Title of Module: Sanitation

Coordinator(s) / organiser(s): Dr. Lilis Sulistyorini, Ir., M.Kes. (Module Leader)

Teaching Faculty					
Title	Name	Qualifications*	Hours contributed		
Dr.	Lilis Sulistyorini	Ir., M.Kes., Dr.	20.8		
dr.	Kusuma Scorpia Lestari	dr., M.KM.	16.7		
Ms.	Retno Adriyani	S.T., M.Kes.	12.47		
Ms.	Corie Indria Prasasti	S.KM., M.Kes.	16.7		

* PhD, Master, 20 years service(in practice) etc. Only provide details for faculty responsible for 25% or more of course load.

Core /elective or optional:	Elective:	
	Water sanitation (LKM313)	
	Environmental Sanitation (LKM308)	

Number of SKS credits allocated	Student's workload	Contact work	Self-study work
	in hours	hours*	hours
5 SKS	226.67	66.67	160

* includes lectures, seminars, face-to-face, assessments

Learning competences / objectives

On successful completion of this module students will be able to:

Water sanitation:

- 1. Define clean water, drinking water, water quality and water bodies
- 2. Describe water treatment methods
- 3. Understand the control of water borne diseases.

Environmental Sanitation:

- 1. Explain environmental sanitation
- 2. Measure sanitation of houses, housing and settlements
- 3. Measure the sanitation of public places
- 4. Measure the sanitation of eating places

Syllabus content. Brief overview of syllabus using bullet points.

- Water sanitation:
- Safe water provision
- Water contamination and water quality control activities
- Drinking water supply system
- Effective water quality improvement techniques

Environmental Sanitation:

- Definition of sanitation and efforts to improve environmental sanitation
- Management of household waste and excreta
- Environmental sanitation in different types of residential areas
- Sanitation of public service and eating places
- Sanitary inspection

Module level timetable - indicate the timing of the teaching sessions from the upcoming teaching year:

Water sanitation: 6th semester

Environmental Sanitation: 7th semester

Pedagogic/teaching methodology:

Scheduled learning includes lectures and discussions about the actual real life cases which are given by lecturer.

Lecturer presents the teaching materials with LCD and whiteboard. In one class, all the students are divided into small groups. Each group has to discuss the topic determined by the lecturer and present the results to the class.

Sanitation inspection is done in a field study by directly checking the indicators.

Independent learning includes hours engaged with essential reading, assignment preparation and completion and self-directed study. Students are provided with access to essential and supplementary learning via email or e-learning (AULA) and whiteboard.

Assessments used:

There are three types of examination:

- 1. Middle examination (30%)
- 2. Final examination (30%)
- 3. Structured assignment (40%)

Each examination takes 100 and 150 minutes including multiple choice questions, case studies, and essays. The examination assesses the students' knowledge and understanding and all learning outcomes of the module. Structured assignment is given by writing a paper then the students present it.

Weeks requi		place	Number of weeks	Week number
Water sanitation Weeks beginning 02/2020-05/2020			16	17-32
Environmental San Weeks beginning 0			16	17-32