

## Universitas Negeri Surabaya Faculty of Mathematics and Natural Sciences Biology Education Masters Study Program

Document Code

SEMESTER LEARNING PLAN													
Courses			CODE		Cours	Course Family		Credit Weight		SEMESTER	Compilation Date		
Learning Theory			1234502004		Compu Subjec	npulsory Study Program ojects		T=2	P=0	ECTS=4.48	1	October 21, 2023	
AUTHOR	IZAT	ION		SP Developer		Course Cluster Coordinator			Study Program Coordinator				
			Dr. Raharjo M.Si				Prof. Dr. Endang Susantini, M.Pd			Prof. Dr. Yuliani, M.Si.			
Learning model		Case Studies											
Program	1	PLO study pr	ogram	n which is ch	arged to the	cours	е						
Outcome	es	Program Obje	ectives	s (PO)									
(PLO)		PLO-PO Matr	ix										
			P.O										
		PO Matrix at the end of each learning stage (Sub-PO)											
			Ρ	2.0	2 3 4	5	6 7	Week	10	11	12 13	3 14 15	5 16
Short Course Description		Study of the principles and ways students learn according to behavioral learning theory, social learning theory, cognitive learning theory, constructivist approach, connectivism theory, as well as motivating students to learn; and its application in learning through analysis of case examples in class.											
Reference	ces	Main :											
		<ol> <li>Hergenhahn, B. R. &amp; Olson, Matthew H. 2012. Theories of Learning (Teori Belajar). Edisi Ketujuh. Jakarta: Kencana Prenada Media Group.</li> <li>Santrock, J. W. 2008. Educational Psychology. Third Edition. Boston: McGraw-Hill.</li> <li>Slavin, R. E. 2009. Educational Psychology Theory and Prctice. Eight Edition. Boston: Pearson.</li> <li>Schunk, Dale. H., 2012. Learning Theories An Educational Perspective. Sixth Edition. Boston: Allyn &amp; Bacon.</li> <li>Woolfolk, A. 2010. Educational Psychology, Global Edition. Eleventh Edition. New Jersey: Pearson Education.</li> </ol>											
		Supporters:											
Supporti lecturer	ing	Dr. Raharjo, M.Si. Prof. Dr. Endang Susantini, M.Pd.											
Week- Sta		nal abilities of ch learning age ub-PO)		Evaluation		Form	Offling	Help Lea Learning m Student Assi [Estimate		earning, methods, signments, ted time]		Learning materials [ References ]	Assessment Weight (%)
(1)		(2)		(3)	(4)	onn	Unine (	5)		e	6)	(7)	(8)
()		<b>\-</b> /		(-)	(.)		, r					~ ~ /	(3)

1	Understand behavioral learning theory and its application in learning	<ol> <li>Provide examples of behavior that reflects learning and non-learning</li> <li>Describe the development of behavioral learning theory</li> <li>Provide examples of the application of Pavlov, Thorndike, and Skinner theories in biology learning</li> </ol>	Form of Assessment : Participatory Activities		Discuss material on Behavioral learning theory based on PPT Behavioral learning theory and source books (1 x 50 minutes) Visit the website for online lectures Chat regarding the nature of behavioral learning theory Give feedback regarding the nature of behavioral theory (1 x 50 minutes) · 2 X 50	5%
2	Understand behavioral learning theory and its application in learning	1. Explain the principles of behavioral learning2. Provide examples of the application of behavioral learning principles in biology learning			Visiting the website for online lectures Presentation and discussion of concepts in behavioral learning theory Providing feedback between students (2 x 50 minutes) 2 X 50	5%
3	Understand social learning theory and its application in learning	Describe the main ideas of Albert Bandura's social learning theory			Discussing Social learning theory based on Social Learning Theory PPT and reference books (1 x 50 minutes) Visiting the website for online lectures Presentation and discussion of concepts in behavioral learning theory (1 x 50 minutes) 2 X 50	5%
4	Understand social learning theory and its application in learning	Provide examples of the application of social learning theory in biology learning	Form of Assessment : Participatory Activities	Make decisions to determine whether biology learning cases can be solved with social learning theory or not (2 x 50 minutes) 2 X 50		5%
5	Understand social learning theory and its application in learning	Make an example of a biology worksheet that applies social learning theory	Criteria: 10 Form of Assessment : Project Results Assessment / Product Assessment		Compiling a biology worksheet that follows Bandura's theory (1 x 50 minutes) Visiting the website for online lectures Presentation and discussion of the biology worksheet that has been prepared (1 x 50 minutes) 2 X 50	10%
6	Understand information processing theory and cognitive learning theory, and their application in learning	1.Explain the information processing model 2.Describe various research on the brain 3.Explain why people remember or forget	Form of Assessment : Participatory Activities	Discuss Information Processing material based on reference books and Information Processing PPT (1 x 50 minutes) 2 X 50		5%
7	Understand information processing theory and cognitive learning theory, and their application in learning	<ol> <li>Explain ways to teach memory strategies</li> <li>Explain the factors that make information meaningful</li> </ol>		Visiting the web for online lectures Presentation on concepts in information processing theory based on reference books Discussion and questions and answers (2 x 50 minutes) 2 X 50		10%
8	Midterm exam			2 X 50		20%

9	Understand information processing models and cognitive learning theory, and their application in learning	<ol> <li>Explain study strategies to help students learn</li> <li>Explaining metacognitive strategies helps students learn</li> <li>Provide examples of the application of learning strategies in biology learning</li> </ol>	Form of Assessment : Participatory Activities	Making decisions to determine whether biology learning cases can be solved using cognitive learning theory or not (1x50 minutes) Visiting the website for online lectures Presenting examples of learning strategies that can be used in biology learning based on reference books (1x50 minutes) 2 X 50		5%
10	Understand constructivist theories and their application in learning	<ol> <li>Explain the constructivist view of learning</li> <li>Comparing Piaget's theory and Vygotsky's theory</li> <li>Explain the implications of Piaget's theory in biology learning</li> <li>Explain the implications of Vygotsky's theory in biology learning</li> <li>Explain the implications of Vygotsky's theory in biology learning</li> <li>Describe how to use cooperative learning in biology learning</li> </ol>	Form of Assessment : Participatory Activities	Visiting the web for online lectures Discussing Constructivist Approach material based on Constructivist PPT and Reference Observing constructivist learning videos Communicating/presenting based on PPT and reference books (2x50 minutes) 2 X 50		5%
11	Understand constructivist theories and their application in learning	Provide examples of the application of cooperative learning in biology learning. Provide examples of biology worksheets based on cooperative learning	Form of Assessment : Participatory Activities	Carrying out biology learning simulations starting with cognitive conflict through cooperation Reflecting on cooperative learning Having a responsible attitude towards completing assignments given by the lecturer Making biology worksheets based on cooperative learning based on reference books Discussing student-made biology worksheets Having a responsible attitude towards completing assignments given by the lecturer (2x50 minutes) 2 X 50		5%
12	Understand constructivist theories and their application in learning	<ol> <li>Describe how to teach problem solving and thinking skills</li> <li>Provide examples of the application of problem solving and thinking skills in biology learning</li> <li>Provides examples of biology worksheets that train thinking skills</li> </ol>	Form of Assessment : Participatory Activities	Communicating/presenting Thinking skills concepts based on reference booksCreating biology worksheets that can practice thinking skills based on reference books (1x50 minutes)Visiting the website for online lectures• Presentation and discussion of student- made biology worksheets (1x50 minutes) 2 X 50		5%

13	Understand connectivism theory and its application in learning	1. Explain the important role of connectivism theory in the digital era2. Comparing the advantages of connectivism theory with previous theories (behavioral, social, cognitive, and constructivism)	Form of Assessment : Participatory Activities	Communicate/present important ideas of connectivism theory based on reference books and scientific journals Create learning scenarios that apply connectivism theory Discuss learning scenarios produced by students Visit the web for online lectures Presentation and discussion of student- made biology worksheets (1x50 minutes) 2 X 50		10%
14	Understand connectivism theory and its application in learning	1. Provide examples of the application of connectivism theory in learning	Form of Assessment : Participatory Activities	Discussing Connectivism Theory material based on PPT and articles Having a responsible attitude towards completing assignments given by the lecturer (1x50 minutes) Visiting the website for online lectures Discussing connectivism theory (1x50 minutes) 2 X 50		10%
15	Understand motivation theories and their application in learning	1. Explain motivation theories2. Provide examples of the application of motivation theories in learning 3. Explain how to increase achievement motivation 4. Provides examples of the application of achievement motivation to help students overcome learning disabilities	Form of Assessment : Participatory Activities	Visiting websites for online lectures Communicating/presenting ways to increase motivation based on reference books Observing motivational learning videos Reflecting after observing motivational learning videos Having a responsible attitude in applying motivation theory in biology learning (2x50 minutes) 2 X 50		15%
16	Final exams		Form of Assessment : Test	2 X 50		20%

## **Evaluation Percentage Recap: Case Study**

No	Evaluation	Percentage
1.	Participatory Activities	70%
2.	Project Results Assessment / Product Assessment	10%
3.	Test	20%
		100%

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.
- 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.
- 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.