I. **Catalog Description and Credit Hours of Course:**

Introduction to formulation and provisions of environmental regulations and policies with an emphasis on major federal legislative acts. University Studies Interdisciplinary Course. Three class meetings per week. Three credit hours.

II. **Interdisciplinary Nature of the Course:**

The topic of the course requires the integration of knowledge from a variety of disciplines. The administration of environmental science programs must utilize biological, chemical, geological, sociological, political, managerial, industrial, technological, and psychological factors to establish legal responsibilities and interpret policies formulated through the regulatory process. The course crosses the University Studies Perspectives of Natural Systems and Human Institutions. Environmental law has become a system of regulations, guidelines, statutes, policy negotiation and case-specific interpretations that are interrelated. Environmental laws and policies are grounded in scientific inquiry into environmental challenges has been an interdisciplinary approach (i.e., Perspectives on Natural Systems) for developing solutions that may prevent, minimize, and remedy the actions that damage or threaten the environment, public health and occupational safety. The formulation, implementation, and enforcement of environmental laws and policies take place within cultural, economic, political, and social contexts (i.e., Perspectives on Human Institutions). The impacts of pollution on the disenfranchised populations which can not escape the environmental consequences of urbanization practices is a social issue that must be addressed by local, state, and federal government policy decisions.

III. **Prerequisite(s):** Junior standing and the Living Systems (any BS or BI course) and Physical Systems University Studies courses.

IV. **Purposes or Objectives of the Course:**

A. Have a fundamental understanding of the environmental laws, policies and processes that influence public policy and decision-making domains (1,2,4,7);

B. Have an appreciation of the impact of cultural, sociopolitical, economic, and scientific factors on environmental laws and policies (1,4,5,6,7);

C. Have an ability to apply knowledge of solid and hazardous waste laws and policies (1,2,4,5,7);

D. Have an ability to apply knowledge of contaminated site remediation laws and policies (1,2,4,6,7);
E. Have an ability to apply knowledge of waste minimization/recycling policies (1,2,7,8);
F. Have an ability to apply knowledge of air pollution laws and policies (1,2,6,7);
G. Have an ability to apply knowledge of water pollution laws and policies (1,2,6,7);
H. Have an ability to apply knowledge of environmental health science program regulations and management (1,2,4,5,6,7,8);
I. Have an appreciation of environmental negotiating techniques used in the environmental policy-making, regulation enforcement, and law-making arenas (1,2,4,5,6,7,8,9);
J. Have experience in researching actual court cases arising from environmental conflicts (1,2,3);
K. Have experience in communicating about regulatory statutes and scientific information (1,2,3,9).

V. Expectations of Students:
A. Attend class and participate in class discussions.
B. Complete out-of-class assignments by established deadlines.
C. Show satisfactory performance on exams and class presentations.

VI. Textbooks(s):

VII. Course Content or Outline:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Class Periods</th>
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<tbody>
<tr>
<td>Fundamentals of Environmental Law (1,2,4,5,6,7,8,9)</td>
<td>3</td>
</tr>
<tr>
<td>Resource Conservation and Recovery Act Regulations and Policies (1,2,4,5,6,7,8)</td>
<td>3</td>
</tr>
<tr>
<td>Clean Air Act (1,2,4,5,6,7,8)</td>
<td>3</td>
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<tr>
<td>Clean Water Act (1,2,4,5,6,7,8)</td>
<td>3</td>
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<tr>
<td>Oil Pollution Act (1,2,4,5,6,7,8)</td>
<td>2</td>
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<tr>
<td>Safe Drinking Water Act (1,2,4,5,6,7,8)</td>
<td>3</td>
</tr>
<tr>
<td>Superfund Legislation CERCLA/SARA (1,2,4,5,6,7,8)</td>
<td>3</td>
</tr>
</tbody>
</table>
Emergency Planning, Community Right To Know Act (1,2,4,5,6,7,8) 2

National Environmental Policy Act (1,2,4,5,6,7,8) 2

Endangered Species Act (1,2,4,5,6,7,8) 1

Coastal Zone Management (1,2,4,5,6,7,8) 1

Toxic Substance Control Act (1,2,4,5,6,7,8) 2

Pollution Prevention (1,2,4,5,6,7,8) 1

Federal Insecticide, Fungicide and Rodenticide Act (1,2,4,5,6,7,8) 1

Environmental Crime (1,2,3,4,5,6,7,8,9) 1

OSHA (1,2,3,4,5,6,7,8,9) 2

Public Health Law (1,2,3,4,5,6,7,8,9) 5

Student Presentations (1,2,3,6,7,9) 4

Examinations 3

Total 45

VIII. Basis of Student Evaluation:

A. Three essay examinations 60%

B. Individual out-of-class project/report 10%

C. Four group presentations on case law projects 20%

D. Research paper 10%

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100%

IX. Justification for Inclusion in the University Studies Program

Objective 1. Demonstrate the ability to locate and gather information.

Emphasis: Significant

Content: Students will utilize the library journal collection to locate and gather information regarding the use of federal and state regulations and policies to address specific environmental
and economic issues regarding air, land and water pollution. In addition, students will be expected to utilize on-line services including the U.S. Congress database, the United States Code database and the Pace Virtual Environmental Law Library to research and communicate laws, regulations, policies and court cases.

**Teaching Strategies:** Classroom instruction activities will include lectures, group discussions, and practical demonstrations of environmental laws and negotiating methods. The instructor will provide an introduction to and a fundamental working knowledge of all the environmental laws and program management objectives provided in Section IV. Group discussions will be held during the course to enable students to research court cases, policy debates and regulations and demonstrate their knowledge of how the lecture material applies to “real-world” situations. Students will attend an instructional tour of the library by library faculty and the instructor. Information sheets will be completed by the students to illustrate their understanding of locating specific journal information. In addition, on-line law resources will be shown to the students and the students will identify information for class activities. Finally, negotiation methods that are used by industry will be discussed and the students will practice these methods during group interactions.

**Student Assignments:** Students will be required to research environmental regulations and law libraries and deliver group discussions from these databases. In addition, students will be required to research environmental journals and government documents and prepare a paper that addresses one of the regulations discussed in class. The paper will include a summary of the law under study, the students’ belief model on how the regulation should function and supporting documentation for or against that belief.

**Evaluation:** The discussions of case studies by the students will document the ability to gather information and extrapolate the basis of court decisions to science and regulatory intent. Students will be required to gather supporting information for a written report that addresses a specific regulation and interpretation of that regulation. Evaluation of the material will be based on a clear definition and understanding of the topic, the interpretation of the data, and peer-review.

**Objective 2.** Demonstrate capabilities of critical thinking, reasoning, and analyzing.

**Emphasis:** Significant

**Content:** The emphasis of the course will involve the application of biological, chemical and geological principles to the social, political, economical, and psychological aspects of regulatory control and policy determination in the environmental arena. Students will be expected to develop critical reading and thinking skills that lead to the synthesis of factual and perceived information in order to make critical decisions on environmental law/policy issues.

**Teaching Strategies:** The course lectures, group discussions/presentations and research paper will all emphasize the basic direction and intent of each regulatory aspect of environmental law, but the students will be challenged to realize that there is no single method of achieving the intent or interpreting the guidance of the regulation/law/policy. The students will be encouraged to examine situations, identify potential options, and utilize critical evaluation skills on each option to make decisions.
**Student Assignments:** Students will be required to search various on-line databases via the web for court cases which address lecture materials and then critically examine the facts of the case to determine what options may have been used to address the subject matter and develop reasons for a decision in the case. Students will also prepare a research paper that will encompass one aspect of a chosen regulation or policy, the students’ belief on the success or failure of the regulation/policy, and supporting documentation for the belief. In order to complete this task, students must utilize critical thinking, sound reasoning and information analysis.

**Evaluation:** The case study summaries and group discussions will require a verbal report and a written summary, both of which will be evaluated for the quality of analysis, critical thinking and reasoning. The research paper will require a written report, which will be evaluated for quality of analysis, critical thinking, reasoning, and writing quality. Finally, the short-answer/essay examinations will be evaluated in the same manner.

**Objective 3.** Demonstrate effective communication skills.

**Emphasis:** Significant

**Content:** Effective communication skills are very necessary for the explanation of environmental laws/regulations/policies. These skills include written interpretations, critical and creative thinking, a well analyzed, reasoned and structured argument, a clearly organized verbal presentation, and non-verbal mannerisms that show interest and cooperation in joint efforts. The students will be required to participate in written, verbal, and non-verbal communications related to course objectives.

**Teaching Strategies:** Students will be exposed to effective and ineffective written communications related to environmental law and policy debates through case law review and on-line resources. Also, students will be exposed to reasoned argument and critical thinking methods through textbook and supplementary reading assignments. Verbal communications will be in the forms of lectures/discussions, group discussions and student group presentations. Written work on a specified topic will be submitted and graded on presentation of ideas and critical content. The instructor will evaluate the material and offer suggestions for improvement. Students will utilize the evaluated material to structure a more in-depth response to the same topic.

**Student Assignments:** The course will place great emphasis on communication methods. A primary course assignment will involve a student verbal presentation of case studies or policy debates that proffers the critical review of case facts. The talk will be organized and prepared by students with the assistance of the instructor. A second primary assignment of the course will involve an independent research paper, which clearly states the student’s belief of the success or failure of a specific regulation/policy. The student must organize and prepare a written document that succinctly states the belief and supporting documentation. Essay questions on examinations will also require effective written communication.

**Evaluation:** The verbal presentations to the class will be evaluated in terms of content and quality. The written case summaries and research paper will be evaluated in terms of content, organization and quality of supporting documentation. Answers to essay questions will be evaluated on content, organization and clarity.
Objective 4. Demonstrate an understanding of human experiences and the ability to relate them to the present.

Emphasis: Considerable

Content: The interaction of scientific and sociological factors involved with the establishment, management and dynamic continuation of all environmental programs will be strongly emphasized during the course. The environmental movement has had a history of reactive legislation and policy interpretation based on perception rather than facts. This course will provide a fundamental introduction to the environmental laws, regulations and policies that have evolved in order to facilitate a social, political and scientific understanding of intent in each student.

Teaching Strategies: Lectures/group discussions will be used to provide historical, sociopolitical and scientific information as it applies to environmental laws/regulations/policies and environmental program management. In addition, case study review and student presentations will be used to demonstrate the effectiveness of sociopolitical perceptions or scientific evidence during negotiation processes.

Student Assignments: Assigned readings in textbooks and scholarly journals will be used to discuss the course objectives stated in Section IV. The research paper will be based on the student’s perception of the success or failure of a specific environmental law/regulation/policy, therefore, a direct link between perception and fact will be shown to each student during the preparation of the paper.

Evaluation: Assessment of the student’s appreciation of the relation of human experience and perception to present conditions will be through examinations, case review discussion and the research paper.

Objective 5. Demonstrate an understanding of various cultures and their inter-relationships.

Emphasis: Some.

Content: The cultures that will be discussed in this course are limited to corporate culture, regulatory culture and an overall population culture. There are extreme differences between each of these entities. Corporate cultures are generally based on a desire for less regulation and a wide interpretation of environmental law/regulation/policy. Regulatory cultures are generally based on strict interpretation and scientific knowledge. The culture of the population as a whole is based on a desire to be protected from all harm and risk, either real or perceived. In addition, the cultural issues associated with environmental justice issues will be explored using current Brownfield policies, National Environmental Protection Act guidance, and environmental justice executive orders.

Teaching Strategies: Lecture/discussions and group presentations will be used to demonstrate the differences between cultures and how these differences influence environmental law/regulation/policy decisions.

Student Assignments: Assigned readings in textbook and scholarly journals will cover the cultural impacts discussed above.
Evaluation: Assessment of the students’ appreciation of cultural challenges will be done through group discussions and examination questions.

Objective 6. Demonstrate the ability to integrate the breadth and diversity of knowledge and experience.

Emphasis: Significant.

Content: The very nature of the study and interpretation of environmental law/regulation/policy requires the integration of knowledge from a broad diversity of disciplines, including: biology, chemistry, geology, economics, industrial technology, sociology, political science, law, business management and psychology. Students will be instructed on how various methods within diverse disciplines are used to develop environmental policies. The course will discuss the importance of diversity in establishing the intent and interpretation of environmental law/regulation/policy. An example of this activity is the illustration of the interplay of various professions in the development of environmental impact statements (EIS) resulting from the requirements of the National Environmental Policy Act. Student groups are asked to prepare the framework of an EIS based on scenarios provided by the instructor. The students discover that the skills needed to complete the framework include knowledge of the biological, chemical, geological, business planning/accounting, sociological, psychological, political science and communication professions.

Teaching Strategies: Lecture/discussion, group discussions of case studies, and a research paper will be used to demonstrate the application of various methodologies and the impacts of diverse scientific, sociopolitical, psychological and business management factors on the formulation, implementation and enforcement of environmental law/regulation/policy.

Student Assignments: Reading assignments and case study reviews will be used to provide students with an understanding of the impacts of diverse disciplines on environmental law/regulation/policy. The research paper will also provide the students with an opportunity to demonstrate an understanding of the impact of various disciplines on the effectiveness of environmental law/regulation/policy.

Evaluation: Written assignments, group discussions of case studies, and examination responses will be evaluated with regard to the students’ ability to integrate the broad and diverse disciplines that impact environmental law/regulation/policy.

Objective 7. Demonstrate the ability to make informed, intelligent value decisions.

Emphasis: Considerable

Content: The objectives of this course provide the student with a fundamental knowledge of the expected outcomes associated with major environmental laws/regulations/policies. The emphasis of the course is to provide an introduction to the requirements and intentions of major environmental laws/regulations/policies and program establishment and management. The issues of environmental law confront students with value questions regarding natural resource usage and preservation, the ethics of community contamination, land use practices, sociopolitical and economic allocation of support for environmental programs, and the value of risk assessment benefits.
**Teaching Strategies:** Lecture/discussion will emphasize decision-making strategies that encompass the gathering, assessing, and valuing of specific scientific, sociopolitical and management factors that are fundamental to the environmental law/regulation/policy area.

**Student Assignments:** Reading assignments, case-study reviews, group discussions and a research paper will require students to examine the importance of science, societal values and personal values on the establishment of an environmental program.

**Evaluation:** Examination responses, a research paper, case-study summaries and group discussions will be evaluated for evidence of information- and value-based decision-making.

**Objective 8.** Demonstrate the ability to make informed, sensitive, aesthetic responses.

**Emphasis:** Some

**Content:** The course will address the issues associated with sensitive, aesthetic responses to environmental concerns related to land use, and natural resource conservation. The emphasis of aesthetics to be addressed in this course will be concerned with the requirements of the National Environmental Protection Act and the Clean Water Act. Other aesthetic issues will be addressed in solid waste and hazardous waste disposal.

**Teaching Strategies:** This objective will be addressed through lecture/discussion, case-study review, group discussion and reading assignments.

**Evaluation:** Evaluation of students understanding of this objective will be conducted using examination responses and case-study discussions.

**Objective 9.** Demonstrate the ability to function responsibly in one’s natural, social, and political environment.

**Emphasis:** Significant.

**Content:** This course is intended to significantly address this objective. The course will repeatedly emphasize the intricate mechanisms associated with environmental laws/regulations/policies and the rules of the regulated community, the regulators and the potential impacts to the general public. The students will understand the importance of the sociopolitical forces that influence environmental issues and perceptions. In addition, the students will also demonstrate knowledge of importance of natural systems and the desire to protect and value resources.

**Teaching Strategies:** This objective will be addressed through lecture/discussion, case-study review and the preparation of a research paper. A discussion of the Dominant Social Paradigms that influence policy and law formation will be crucial in developing student attitudes and understanding in this objective.

**Student Assignments:** The reading assignments will provide each student with a thorough understanding of the requirements associated with major environmental laws/regulations/policies. The case-study reviews will assist students in evaluating the importance of sociopolitical and business management factors in environmental decision making.
The research paper will allow students to demonstrate their understanding of how diverse factors influence the establishment of environmental laws/regulations/policies.

**Evaluation:** The student assignments will be evaluated with regard to the realization of how diverse factors influence one’s ability to responsibly function in a natural and sociopolitical environment.

**X. Background**

The instructor of this course should have excellent knowledge of current environmental laws/regulations/policies facing today’s society. In addition, the instructor should have experience in addressing concerns of the regulated community, general public, and regulators. A working knowledge of regulation and policy interpretation is imperative for the instructor. This knowledge can be used to demonstrate the influences of scientific knowledge, sociopolitical factors and business management skills on environmental regulations/policy formation.

**XI. Limitation on Course Enrollment**

Course enrollment would be limited to 20 students due to class time limitations. Class time needed for group discussions and presentations would impact lecture/discussion time if the class size exceeds the limits established in the Course Approval Guidelines.