

Module Title Public Health	Reference AS3033
	SCQF Level SCQF 9
Keywords Aquatic Ecology, Water Treatment, Wastewater Treatment, Disease	SCQF Points 15
	ECTS Points 7.5
	Created May 2002
	Approved May 2008
	Amended May 2011
	Version No. 2

This Version is No Longer Current

The latest version of this module is available [here](#)

Prerequisites for Module

AS1010 or equivalent

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

To provide students with the ability to recognise the processes associated with provision of safe drinking water and food.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

Water Treatment; quantity, water quality standards and sources of supply; pre-treatment sedimentation; coagulation; flocculation; filtration; disinfection; advanced treatment; delivery. Local examples of problems and solutions.

Indicative Student Workload

<i>Contact Hours</i>	Full Time
Field Visit	3
Lectures	24
Tutorials	9
<i>Directed Study</i>	
Directed Study	24
<i>Private Study</i>	
Private Study	90

Mode of Delivery

This module is delivered by lectures, tutorials and a field visit.

1. Discuss the management and treatment of wastewater.
2. Discuss microbial diseases associated with water and food.
3. Explain the procedures and regulations developed to ensure food safety.
4. Discuss how potable water is managed and treated.

Indicative Module Content

Wastewater Treatment Processes: primary, secondary treatment; activated sludge systems; attached growth systems; advanced treatment; disinfection. Local examples of problems and solutions. Alternative technologies. Water, food and disease: sanitation, and population growth. Sources, symptoms and prevention of microbial disease including recommended procedures and regulations. Assessment of water quality; oxygen transfer; dissolved oxygen and biochemical oxygen demand; parameters of organic content in water quality; biotic indices and ecological perspectives.

Assessment Plan

	Learning Outcomes Assessed
Component 1	2,3,4
Component 2	1

Component 2 is assessed by a field study report.

Component 1 is assessed by a closed book examination

Indicative Bibliography

1. MADIGAN, M., et al. *Brock: Biology of Microorganisms.* Current Edition. Pearson Prentice Hall, New Jersey.
2. WORLD HEALTH ORGANISATION. *Water, Sanitation and Health.* Current Edition. WHO electronic Library.
3. DETELS R. et al., *Oxford Textbook of Global Public Health.* Current Edition. Oxford University Press: Oxford, UK