



Universitas Negeri Surabaya
Faculty of Mathematics and Natural Sciences
Data Science Undergraduate Study Program

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date										
Conservation of Natural Resources and Environment	4920202006		T=2	P=0	ECTS=3.18	2	July 17, 2024										
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator											
			Yuliani Puji Astuti, S.Si., M.Si.											
Learning model	Case Studies																
Program Learning Outcomes (PLO)	PLO study program which is charged to the course																
	Program Objectives (PO)																
	PLO-PO Matrix																
		P.O															
	PO Matrix at the end of each learning stage (Sub-PO)																
	P.O	Week															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Short Course Description	Discusses: 1) The scope of conservation which includes: Definition, objectives, benefits and efforts to conserve natural resources and the environment (SDAL); 2) Environmental ethics which includes: Definition, Paradigm and Principles of Environmental Ethics; 3) Natural resources which include: Definition, types and benefits of Natural Resources; 4) Local wisdom which includes: Understanding, approaches, challenges and local wisdom in community life in the future; 5) Management and problems of natural resources and the environment which includes: issues, problems and management of natural resources and the environment; 6) Conservation awareness which includes awareness of the importance of conserving natural resources and the environment, eco campuses and conservation campuses as well as 7. Regulations for Conservation of Natural Resources and the Environment. Lecture activities are carried out in a student center with discussions, observations, project assignments, and presentations by developing ecopreneurship characteristics.																
References	Main :																
	Supporters:																
Supporting lecturer	Dr. H. Sunu Kuntjoro, S.Si., M.Si. Reni Ambarwati, S.Si., M.Sc. Guntur Trimulyono, S.Si., M.Sc. Erlix Rakhmad Purnama, S.Si., M.Si. Ahmad Fudhaili, S.Si., M.Sc., Ph.D. Putut Rakhmad Purnama, S.Si, M.Si.																
Week-	Final abilities of each learning stage (Sub-PO)	Evaluation		Help Learning, Learning methods, Student Assignments, [Estimated time]		Learning materials [References]	Assessment Weight (%)										
		Indicator	Criteria & Form	Offline (offline)	Online (online)												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)										

1	Proposing creative ideas in solving general environmental problems	1. Explain the meaning of SDA and L, Identify SDAL around the environment, Explain the benefits of SDAL 2. Analyze the background of conservation of natural resources and the environment, Describe the meaning, objectives and benefits of conservation, Describe conservation of natural resources and the environment	Criteria: Student centered/Presentation/Discussion (2 x 50') Form of Assessment : Participatory Activities	Offline 2x50 minutes		Material: 1. Rachmadiarti, F., Faizah, U., Kuntjoro, S. 2017. Student Textbook on Natural Resources and Environmental Conservation. Surabaya: Unesa University Press. References: Material: 2. Van Dyke, F. 1993. Conservation Biology. Boston : University of Arkansas, Inc. References: Material: 3. Faizah, U., Rachmadiarti, F., Prastiwi, Muji Sri., Kuntjoro, S. 2017. Textbook on Conservation of Natural Resources and the Environment based on Problem Based Learning to train Conservation Awareness. Surabaya: Airlangga University Press. References:	5%
2	Proposing creative ideas in solving general environmental problems		Form of Assessment : Project Results Assessment / Product Assessment	Offline 2x50 minutes		Material: 1. Faizah, U., Rachmadiarti, F., Prastiwi, Muji Sri., Kuntjoro, S. 2017. Problem Based Learning-based Natural Resources and Environmental Conservation Textbook to train Conservation Awareness. Surabaya: Airlangga University Press. References:	5%

3	Applying environmental ethical principles in life	1. Explain environmental ethics, explain the principles of environmental ethics, write examples of environmental ethics	Form of Assessment : Participatory Activities	Offline 2x50 minutes		Material: 1. Faizah, U., Rachmadiarti, F., Prastiwi, Muji Sri., Kuntjoro, S. 2017. Problem Based Learning-based Natural Resources and Environmental Conservation Textbook to train Conservation Awareness. Surabaya: Airlangga University Press. References:	5%
4	1. Applying environmental ethical principles in life 2. communicate natural resource and environmental issues at global and national levels	Identify SDAL at the global and national levels and explain the factors that influence and impact SDAL exploration at the global and national levels.	Criteria: Student centered/Presentation/Discussion (2 x 50') Form of Assessment : Participatory Activities	Offline 2x50 minutes		Material: 1. Faizah, U., Rachmadiarti, F., Prastiwi, Muji Sri., Kuntjoro, S. 2017. Problem Based Learning-based Natural Resources and Environmental Conservation Textbook to train Conservation Awareness. Surabaya: Airlangga University Press. References:	5%
5	Students are able to communicate natural resource and environmental issues at the local level, on campus and in the surrounding environment	Explain the factors that influence and impact SDAL exploration at the local level		Offline 2 x50 minutes		Material: 1. Faizah, U., Rachmadiarti, F., Prastiwi, Muji Sri., Kuntjoro, S. 2017. Problem Based Learning-based Natural Resources and Environmental Conservation Textbook to train Conservation Awareness. Surabaya: Airlangga University Press. References:	5%
6	1. Develop effective ideas to overcome natural resource and environmental problems 2. Students are able to explain the what, why and how of conservation of natural resources and the environment		Form of Assessment : Project Results Assessment / Product Assessment	Offline 2x50 minutes		Material: 1. Rachmadiarti, F., Faizah, U., Kuntjoro, S. 2017. Student Textbook on Natural Resources and Environmental Conservation. Surabaya: Unesa University Press. References:	5%

7	Develop systematic ideas to preserve local community wisdom		Form of Assessment : Participatory Activities	Offline 2 x 50 minutes		Material: 1. Faizah, U., Rachmadiarti, F., Prastiwi, Muji Sri., Kuntjoro, S. 2017. Problem Based Learning-based Natural Resources and Environmental Conservation Textbook to train Conservation Awareness. Surabaya: Airlangga University Press. References:	5%
8	Do the Midterm Exam (UTS) questions well			Offline 2 x 50 minutes			0%
9	Develop systematic ideas to preserve local community wisdom		Form of Assessment : Participatory Activities	Offline 2 x 50 minutes		Material: 1. Faizah, U., Rachmadiarti, F., Prastiwi, Muji Sri., Kuntjoro, S. 2017. Problem Based Learning-based Natural Resources and Environmental Conservation Textbook to train Conservation Awareness. Surabaya: Airlangga University Press. References:	5%
10	Develop effective ideas in accordance with the principles of natural resource and environmental management		Form of Assessment : Participatory Activities	Offline 2 x 50 minutes			5%
11	1. Develop effective ideas in accordance with the principles of natural resource and environmental management 2. Students are able to explain the management of non-biological natural resources		Form of Assessment : Participatory Activities	Offline 2 x 50 minutes			5%

12	<p>1.Understand global and local conservation principles</p> <p>2.Students are able to explain the management of biological natural resources</p>		<p>Form of Assessment : Participatory Activities</p>	Offline		<p>Material: 1. Faizah, U., Rachmadiarti, F., Prastiwi, Muji Sri., Kuntjoro, S. 2017. Problem Based Learning-based Natural Resources and Environmental Conservation Textbook to train Conservation Awareness. Surabaya: Airlangga University Press.</p> <p>References:</p>	0%
13	<p>1.Understand global and local conservation principles</p> <p>2.Students are able to explain the management of urban natural resources</p>		<p>Form of Assessment : Participatory Activities</p>	Offline 2 x 50 minutes		<p>Material: 1. Rachmadiarti, F., Faizah, U., Kuntjoro, S. 2017. Student Textbook on Natural Resources and Environmental Conservation. Surabaya: Unesa University Press.</p> <p>References:</p> <hr/> <p>Material: 1. Rachmadiarti, F., Faizah, U., Kuntjoro, S. 2017. Student Textbook on Natural Resources and Environmental Conservation. Surabaya: Unesa University Press.</p> <p>References:</p>	0%
14	Understand the principles of global and local natural resource conservation regulations		<p>Form of Assessment : Participatory Activities</p>	Offline 2 x 50 minutes		<p>Material: 1. Faizah, U., Rachmadiarti, F., Prastiwi, Muji Sri., Kuntjoro, S. 2017. Problem Based Learning-based Natural Resources and Environmental Conservation Textbook to train Conservation Awareness. Surabaya: Airlangga University Press.</p> <p>References:</p>	5%

15	Understand the principles of environmental regulation		Form of Assessment : Project Results Assessment / Product Assessment, Portfolio Assessment	Offline 2 x 50 minutes		Material: 1. Faizah, U., Rachmadiarti, F., Prastiwi, Muji Sri., Kuntjoro, S. 2017. Problem Based Learning-based Natural Resources and Environmental Conservation Textbook to train Conservation Awareness. Surabaya: Airlangga University Press. References:	5%
16	Do the Final Semester Examination (UAS) questions well		Criteria: Test Form of Assessment : Test	Offline			0%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	40%
2.	Project Results Assessment / Product Assessment	12.5%
3.	Portfolio Assessment	2.5%
		55%

Notes

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Forms of assessment:** test and non-test.
- 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.
- 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.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- 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%.
- TM=Face to face, PT=Structured assignments, BM=Independent study.