

ERM Learning Goals and Objectives

Goal 1. Scientific Analysis of Environmental Issues

Students should be able to analyze scientific aspects of various environmental issues.

Objective 1: Analysis

Students should be able to analyze the scientific aspects of various environmental issues such as human biology and toxicology; ecosystems and biodiversity; environmental chemistry; energy and technology; environmental geology and hydrologic systems, and probability and inferential statistics.

Goal 2: Public Policy Analysis

Students should be able to evaluate public policy as it relates to environmental issues.

Objective 1: Economic Analysis

Students should be able to evaluate trade-offs, efficiency and market failures, conduct benefit-cost and cost-effectiveness analysis, calculate net present value, understand fairness and sustainability and the structuring of incentives.

Objective 2: Political Analysis

Students should be aware of political power and resources, understand the stages of the policy process, and strategies and tactics.

Goal 3: Law and Compliance

Students should be able to analyze legal issues and comply with legal requirements as they relate to the environment.

Objective 1: Legal Analysis

Students should be able to apply the general principles of common law, statutory law, administrative rule-making, constitutional due process and appellate review to environmental issues.

Objective 2: Legal Analysis

Students should ascertain the legal consequences of actions and facts by finding the law, analyzing and evaluating its applicability, and updating it through Shepardizing.

Objective 3: Determining Regulatory Requirements

Students should be familiar with recordkeeping and reporting, permits, labeling and information, ambient and emission standards.

Goal 4: Critically Evaluating and Synthesizing Knowledge

Objective 1: Evaluate

Students should be able to weigh the preponderance of evidence for competing theories or arguments.

Objective 2:

Students should be able to critically evaluate strengths and limitations of world views and disciplinary paradigms.

Objective 3: Synthesis

Students should be able to synthesize world views and disciplinary paradigms.