

# SSM 110 : Sustainable Water and Waste Management

**Credits:** 3

**Class Hours:** 3 lecture

**Prerequisites:** Qualified for MATH 100.

**Recommended:** Completed ENG 100.

**Description:** This course explores water, wastewater, and waste management challenges and solutions, with an emphasis on issues specific to Hawai'i. Students will explore sustainable operational management of water, wastewater, and solid waste systems. This includes composting, recycling processes, energy from waste, and water quality testing. Students will take water samples and analyze water quality with state-of-the-art technologies.

**Semester Offered:** Fall, Spring

**Designation:**

Diversification: Physical Sciences – DP

**Course Student Learning Outcomes (CSLOs):**

1. Detail Hawai'i's water, waste, and wastewater management concerns.
2. Use various devices to measure nutrients and contaminants in water samples to draw conclusions explaining concentrations.
3. Summarize various approaches to water reuse and water supply challenges that are specific to Hawai'i.
4. Describe different ways to sustainably address waste management challenges such as recycling/upcycling.
5. Identify and describe the major processes used in water, wastewater treatment and water distribution including policy and standards in place.