Utility Management
California State University, Sacramento
(1.6 Continuing Education Units)

COURSE DESCRIPTION

This course introduces water sector utility managers to the major areas of responsibility for effective management including planning, organization, workforce development and staffing, information management and recordkeeping, communication and public outreach, security, cyber security, risk and resilience assessments, emergency response plans, utility finance and funding, asset management, and managing change and challenges.

COURSE OUTLINE

This course provides managers with an introduction to the concepts and practices used to effectively manage a water sector utility.

Chapter 1, Introduction to Utility Management
Learning Objectives
1. Identify the core responsibilities and functions of a utility manager.
2. Analyze and prepare to develop your utility's workforce.
3. Recognize how and why a utility should communicate, both with internal stakeholders and with the public.
4. Plan the basic elements of a hazards communication program to protect employees.
5. Apply principles of cyber security and physical security to protect against emergencies and attacks.

The main purpose of this chapter is to introduce utility managers to the core responsibilities and functions of managing a water sector utility.

Chapter 2, Managing for the Future
Learning Objectives
1. Understand utility expenses and infrastructure needs.
2. Understand utility revenues sources and their relationship to setting rates.
3. Maximize the utility asset life for operational optimization.
4. Handle the changes and challenges facing utility managers.

The main purpose of this chapter is to introduce water sector utility managers to practices and programs that contribute to the long-term sustainability and resiliency of the utility.

TIME ASSIGNMENT

Text pages: The content from the training manual used in this course, *Utility Management*, includes 128 pages. The average word count on a page from the training manual is 525 words. The training manual used for this course contains text, tables, graphs, illustrations, math example problems, section questions, and chapter review questions to enhance the presentation of information and the student learning experience. The course is designed for students to spend the same amount of time reading the tables, graphs, and illustrations as they spend reading the equivalent amount of related chapter text. Therefore, each page is assumed to contain the equivalent of 525 words. The average reading speed is

130 words per minute; therefore, each page is projected to require 4 minutes of student time for each reading.

Math example problems: The course contains 2 math example problems. The projected average time to solve each math problem is 3 minutes.

Section questions: The course contains 73 section questions, located in the "Check Your Understanding" sections integrated throughout the chapter text. These questions enable students to self-assess their understanding of a section's material before proceeding to the next section. The projected average response time is 2 minutes per question.

Chapter review questions: The course contains 60 review questions, located in the "Chapter Review" at the end of each chapter. Question types include fill-in, multiple choice, and matching. The projected average response time is 2 minutes per question.

Objective test questions: The course contains 75 test questions. There is 1 objective test per chapter. The projected average response time is 2 minutes per question.

Course component	Number of component units		Minutes required to complete component unit		Total time assignment for component
Text pages	128	×	4	=	512
Math example problems	2	×	3	=	6
Section questions	73	×	2	=	146
Chapter review questions	60	×	2	=	120
Objective test questions	75	×	2	=	150
					934 minutes
					15.6 or 16 hours