

Revised: July 2003

COURSE INFORMATION

COURSE PREFIX/NUMBER: **EVT 206**
COURSE TITLE: **Introduction to Environmental Compliance**
LECTURE HOURS PER WEEK: 3.0
CREDIT HOURS PER SEMESTER: 3.0

DL ATTENDANCE/VA STATEMENT TEXTBOOK INFORMATION

COURSE DESCRIPTION

This course covers an introduction to regulatory concepts and requirements for compliance with environmental regulations by governmental and non-governmental entities.

COURSE COMPETENCIES/PERFORMANCE OBJECTIVES

The student will be provided with instruction and appropriate supporting materials to develop knowledge of environmental protection concepts, issues and regulatory requirements. Upon successful completion of this course, the student should be able to:

Module 1: Introduction to the Environmental Movement and Environmental Regulation in the U.S.

- Describe the development of the environmental movement and environmental regulatory system in the US
- Identify Federal and State regulatory agencies that regulate environmental impact-producing activities in South Carolina
- Identify important non-governmental organizations that may be involved in environmental impact issues in South Carolina
- Discuss the major sources of pollution from construction, industrial or other sources that have potential impacts on environmental systems and human health

Module 2: Development and Adoption of U.S. Environmental Laws and Regulations

- Describe the processes by which environmental laws and regulations are developed and adopted at the Federal and State levels.
- Identify the major Federal and State laws that control environmental impact-associated activities in the US and South Carolina.
- Discuss the relationships among environmental laws, implementing regulations and agency guidance.
- Locate applicable Federal and State environmental laws and regulations using the Federal Register, the U.S. Code, the Code of Federal Regulations or the State Registers and Administrative Codes

Module 3: Review of Scientific Concepts Related to Environmental Impacts and Regulation

- Describe major types of environmental impacts pollutant discharges can have in terrestrial and aquatic ecosystems
- Discuss major ecological processes that are related to environmental impacts of specific types of pollutants and discharges
- Discuss major types of human health impacts associated with pollutant discharges

Module 4: Air Quality

- Describe the basic provisions of the Clean Air Act and its amendments
- Describe the roles of Federal and State agencies in implementation and enforcement of provisions of the Clean Air Act

- Describe the process of obtaining required construction and operating permits for an emitting source under various situations
- Describe requirements for compliance emissions testing and data reporting
- Describe technologies available for control of gaseous and particulate air pollutants

Module 5: Control of Water Pollution, Safe Drinking Water and Related Topics

- Describe the basic provisions of the Clean Water Act and its amendments
- Describe the roles of Federal and State agencies in implementation and enforcement of provisions of the Clean Water Act
- Describe the requirements for construction and operating permits for wastewater treatment facilities
- Describe the requirements for obtaining NPDES permits for wastewater- and storm water discharging facilities
- Describe requirements for wastewater and storm water discharge testing and data reporting
- Describe technologies available for control of pollutant discharges in wastewater and storm water

Module 6: Regulation of Hazardous and Non-Hazardous Solid Wastes

- Describe the basic provisions of RCRA and its amendments
- Describe the roles of Federal, State and Local regulatory and responder agencies in control of handling, storage, transport and control of releases of hazardous wastes
- Define and distinguish among solid, hazardous and non-hazardous wastes
- Identify facilities that are subject to management under applicable hazardous waste generator categories
- Describe requirements for handling, storage, treatment and disposal of hazardous wastes
- Prepare a hazardous waste shipping manifest and describe the labeling and manifesting requirements for transporting hazardous wastes
- Describe requirements for management of underground storage tanks
- Describe the intent and requirements for a Facility Contingency Plan
- Discuss the objectives of CERCLA, SARA and the National Contingency Plan in remedial cleanup of hazardous waste sites
- Discuss requirements for control of hazardous chemical releases under EPCRA

Module 7: Protection of Public and Worker Health and Safety

- Discuss the role of OSHA in protecting the health of workers through maintenance of a safe working environment
- Describe OSHA requirements for maintenance of records on safety plans, injuries and illnesses related to on-the-job activities
- Describe OSHA mandated health and safety training requirements
- Identify various classes of materials that constitute physical, chemical or biological hazards and relate their properties to their specific hazards
- Discuss workplace hazard communication requirements, including use of labeling and employee training
- Obtain and retrieve basic information about hazardous chemicals from Material Safety Data Sheets
- Describe appropriate emergency response procedures and reporting requirements for chemical spills or releases

Module 8: Survey of Other Environmental Laws and Regulations

- Identify projects that would require preparation of an Environmental Impact Statement
- Describe the factors considered in Environmental Assessments and Environmental Impact Statements
- Describe the general requirements for registration, use, storage and disposal of pesticides
- Describe categories of contaminants subject to control in public drinking water Systems
- Describe requirements for use, storage and disposal of PCB's under TSCA

MINIMAL STANDARDS

Minimal standards of performance for course competencies are indicated by achieving a 60 percent accuracy level on all evaluation instruments used in the course performance evaluation strategy.

COURSE REQUIREMENTS

Attendance Policy

Students are responsible for attending class meetings in the course and for completion of all reading and written assignments made in all classes. If a student is absent from a class meeting, it is the student's responsibility to obtain and complete any assignment that may have been made in the missed meeting. Students who are absent from more than 20 percent of the total contact class hours will be withdrawn from the course in accordance with the York Technical College attendance policy. Therefore, since this course has a total of 48 contact hours, any student who is absent for a cumulative total of 12 hours will be withdrawn regardless of the student's status relative to other performance measures.

Withdrawal from A Course

A student may withdraw from a course after the drop/add period until midterm with a grade of "W" (withdrawn). To withdraw from a course, the student must obtain and complete a Request for Withdrawal form from his advisor or from Student Services. Students who withdraw after midterm may receive a grade of "W" at the discretion of the instructor if performance has been satisfactory to the point of withdrawal. Otherwise, such withdrawals will receive a grade of "WF".

Student Conduct

Students are required to conform to all conduct codes as specified in the York Technical College Handbook and Catalog. In addition, any incidents of cheating or other academic dishonesty shall result in mandatory withdrawal of the student from the course, assignment of a grade of "F," and possible further disciplinary action as appropriate.

EVALUATION STRATEGIES/GRADING

Grades will be determined as described below:

All competencies will be evaluated with a minimum of four one-hour exams given at intervals during the course (see below), plus a comprehensive final exam at the completion of the course. Each hour exam will count 20 percent of the course grade and the final exam will count 15 percent. In-class pop quizzes or oral quizzes will determine the final five percent of the grade. Certain competencies, at the discretion of the instructor, may be further evaluated through homework assignments, written reports or other appropriate instruments. The grading scale for the course will be as follows:

Test 1	Modules 1 & 2	20% of course grade
Test 2	Modules 3 & 4	20% of course grade
Test 3	Modules 5 & 6	20% of course grade
Test 4	Modules 7 & 8	20% of course grade

Quizzes, homework, written reports, etc. = 5% of course grade

Final Exam = 15% of course grade
100%

A 90 – 100

B	80 – 89
C	70 – 79
D	60 – 69
F	Below 60

Attached is a statement of your instructor's additional requirements and/or policy.
Entry Level Skills: NONE

Prerequisites: NONE

Co-Requisites: NONE

TOPIC/CONTENT OUTLINE

History and Background of Environmental Regulation
Federal and State Environmental Laws, Regulations and Regulatory Frameworks
Environmental Science Principles
Air Quality Laws and Regulations
Water Quality Laws and Regulations
Solid and Hazardous Waste Laws and Regulations
Human Health Issues and OSHA Regulations

Module 1: Introduction to the Environmental Movement and Environmental Regulation in the U.S.
Development, Conservation, Preservation and Environmentalism
Private Enterprise
Federal and State Agencies
Non-Governmental Organizations and Activities
Preservation and Land Use
Environmental Protection Laws and Regulations
Pollution
Waste Disposal
Environmental Impacts
Human Health Impacts

Module 2: Development and Adoption of U.S. Environmental Laws and Regulations
Laws, Policies and Regulations
Laws and Legislation at the Federal Level
Publication of Proposed and Enacted Laws
Implementation of Laws
State Laws and Regulations – North and South Carolina
Agency Publications
Locating Laws, Regulations and Documents

Module 3: Review of Scientific Concepts Related to Environmental Impacts and Regulation
Species, Adaptation and Evolution
Organisms and Populations
Habitat
Ecosystems and Diversity
Pollution and Pollutants
Metabolism
Biodegradation
Biomagnification
Toxicity
Carcinogenicity
Dose-Response Relationships
Surface Waters

Ground waters
Water Quality
Oxygen Demand and Pollutant Loadings
Air Quality
Soils, Sediment and Sediment Quality
Radiation

Module 4: Air Quality
Air Quality, Air Quality Standards and Pollutant Emissions
The Clean Air Act and Its Amendments
Regulatory Provisions
Permits
Risk Management Plans
Air Quality and Emissions Sampling
Dispersion Modeling
Emissions Control Technologies

Module 5: Control of Water Pollution, Safe Drinking Water and Related Topics
Control of Water Pollution, Safe Drinking Water and Related Topics
Wastewater and Discharges
Clean Water Act
Implementing Regulations - 40 CFR 110-140
Controlled Activities Under the CWA
Wastewater Discharges to Receiving Waters and Permit
Wastewater Discharges to Municipal POTW's and Pre-Treatment
The NPDES System and Permits
Cooling Water Intakes and Discharges
Storm water Discharges
Safe Drinking Water Act

Module 6: Regulation of Hazardous and Non-Hazardous Solid Wastes
Solid Wastes and Hazardous Wastes
Solid and Hazardous Waste Handling, Storage and Disposal Issues
The Resource Conservation and Recovery Act

RCRA Implementing Regulations
CERCLA, SARA and the NCP
Solid Waste
Hazardous Waste
Hazardous Waste Generators
Requirements for Hazardous Waste Generators
Hazardous Waste Accumulation
Special Requirements for Tank Management
Shipping and Handling Requirements
Spill and Release Preparedness
Facility Contingency Plan
Treatment, Storage and Disposal Facility Requirements
Personnel Training Requirements
Waste Minimization
Waste (Used) Oil Management
Universal Waste Management
Underground Storage Tanks
Aboveground Storage Tanks

Module 7: Protection of Public and Worker Health and Safety
OSHA regulations

Process Safety Management
Asbestos Management
Lead Abatement

Module 8: Survey of Other Environmental Laws and Regulations

Survey of Other Environmental Laws and Regulations

National Environmental Policy Act

Safe Drinking Water Act

Toxic Substances Control Act

Federal Insecticide, Fungicide and Rodenticide Act