



**Universitas Negeri Surabaya**  
**Faculty of Engineering,**  
**Building Engineering Education Undergraduate Study Program**

Document Code

## SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Environmental Health Engineering	8320502229		T=2	P=0	ECTS=3.18	6	July 18, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	.....	.....	Dr. Gde Agus Yudha Prawira Adistana, S.T., M.T.

Learning model	Project Based Learning
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Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																															
	Program Objectives (PO)																																															
	PLO-PO Matrix																																															
		P.O																																														
	PO Matrix at the end of each learning stage (Sub-PO)																																															
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th rowspan="2" style="width: 5%;">P.O</th> <th colspan="16">Week</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th> </tr> </table>														P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
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Short Course Description	This course will lead students to understand various global environmental issues, the environment as a resource, and quality of life; the concept of sustainable development (sustainable development) includes aspects: economic, socio-cultural, ecological. Renewable-unrenewable natural resources, Natural Resources: definition of environmental pollution/contamination; management and conservation, able to communicate the concept of a healthy environment and environmentally sound development in order to solve critical natural resource problems related to threats to global environmental issues and environmental damage; Water Resources: condition of water on earth, distribution/hydrological cycle, quality & water as a source of disease; problems, damage/pollution and prevention and treatment of water; Soil Resources: properties and functions of soil; erosion and sediment; problems & damage/pollution and prevention and processing of land.
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References	<b>Main :</b>  1. UURI Nomor 32 tahun 2009 tentang Pengelolaan Lingkungan Hidup Soerjani, Moh., Rofiq A., Rozy M., 1987. <i>Lingkungan: Sumber daya Alam &amp; Kependudukan dalam Pembangunan</i> . Jkt: UI Pres Philip Kristanto, 2002. <i>Ekologi Industri</i> . Yogyakarta: Andi Aditama, TY. 1992. <i>Polusi Udara dan Kesehatan</i> . Jakarta: Arcan Kepmenkes RI No.829/Menkes/SK/VII/1999 tentang Persyaratan Kesehatan Perumahan. Jakarta: Departemen Kesehatan RI.
	<b>Supporters:</b>  

Supporting lecturer	Dr. Nurmi Frida Dorintan Bertua Pakpahan, M.Pd. Prof. Dr. Erina Rahmadyanti, S.T., M.T.
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Week-	Final abilities of each learning stage (Sub-PO)	Evaluation	Help Learning, Learning methods, Student Assignments, [ Estimated time]	Learning materials [ References]	Assessment Weight (%)
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		Indicator	Criteria & Form	Offline ( offline )	Online ( online )	]	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Describes: global environmental issues, globalization of environmental problems, the relationship between humans and ecosystems (the universe)	1. Definition: environment, ecology, humans & nature, 2. Concept of healthy living and human awareness of the environment.	Criteria: 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
2			Criteria: 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
3			Criteria: 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
4			Criteria: 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
5			Criteria: 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
6			Criteria: 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
7			Criteria: 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%

8	Midterm Exam (UTS)	-	<b>Criteria:</b> 0 - 100	Closed Book 2 X 50			0%
9			<b>Criteria:</b> 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
10			<b>Criteria:</b> 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
11			<b>Criteria:</b> 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
12			<b>Criteria:</b> 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
13			<b>Criteria:</b> 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
14			<b>Criteria:</b> 0 - 100	1. Lectures and students listening to lectures 2. Reviewing various recommended learning resources 3. Discussion 2 X 50			0%
15	Students can conclude the essence of environmental health techniques (2)	1. Briefly explain the essence of the Environmental Health Engineering lecture. 2. Conclude the Environmental Health Engineering lecture	<b>Criteria:</b> 0 - 100	1. Review various recommended learning resources 2. Discussion 3. Presentation 2 X 50			0%
16							0%

### Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
		0%

#### Notes

1. **Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
2. **The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
3. **Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
4. **Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
5. **Indicators for assessing** ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
6. **Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
7. **Forms of assessment:** test and non-test.
8. **Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
9. **Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
12. TM=Face to face, PT=Structured assignments, BM=Independent study.