

Title of Module:

Environmental Health Analysis

Coordinator(s) / organiser(s):

Prof. Soedjajadi Keman, dr., M.S., Ph.D. (Module Leader)

Teaching Faculty

Title	Name	Qualifications*	Hours contributed
Professor	Soedjajadi Keman	dr., M.S., Ph.D.	14.67
Professor	J. Mukono	dr., M.S., M.PH., Dr.	10.67
Dr.	Roro Azizah	S.H., M.Kes., Dr.	20
dr.	M. Farid Dimiyati Lusno	dr., M.KL.	21.33
dr.	Kusuma Scorpia Lestari	dr., M.KM.	14.67
Mr.	Aditya Sukma Pawitra	S.KM., M.KL.	18.66
Ms.	Retno Adriyani	S.T., M.Kes.	14.67
Ms.	Corie Indria Prasasti	S.KM., M.Kes.	18.66

* 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:	Core: Environmental Quality Analysis (LKM316) Elective: Environmental Health Risk Assessment (MNS404) Environmental Health Aspect of Disaster Management (KME425) Instrumentation and Environmental Observation (Integrating Experience see section 7)
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Number of SKS credits allocated	Student's workload in hours	Contact work hours*	Self-study work hours
10 SKS	453.33	133.33	320

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

Learning competences / objectives

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

Environmental Quality Analysis:

1. Analyze an environmental situation
2. Compare the result of environmental analysis with environmental and health regulation

Environmental Health Risk Assessment:

1. Measure the environmental quality and community health status
2. Calculate using EHRA formula
3. Summarize the result of the calculation

4. Draw a conclusion and give a recommendation

Environmental Health Aspect of Disaster Management:

1. Identify the environmental health problems in a specific disaster
2. Explain the planning, preparation and operational steps in sanitation due to the disaster according to its characteristics
3. Design of environmental health program

Syllabus content. Brief overview of syllabus using bullet points.

Environmental Quality Analysis:

- Introduction of environmental quality
- Physical, chemical and biologic methods and sampling techniques for analyzing the quality of water, air and food
- Health and environmental regulation

Environmental Health Risk Assessment:

- Ecologic risk assessment
- Human health risk assessment
- Environmental health risk assessment
- Environmental health risk analysis
- Biological monitoring
- Quality management (ISO 9000, ISO 14000 and ISO 22000)

Environmental Health Aspect of Disaster Management:

- Definition of disaster
- Risk of disaster
- Disaster management according to the disaster management cycle
- Health problems (communicable and non-communicable disease) occurring in a disaster
- Basic sanitation as an environmental health effort of disaster management
- Post disaster risk management
- Handling social health problems caused by disasters
- Handling the disease vector
- Planning and providing shelter
- Disaster management in respect of potential disasters occurring in Indonesia

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

Environmental Quality Analysis: 5th semester

Environmental Health Risk Assessment: 7th semester

Environmental Health Aspect of Disaster Management: 7th semester

Pedagogic/teaching methodology:

Scheduled learning includes lectures and discussions about the actual real life cases. During lecture in the classroom, the lecturer creates a chance for students to deliver their thought about specific case. Students are asked to adapt the critical thinking for solving health problem.

Lecturer presented 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 presents the results to the class.

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 (40%)
2. Final examination (50%)
3. Structured assignment (10%)

Each examination takes 100 minutes includes multiple choice questions, essays, short answer questions, and case studies. 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 required and place in academic calendar:	Number of weeks	Week number
Environmental Quality Analysis Weeks beginning 08/2019-11/2019	16	01-16
Environmental Health Risk Assessment Weeks beginning 08/2020-11/2020	16	01-16
Environmental Health Aspect of Disaster Management Weeks beginning 08/2020-11/2020	16	01-16