## Title of Module: Industrial Hygiene

Coordinator(s) / organiser(s):

Dr. Noeroel Widajati, S.KM., M.Sc. (Module Leader)

Teaching Faculty						
Title	Name	Qualifications*	Hours contributed			
Dr.	Noeroel Widajati	S.KM., M.Sc., Dr.	10.8			
Dr.	Yustinus Denny Ardyanto W.	Ir., M.S., Dr.	12			
Dr.	Abdul Rohim Tualeka	Drs., M.Kes., Dr.	12			
drh.	Meirina Ernawati	drh., M.Kes.	20.4			
Mr.	Mulyono	S.KM., M.Kes.	14.4			
Mr.	Dani Nasirul Haqi	S.KM., M.KKK.	18			
Ms.	Endang Dwiyanti	Dra., M.Kes.	16.8			
Ms.	Putri Ayuni Alayyannur	S.KM., M.KKK.	15.6			

\* 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:			
	Industrial Hygiene I (KMK106)			
	Elective:			
	Industrial Hygiene II (KMK310)			
	Risk Management of Occupational Health and Safety			
	(KMK312)			
	Implementation of Occupational Health and Safety			
	(Integrating Experience see section 7)			

Number of SKS credits allocated	Student's workload	Contact work	Self-study work
	in hours	hours*	hours
9 SKS	408	120	288

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

Learning competences / objectives

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

Industrial Hygiene I and II:

- 1. Define the problem correctly
- 2. Evaluate data integrity and comparability
- 3. Declare the policy options and formulate them clearly and densely
- 4. Decide the appropriate action with the problem at hand
- 5. Understanding the importance of a diverse worker's health

Risk Management of Occupational Health and Safety:

- 1. Advocate the occupational safety health program
- 2. Apply public health sciences, including social and behavioral sciences, chronic diseases, infections and accidents to the workplace.
- 3. Implement basic skills of human relationships in organizational management and resolution of emerging risks related to occupational health and safety

Syllabus content. Brief overview of syllabus using bullet points. Industrial Hygiene I:

- Industrial hygiene concept (physical, chemical and biological factor),
- Threshold Limit Value and Personal Protective Equipment,
- Industrial ventilation, Canteen, Housekeeping, On-site sanitation company Industrial Hygiene II:
- HIRARC method on physical, chemical and biological factor

Risk Management of Occupational Health and Safety:

- Risks in the work environment, and hazard identification techniques,
- OHSAS,
- Quantitative and qualitative risk analysis techniques,
- Basic concepts and implementation of risk management,
- Normative foundation of SMK3, implementation of SMK3, and SMK3 Audit

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

Industrial Hygiene I: 6th semester

Industrial Hygiene II: 7th semester

Risk Management of Occupational Health and Safety: 7<sup>th</sup> semester

Pedagogic/teaching methodology:

Scheduled learning includes lectures, discussions about the actual real life cases, and seminars in groups for applying problem solving techniques to solve real life issues which are given by lecturer. During lecture in the classroom, the lecturer gives the didactic question and creates a chance for students to deliver their though about specific case. Students are asked to adapt the critical thingking for solving health problem.

In many meetings, the lecturer tends to ask the students making simulation for improving the their capability understanding those topics.

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. Simulation means lecturer gives a case-based problem and the students resolve the problem with Hazard Identification, Risk Assessment, and Risk Control (HIRARC) or Anticipation, Recognition, Evaluation, and Control (AREC) method.

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	Number of weeks	Week number
in academic calendar:					
Industrial Hygiene I Weeks beginning 02/2020 -05/2020			16	17-32	
Industrial Hygiene II Weeks beginning 08/2020-11/2020				16	01-16
Risk Management of Occupational Health and Safety				16	01-16
Weeks beginning 08/2020-11/2020					