UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Service Management

2526-1-F7603Q022-F7603Q02202

Aims

The teaching of the second module 'Service Management' aims to enable students to understand the principles and methods that allow:
• sustainable management of water resources within the boundaries of the company/facility;
• sustainability assessment using indices and indicators;
• sustainability reporting and certification.

The topics of this module are closely related to some aspects of the first module 'Urban Water Cycle', and the teaching will, where necessary and beneficial for the general understanding of the interrelationships of the aspects taught, see incorporation of parts of the first module.

The students are invited to consult the syllabus of the entire course for details regarding learning- and skill-related objectives.

Contents

• Implementation and monitoring of Key Performance Indicators.
• Sustainability reporting and certification.
• Socially Responsible Investment Indices and Environmental Accounting.
• Sustainability in industrial water management.

Detailed program

• Sustainable Water Management in industry.

• Service Management Fundamentals and integration with Water Management in industry.
• Water Management and Sustainability Reporting: ESG Reporting on water use in industry.
• Water treatment as a service: Key Performance Indicators for Sustainable Water Management.
• Sustainability Reporting and certifications: ISO 14001, GRI and ESRS.
• Sustainability Assessment and reporting: water footprint of industrial operations, ensuring transparency in water use and management practices.
• Sustainable supply chain management for water.

Prerequisites

• Basic knowledge of service management.

Teaching form

3 CFUs of mixed theoretical and practical lessons in the classroom (30 hours):
• 10 two-hour lectures, in person, Delivered Didactics;
• 5 two-hour lectures, reading and discussing case studies, in person, Interactive Teaching.

Attendance to lectures and interactive exercises is highly recommended.

Textbook and teaching resource

• Lens P., Hulshoff Pol L., Wilderer P., Asano T. (2005). Water Recycling and Resource Recovery in Industry - Analysis, Technologies and Implementation. London: IWA Publishing. DOI: https://doi.org/10.2166/9781780402802.
• Slides.
• Selected scientific papers made available on the e-learning website of the course.

Semester

II semester (March - June)

Assessment method

The final examination will take the form of an oral interview. There will be a single oral interview for both modules due to their close interconnection. The oral interview is structured in two parts:
• a first part in which the student will expose, by means of presentation with slides, the results of an assignment involving the critical analysis of a case study (duration of the presentation 10-15 min); in this part, the ability to critically understand, expose and communicate a scientific text will be evaluated;
• a second part of discussion, with 2-4 questions, on the topics covered by the two modules of the course (duration

of 20-30 min); in this part the degree of knowledge acquired and the ability to apply the interpretative tools acquired will be evaluated.

The final score will be between 18/30 and 30/30 *cum laude*, based on the overall assessment considering the following criteria:
(1) knowledge and understanding;
(2) ability to connect different concepts;
(3) autonomy of analysis and judgment;
(4) ability to correctly use scientific language.

Office hours

Always, after scheduling an appointment *via* e-mail.

Sustainable Development Goals

QUALITY EDUCATION | CLEAN WATER AND SANITATION | INDUSTRY, INNOVATION AND INFRASTRUCTURE | SUSTAINABLE CITIES AND COMMUNITIES | RESPONSIBLE CONSUMPTION AND PRODUCTION