



University of Maryland University College

**Master of Science in Environmental Management (ENVM)
Information and Technology Systems Department**

PROGRAM ASSESSMENT PLAN
Program Outcomes and Learning Assessment Criteria

Summer 2007

Master of Science in Environmental Management Program

TABLE OF CONTENTS

Program Overview: Master of Science in Environmental Management Program3

Program of Study: Master of Science in Environmental Management Program.....4

Development of Program Outcomes: Master of Science in Environmental Management Program5

Program Outcomes: Master of Science in Environmental Management Program.....6

Alignment of Program Outcomes with Learning Objectives and Assessment Methods: Master of Science in Environmental Management Program.....7

Master of Science in Environmental Management Program

PROGRAM OVERVIEW

The Master of Science in Environmental Management Program is designed to provide the skills, knowledge, and competencies in environmental management to function effectively in diverse organizational settings engaged in the field. The courses in the program are interrelated and provide a solid conceptual and applied foundation. An applicant must have at least six undergraduate credits in basic biology and chemistry for admission to the program.

Master of Science in Environmental Management Program

PROGRAM OF STUDY

CORE COURSES

UCSP 611	Introduction to Graduate Library Research Skills	0 credit hours
ENVM 641	Environmental Auditing	3 credit hours
ENVM 643	Environmental Communication and Reporting	3 credit hours
ENVM 646	Environmental Law and Policy Development	3 credit hours
ENVM 647	Environmental Risk Assessment	3 credit hours
ENVM 649	Principles of Waste Management and Pollution Control	3 credit hours

SPECIALIZATIONS: Students must complete one of the following three specializations.

Waste and Natural Resource Management:

WNRM 645	Hazardous Materials Transportation	3 credit hours
WNRM 644	New Technologies in Environmental Management	3 credit hours
WNRM 650	Land and Water Resource Management	3 credit hours
WNRM 651	Watershed Planning Management	3 credit hours
WNRM 652	Principles of Air Quality Management	3 credit hours
WNRM 653	Land Use Management	3 credit hours
WNRM 670	Seminar in Environmental Management	3 credit hours

Energy Resources Management and Policy Development

ENER 601	Energy Resources	3 credit hours
ENER 602	Energy Economics	3 credit hours
ENER 603	Energy Infrastructure	3 credit hours
ENER 604	New Technologies in Energy Management	3 credit hours
WNRM 644	New Technologies in Environmental Management	3 credit hours
WNRM 650	Land and Water Resource Management	3 credit hours
WNRM 670	Seminar in Environmental Management	3 credit hours

Project Management

PMAN 634	Foundations of Project Management	3 credit hours
PMAN 637	Risk and Quality Management	3 credit hours
PMAN 638	Communication, Negotiation, and Conflict Resolution	3 credit hours
PMAN 639	Project Knowledge Management	3 credit hours
PCMA 627	Legal Aspects of Contracting	3 credit hours
MGMT 640	Financial Decision-Making for Managers	3 credit hours
PMAN 670	Advanced Project Methods	3 credit hours

Master of Science in Environmental Management Program

DEVELOPMENT OF PROGRAM OUTCOMES

The table below identifies the curricular influences that support the program outcomes specific to the Master of Science in Environmental Management Program.

SOURCES/RESOURCES PROVIDING CURRICULAR FOUNDATION FOR PROGRAM OUTCOMES Master of Science in Environmental Management Program		
SOURCE	DESCRIPTION	WEB ADDRESS OR DOCUMENT NAME (if applicable)
Core Learning Areas of the UMUC Graduate School of Management and Technology	<p>UMUC degree programs are required to imbed identified institutional CLAs into each degree program. The CLAs for the Graduate School of Management and Technology are:</p> <ul style="list-style-type: none"> • Written Communication (COMM) • Technology Fluency (TECH) • Information Literacy (INFO) • Quantitative Literacy (QUAN) • Critical Thinking (THIN) <p>The expanded definition for each Core Learning Area was considered in creating the respective program outcome.</p>	UMUC Institutional Plan for the Assessment of Student Learning
Program Advisory Committee	Members of the committee have been designated to assist in the development of the entire Master of Science in Environmental Management Program.	
Other environmental management programs offered at major universities.		
International standards and mandates of federal and state environmental agencies, including those related to water and air quality, waste management, and land resource management.		

Master of Science in Environmental Management Program

PROGRAM OUTCOMES

The program outcomes for the Master of Science in Environment Management Program are delineated below. The program outcomes describe the expectations for all graduates of the Master of Science in Environmental Management Program.

PROGRAM OUTCOMES Master of Science in Environmental Management Program	
CORE LEARNING AREA	PROGRAM OUTCOME
COMM	Recognize the importance of effective communication skills in the design of an environmental management system.
TECH	Use technological resources for effective management of an environmental project.
INFO	Articulate environmental policies for business and industry that are based upon research and best practice.
QUAN	Use skills of quantitative analyses in the management of environmental risk assessment.
THIN	Critique new/emerging strategies, laws, and regulations pertinent to the field of environmental management.

Master of Science in Environmental Management Program

ALIGNMENT OF PROGRAM OUTCOMES WITH LEARNING OBJECTIVES AND ASSESSMENT METHODS

The following grid aligns the program outcomes of the Master of Science in Environmental Management Program with: 1) learning objectives from the designated program coursework and 2) specific methods used to assess student learning within the degree program.

CURRICULAR ALIGNMENT Master of Science in Environmental Management Program			
CORE LEARNING AREA	PROGRAM OUTCOME	LEARNING OBJECTIVE(S) AND CORRELATING COURSEWORK	METHOD(S) OF ASSESSMENT
COMM	Recognize the importance of effective communication skills in the design of an environmental management system.	Effectively communicate to top management the benefits of developing and implementing an environmental management system in an organization. (WNRM 670)	Project (Capstone/ Program)
TECH	Use technological resources for effective management of an environmental project.	Describe the interrelationships between policy makers, regulators, stakeholders, advocacy groups and the news media. (ENVM 646)	Research Paper
INFO	Articulate environmental policies for business and industry that are based upon research and best practice.	Manage a project to monitor and influence future policy initiatives, including the identification of multiple pressure points in a given political process. (ENVM 646)	Research Paper
QUAN	Use skills of quantitative analyses in the management of environmental risk assessment.	Use computer software and management techniques to identify, diagnose, and communicate environmental risk assessment. (ENVM 647)	Individual Report/Paper
THIN	Critique new/emerging strategies, laws, and regulations pertinent to the field of environmental management.	Evaluate the global trends that influence the development of domestic and international energy and environmental policy. (ENVM 646)	Research Paper