

**NEW/REVISED/INACTIVATED
PROGRAM**

School of Technology & Human Services
Division

3/22/99

Environmental Technology
Name of Program

New Program [] Attach required information listed on "Program Checklist" and proposed program.

Major Revision of [✓] Major revision is defined as three or more course changes. To change an existing degree/certificate program, provide a typed page of program/certificate and underscore the changes or new additions and line out the deletions.

Rationale for revision:

1. The word "hazardous" was removed from most course titles because of the negative perception by parents of high school aged students; i.e., EHMT 130, EHMT 150, and EHMT 200.
2. Two courses were divided into four shorter courses to fit schedules of U.S. Navy personnel and working adult students; i.e. EHMT 150A, EHMT 150B, EHMT 200A, and EHMT 200B.
3. One course was divided into two district components, each of which is identical to respective California and federal course outlines, thereby, allowing students to receive government certifications for successful completion; i.e., EHMT 231 and EHMT 232.

Delete Program [] Rationale for deletion:

C. Erdahl
Division Dean

_____ Date

Vice President for
Academic Affairs

_____ Date

Vice President for the
Academic Senate

_____ Date

Instructional Office Use Only	
Approved by:	
C&I Sub A	_____ Date
C&I Committee	_____ Date
Governing Board	_____ Date
Catalog Revision	_____ Date

Division Technology & Human Services

Dean Charlotte A. Erdahl, M.A.

Office Bldg. 570, Room 570B

Phone 482-6460

Instructor Robert Evangelista, M.S.

General Description

Environmental Technology Program has two areas of emphasis that allow students to specialize in the new and growing fields of Environmental Management and Occupational Health and Safety. Environmental Management emphasizes the study of and the solutions for environmental pollution and its effect on the environment. Occupational Health and Safety emphasizes the causes of and the solutions for hazardous agents in occupational settings, ~~unsafe work practices~~, and their effect on human health and welfare.

Career Options

The following list is a sample of the many career options available for the environmental major. Most of these require a certificate or an associate degree, or a baccalaureate degree, and a few require a graduate level degree: field sampling technicians, environmental scientist, hazardous materials specialist, pollution control technician, environmental investigator, water quality technician, air quality aid, recycling coordinator, environmental economist, environmental lawyer, environmental journalist, waste management specialist, vocational teacher, transportation planner, legislative researcher, emergency responder, site remediation specialist, hazardous materials manager, wastewater treatment operator, pollution prevention specialist, toxicologist, environmental regulator, environmental activist, and occupational health and safety specialist.

Counseling

All Southwestern College majors are urged to consult with a counselor as soon as possible to develop a *Student Education Plan (SEP)*.

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Counseling

All Southwestern College majors are urged to consult with a counselor as soon as possible to develop a *Student Education Plan (SEP)*. Students who are considering transferring to a four-year university upon the completion of an Associate of Science Degree in Environmental Technology are advised to consult with a counselor and the Transfer Center about university-specific transfer requirements.

ENVIRONMENTAL TECHNOLOGY

(Career/Technical)

COMMON CORE:

CIS 101	Intro. To Computers & Information Processing	4
EHMT 100	Intro. To Environmental Technology	3
EHMT 130	Health Effects of Hazardous Materials	3

		40

Plus Graduation and General Education Requirements

Areas of Emphasis:
Environmental Management
Occupational Health & Safety

ENVIRONMENTAL MANAGEMENT EMPHASIS

Career/Technical

Chem 100	General Chemistry	4
EHMT 110	Waste Stream Generation/Reduction & Treatment	3
Chem 110	Elementary Organic and Biological Chemistry	4
Biol 140	Environmental Biology	3
EHMT 150	Hazardous Waste Management Applications	4
EHMT 200	Hazardous Materials Management Applications	4
EHMT 230	Safety and Emergency Response	4
EHMT 290-293	Environmental Tech. Coop. Work Exp. I-IV	2-4
	<i>Plus Common Core courses for Environmental Technology</i>	10

		38-40

Recommended Electives:

Biol 265; Bus 120, 152; Comm 103; Geol 100; Math 121, 250; PS 102.

Associate in Science Degree

The program focuses on waste treatment technologies, current hazardous waste and hazardous materials regulations, sustainable development, economic and socio-political environmental issues, small business and large facility compliance, emergency response techniques, toxicology, pollution prevention, and the cleanup of contaminated air, water, and soil.

ENVIRONMENTAL TECHNOLOGY

(Career/Technical)

COMMON CORE:

EHMT 100	Intro. To Environmental Technology	3
EHMT 130	Introduction to Toxicants	3

		6

Plus Graduation and General Education Requirements

Areas of Emphasis:
Environmental Management
Occupational Health & Safety

ENVIRONMENTAL MANAGEMENT EMPHASIS

Career/Technical (Major Code: 001971)

Chem 100	General Chemistry	4
EHMT 110	Waste Stream Generation/Reduction & Treatment	3
Chem 110	Elementary Organic and Biological Chemistry	4
Biol 140	Environmental Biology	3
EHMT 150	Waste Management Applications	4
	Or	
EHMT 150A	Environmental Regulations I and	2
EHMT 150B	Environmental Regulations II	2
EHMT 200	Environmental Mtrls. Management App.	4
	Or	
EHMT 200A	Environmental Regulations III and	2
EHMT 200B	Environmental Regulations IV	2
EHMT 230	Safety and Emergency Response	4
	Or	
EHMT 231	Hazardous Mtrls. Incident Response and	2
EHMT 232	CSTI Incident Commander. & First Responder Operations	2
EHMT 290-293	Environmental Technology Cooperative Work Experience I-IV	4
	<i>Plus Common Core courses for Environmental Technology</i>	6

		36

Recommended Electives:

Biol 265; Bus 120, 152; CIS 101; Comm 103; Geol 100; Math 121, 250; PS 102.

Associate in Science Degree

The program focuses on waste treatment technologies, current hazardous waste and hazardous materials regulations, sustainable development, economic and socio-political environmental issues, small business and large facility compliance, emergency response techniques, toxicology, pollution prevention, and the cleanup of contaminated air, water, and soil.

A forty-hour certification that meets OSHA requirements for 29 CFR 1910.120 is given upon the successful completion of EHMT 230.

Certificate of Achievement is granted upon the completion of EHMT 100, 110, 130, 150, 200, and 230.

OCCUPATIONAL HEALTH & SAFETY EMPHASIS

Career/Technical

Chem 100	General Chemistry	4
Biol 190	Human Anatomy and Physiology	4
EHMT 230	Safety & Emergency Response	4
EHMT 260	Occupational Safety	3
EHMT 261	Occupational Safety Management	3
EHMT 270	Introduction to Industrial Hygiene	3
EHMT 271	Introduction to Industrial Hygiene II	3
EHMT 272	Techniques in Industrial Hygiene	2
EHMT 290-293	Environmental Tech. Work Exp. I-IV	2-4

Plus Common Core courses for Environmental Technology 40

38-40

Recommended Electives:

Biol 211, 265; Math 119.

The program focuses on the recognition, evaluation, and control of hazardous agent in the work environment; regulations pertaining to the California and Federal Occupational Safety and Health Administration; the toxicological effects of hazardous agents in the workplace, occupational diseases, and methods of prevention; industrial safety practices; the administration and management of safety programs; and monitoring techniques for airborne contaminants, noise heat, illumination, and radiation.

Certificate of Achievement is granted upon the completion of EHMT 100, 130, 230, 260, 270, 271 and 272.

A forty-hour HAZWOPER certification that meets OSHA requirements for 29 CFR 1910.120 is given upon the successful completion of EHMT 230 or EHMT 231.

Certificate of Achievement is granted upon the completion of EHMT 100, 110, 130, 150 or 150A & 150B, 200 or 200A & 200B, and 230 or 231 & 232. (Major Code: 01972)

OCCUPATIONAL HEALTH & SAFETY EMPHASIS

Career/Technical (Major Code: 01973)

Chem 100	General Chemistry	4
Chem 110	Elem. Organic & Biological Chemistry	4
Biol 190	Human Anatomy and Physiology	4
EHMT 230	Safety & Emergency Response	4
	or	
EHMT 231	Hazardous Mtrls. Incident Response	2
	and	
EHMT 231	Incident Commander & First Responder Operations	2
EHMT 260	Occupational Safety	3
EHMT 261	Occupational Safety Management	3
EHMT 270	Introduction to Industrial Hygiene	3
EHMT 271	Introduction to Industrial Hygiene II	3
EHMT 272	Techniques in Industrial Hygiene	2
EHMT 290-293	Environmental Tech. Coop. Work Exp. I-IV	4

Plus Common Core courses for Environmental Technology 6

36

Recommended Electives:

Biol 211, 265; CIS 101; Math 119.

Associate in Science Degree

The program focuses on the recognition, evaluation, and control of hazardous agents in the work environment; regulations pertaining to the California and federal Occupational Safety and Health Administration; the toxicological effects of hazardous agents in the workplace, occupational diseases and methods of prevention; industrial safety practices; the administration and management of safety programs; and monitoring techniques for airborne contaminants, noise, heat, illumination, and radiation.

A forty-hour HAZWOPER certification that meets OSHA requirements for 29 CFR 1910.120 is given upon the successful completion of EHMT 230 or EHMT 231.

Certificate of Achievement is granted upon the completion of EHMT 100, 130, 230, 260, 270, 271 and 272. (Major Code: 01974)