use of a Material Safety Data Sheet (MSDS) as well as federal/state regulations regarding their use; comprehend the information on a MSDS including distinguishing between employer and employee duties; and identify and define the physical properties of a chemical as listed on a MSDS.	essay, quizzes, in-class discussion, exams (including final)
4	Ļ	describe pollution prevention strategies, techniques, and their interrelationships with various media regulations such as the Clean Water Act (CWA) and the Clean Air Act (CAA); summarize the Code of Federal Regulations (CFR) Title 40 including regulations specific to each media and key sections such as 260- 299, Resource Conservation and Recovery Act (RCRA) hazardous wastes and sections 400-699, and water effluent guidelines and standards.	essay, quizzes, in-class discussion, exams (including final)
5	5	identify the various federal, state, and local wastewater and storm water laws and regulations and their origins (i.e., where and how they came about); explain the differences between a Municipal Separate Storm Sewer System (MS4) and a Sanitary Sewer System; compare and contrast national versus local pretreatment regulations; and differentiate between direct and indirect dischargers.	essay, quizzes, in-class discussion, exams (including final)
6	;	demonstrate a clear understanding of a selected environmental regulation.	report, in-class discussion, presentation
		identify the various federal, state, and local air laws and regulations and their origins (i.e., where and how they came	essay, quizzes, in-class

7	about); summarize major stormwater state and local regulations and other important acronyms; and understand Best Management Practices (BMPs) and characterize the different requirements for each BMP type.	discussion, exams (including final)
8	summarize key federal and state solid waste regulations; describe how pollutants are transferred through air, water, and solid waste into our environment; and define and explain the First Law of Thermodynamics.	essay, quizzes, in-class discussion, exams (including final)

# III. COURSE CONTENT

Estimated %	Торіс	Learning Outcomes			
Lecture (must total 100%)					
12.50%	Environmental acronyms - Federal, state and local jurisdictions and relationships - Legal terminology - Basics of environmental law	1, 6			
18.75%	Federal, state and local hazardous materials laws, acts, and regulations - Use of the ERG and DOT placards	2, 6			
15.50%	First responder awareness - Fire and Emergency Response regulations and practices with attention-grabbing examples - MSDS and regulations	3, 6			
15.75%	Pollution prevention (P2) regulations - P2 strategies and techniques with interactive demonstrations regarding materials exchange and trade-offs - Title 40 of the Code of Federal Regulations (CFR)	4, 6			
12.50%	Wastewater pretreatment regulations - Concept and need for pretreatment - National and local pretreatment programs	5, 6			
12.50%	Federal, state and local air regulations - Stormwater regulations and the National Pollutant Discharge Elimination System (NPDES) - Stormwater, stormwater programs, and BMPs	6, 7			
12.50%	Federal and state solid waste regulations - Local solid waste issues and directions - Table top "Enviroscape" demonstration with class participation.	6, 8			

### IV. TYPICAL ASSIGNMENTS

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A. Writing assignments

Wri	Writing assignments are required. Possible assignments may include, but are not limited to:					
1	reflections and summaries of newspaper/news articles, and/or Internet sources related to environmental regulations, programs, and guidelines in such areas as wastewater and stormwater treatment.					
2	essays and reports on the various federal, state, and local air laws and their origins.					

# B. Appropriate outside assignments

Appropriate outside assignments are required. Possible assignments may include, but are not limited to:

1 readings from the newspaper/news articles, and/or Internet sources on such topics as air quality regulation.

2 research and analysis of a selected environmental program, goal or regulation.

#### C. Critical thinking assignments

Critical thinking assignments are required. Possible assignments may include, but are not limited to:

1 prepare for the research-based oral report.

2 participate in group work linking current legislation to in-class discussions and debates.

3 compare and contrast national versus local wastewater pretreatment regulations and differentiate between direct and indirect dischargers.

#### 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 Other (Specify)

(1) Students may cooperatively work together to research and debate legislation stemming from federal, state, and local agencies. (2) Guest lecturers may be solicited (e.g., Department of Toxic Substances Control or DTSC) along with follow-up assigned group exercises that reinforce course content.

X Optional Field Trips

Required Field Trips

#### VI. METHODS OF EVALUATION

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

Χ	Essay Exam	X Classroom		Skill Demonstration
	Problem Solving	X Reports/Papers/	X	Participation
Χ	Objective Exams	X Projects	X	Other (specify)

Students may be evaluated on: (1) written assessments of the pros and cons related to various federal, state, and local legislation; and (2) research

culminating in an oral report and in-class discussions/debates on selected environmental regulations.

# VII. REPRESENTATIVE TEXTS AND OTHER COURSE MATERIALS

Kubasek, Nancy K., and Gary S. Silverman. <u>Environmental Law</u>. 8th ed. Prentice Hall, 2013.

Salzman, James, and Barton H. Thompson, Jr. <u>Environmental Law and Policy</u>. 4rd ed. Foundation Press, 2013.

# VIII. STUDENT MATERIALS FEES

X No Yes

# IX. PARALLEL COURSES

College	Course Number	Course Title	Units
No comparable community college or CSU courses			

# X. MINIMUM QUALIFICATIONS

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

X Letter grade (P/NP possible at student option)

2. Degree status:

Either [X] 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: X 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

D.

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: X No:
  - 2. If YES do you recommend this course for inclusion on the CSU General Education list?

Yes: $[No: X]$ 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	
University of California (UC) Articulation:						
1. Do you r	ecommend	this course	for transfer	to the UC?	Yes: 🗍 N	No: X

- Do you recommend this course for transfer to the UC? Yes: No: X
  If YES do you recommend this course for the Intersegmental General
- Education Transfer Curriculum (IGETC)? Yes: No: X

IGETC Area 1: English Communication

	English	Composition
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Critical Thinking-English Composition

Oral Communication

IGETC Area 2: Mathematical Concepts and Quantitative Reasoning

Mathematical Concepts

IGETC Area 3: Arts and Humanities

Humanities

IGETC Area 4: Social and Behavioral Sciences

	Anthropolog	v and	Archaeo	loav
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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: A research-based oral report using library print and online resources on such topics as the coordination of wastewater treatment regulations between various government agencies.

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

ENSC M04: 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 learn to sort through environmental legislation present at the federal, state, and local levels in order to make informed and responsible decisions regarding environmental policies.
- 2. Interpersonal: the students will learn the importance of discussion, debate, presentation, critique, and team work in order to effectively communicate ideas related to environmental laws.
- 3. Information: the students will gather, assimilate, and communicate essential information in order to demonstrate knowledge of relevant environmental regulations.
- 4. Systems: the students will demonstrate an awareness of potentially controversial legislation and propose alternative solutions for discussion and debate.
- 5. Technology: the students will continue to gather contemporary working knowledge of developments in technology as related to environmental policy formulation, implementation, and regulation.

The course also addresses the SCANS skills and personal qualities:

- 1. Basic Skills: the students will prepare an oral report and give a presentation which demonstrates a working knowledge of selected environmental policy.
- 2. Thinking Skills: the students will critically evaluate the effects of currently implemented and proposed legislation at the federal, state, and local levels.
- 3. Personal Qualities: the students will demonstrate competencies through oral and written presentations that will be shared with the class in an effort to establish an informed and involved citizenry.

XV. DISTANCE LEARNING COURSE OUTLINE ADDENDUM

ENSC M04: Not Applicable

#### XVI. GENERAL EDUCATION COURSE OUTLINE ADDENDUM

ENSC M04: Not Applicable

#### XVII. STUDENT MATERIALS FEE ADDENDUM

ENSC M04: Not Applicable

XVIII. REPEATABILITY JUSTIFICATION TITLE 5, SECTION 55041

ENSC M04: Not Applicable

# XIX. CURRICULUM APPROVAL

Course Information: Discipline: <u>ENVIRONM</u>ENTAL SCIENCE

Discipline Code and Number: ENSC M04

Course Revision Category: <u>Outline Up</u>date

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: Letrisha Mai 03/16/2016

Librarian: Mary LaBarge 03/16/2016

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