



Universitas Negeri Surabaya
Faculty of Mathematics and Natural Sciences
Undergraduate Chemistry Education Study Program

Document
Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Learning Theory	8420402297	Compulsory Curriculum Subjects	T=2	P=0	ECTS=3.18	1	July 18, 2023
AUTHORIZATION	SP Developer	Institutional	Course Cluster Coordinator			Study Program Coordinator	
	Prof. Dr. Utiya Azizah, M.Pd.		Prof. Dr. Utiya Azizah, M.Pd.			Prof. Dr. Utiya Azizah, M.Pd.	

Learning model	Project Based Learning
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Program Learning Outcomes (PLO)	PLO study program which is charged to the course															
	PLO-10	Able to design, implement, evaluate, learn and develop chemistry learning media by utilizing Information and Communication Technology (CPL 4)														
	PLO-12	Able to demonstrate chemical pedagogical knowledge about designing, implementing and evaluating chemistry learning (CPL 2)														
	Program Objectives (PO)															
	PO - 1	Utilize ICT-based learning resources and learning media to support the implementation of learning by applying certain learning theories.														
	PO - 2	Make decisions based on analysis of learning case examples in class and provide ideas for selecting various alternative solutions.														
	PO - 3	Mastering learning theories and being able to apply them in learning.														
	PO - 4	Have a responsible attitude by applying learning according to relevant learning theories														
	PLO-PO Matrix															
		<table border="1" style="margin-left: 40px;"> <thead> <tr> <th>P.O</th> <th>PLO-10</th> <th>PLO-12</th> </tr> </thead> <tbody> <tr><td>PO-1</td><td></td><td></td></tr> <tr><td>PO-2</td><td></td><td></td></tr> <tr><td>PO-3</td><td></td><td></td></tr> <tr><td>PO-4</td><td></td><td></td></tr> </tbody> </table>	P.O	PLO-10	PLO-12	PO-1			PO-2			PO-3			PO-4	
P.O	PLO-10	PLO-12														
PO-1																
PO-2																
PO-3																
PO-4																

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
PO-1																
PO-2																
PO-3																
PO-4																

Short Course Description	A study of learning theories that begins with a brief introduction to developmental (cognitive) psychology, followed by principles and explanations of how students learn according to behavioral learning theory, social learning theory, cognitive learning theory, constructivist learning theory, neuroscientific learning theory, and theory of student motivation to learn; and its implications for learning through analysis of MIPA learning case examples in class. Lectures are carried out using theory and assignments.
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References	Main :
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<ol style="list-style-type: none"> Hergenhahn, B. R. & Olson, Matthew H. 2012. Theories of Learning (Teori Belajar). Edisi Ketujuh. Jakarta: Kencana Prenada Media Group Santrock, J. W. 2008. Educational Psychology. Third Edition. Boston: McGraw-Hill. Slavin, R. E. 2011. Psikologi Pendidikan Teori dan Praktik. Edisi Kesembilan Jilid 1. Jakarta: PT Indeks. Slavin, R. E. 2011. Psikologi Pendidikan Teori dan Praktik. Edisi Kesembilan Jilid 2. Jakarta: PT Indeks. 							
Supporters:							
<ol style="list-style-type: none"> Woolfolk, A. 2010. Educational Psychology, Global Edition. Eleventh Edition. New Jersey: Pearson Education. 							
Supporting lecturer		Prof. Dr. Hj. Sri Poedjiastoeti, M.Si. Prof. Dr. Utiya Azizah, M.Pd. Dr. Mitalis, S.Pd., M.Si. Bertha Yonata, S.Pd., M.Pd. Dr. Rosalina Eka Permatasari, M.Pd.					
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	Describe behavioral learning theory and its application in learning	<ol style="list-style-type: none"> Describe the use of educational psychology in learning. Provide examples of behavior that reflects learning and non-learning Describe the history of behavioral learning theory Provide examples of the application of Pavlov, Thorndike, and Skinner theories in learning 	Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning Form of Assessment : Participatory Activities	Interactive Discussion	The assignment looks for case examples of the application of behavioral learning theory	Material: Behavioral Learning Theory: Educational Psychology, aspects of human development, and behavioral theory in learning. References: <i>Hergenhahn, BR & Olson, Matthew H. 2012. Theories of Learning. Seventh Edition. Jakarta: Kencana Prenada Media Group</i>	5%
2	Describe behavioral learning theory and its application in learning	<ol style="list-style-type: none"> Describe the principles of behavioral learning Provide examples of the application of behavioral learning principles in chemistry learning Able to analyze research results that can be accessed via the internet regarding behavioral learning theory Provide examples of the application of behavioral learning principles in learning based on research results. 	Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment	<input type="checkbox"/> Case Method <input type="checkbox"/> Group assignment <input type="checkbox"/> Presentation <input type="checkbox"/> Question and answer	The assignment looks for case examples of the application of behavioral learning in chemistry learning	Material: Behavioral Learning Theory: principles of behavioral learning. References: <i>Slavin, RE 2011. Educational Psychology Theory and Practice. Ninth Edition Volume 1. Jakarta: PT Index.</i>	5%

3	Describe social learning theory and its application in learning	<ol style="list-style-type: none"> 1. Describe the main ideas of Albert Bandura's social learning theory 2. Provide examples of the application of social learning theory in learning 3. Analyze research results that can be accessed via the internet regarding social learning theory 4. Provide examples of the application of social learning principles in learning based on research results 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment</p>	Interactive discussions, group assignments	The assignment looks for case examples of the application of social learning theory in learning	<p>Material: Social Learning Theory: Bandura's social cognitive theory and moral development Reference: <i>Slavin, RE 2011. Educational Psychology Theory and Practice. Ninth Edition Volume 1. Jakarta: PT Index.</i></p>	5%
4	Describe social learning theory and its application in learning	<ol style="list-style-type: none"> 1. Describe the main ideas of Albert Bandura's social learning theory 2. Provide examples of the application of social learning theory in learning 3. Analyze research results that can be accessed via the internet regarding social learning theory 4. Provide examples of the application of social learning principles in learning based on research results 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities</p>	Interactive discussions, group assignments	Search and analyze research results that can be accessed via the internet regarding social learning theory	<p>Material: Social Learning Theory: Bandura's social cognitive theory and moral development Reference: <i>Slavin, RE 2011. Educational Psychology Theory and Practice. Ninth Edition Volume 1. Jakarta: PT Index.</i></p>	5%

5	Analyzing information processing models and cognitive learning theory, connectivism, and their application in learning	<ol style="list-style-type: none"> 1. Describe the information processing model 2. Describe the cognitive levels 3. Describe various research on the brain 4. Describe the reasons why people remember or forget 5. Describe ways to teach memory strategies 6. Describe the factors that make information meaningful 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities</p>	<input type="checkbox"/> Interactive discussions <input type="checkbox"/> Presentations <input type="checkbox"/> Group assignments	Search for literature related to cognitive theory	<p>Material: Cognitive Learning Theory: information processing, factors that strengthen long-term memory, memory strategies, and factors that make information meaningful. References: <i>Sanrock, JW 2008. Educational Psychology. Third Edition. Boston: McGraw-Hill.</i></p>	5%
6	Analyzing information processing models and cognitive learning theory, connectivism, and their application in learning	<ol style="list-style-type: none"> 1. Describe the information processing model 2. Describe the cognitive levels 3. Describe various research on the brain 4. Describe the reasons why people remember or forget 5. Describe ways to teach memory strategies 6. Describe the factors that make information meaningful 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities</p>	<input type="checkbox"/> Interactive discussions <input type="checkbox"/> Presentations <input type="checkbox"/> Group assignments	The assignment looks for case examples that apply cognitive theory	<p>Material: Cognitive Learning Theory: information processing, factors that strengthen long-term memory, memory strategies, and factors that make information meaningful. References: <i>Sanrock, JW 2008. Educational Psychology. Third Edition. Boston: McGraw-Hill.</i></p>	5%
7	Analyzing information processing models and cognitive learning theory, connectivism, and their application in learning	<ol style="list-style-type: none"> 1. Explain how metacognitive abilities help students learn 2. Explain study strategies to help students learn 3. Provide examples of the application of learning strategies in learning based on research results that can be accessed via the internet 4. Describe the theory of connectivism 5. Provide examples of the application of connectivism in learning 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities</p>	<input type="checkbox"/> Case Method <input type="checkbox"/> Presentation <input type="checkbox"/> Question and answer	Exploration of case examples of the application of learning strategies in learning based on research results that can be accessed via the internet and Exploration of case examples of the application of connectivism in learning based on research results that can be accessed via the internet	<p>Material: Cognitive Learning Theory: metacognitive skills and learning strategies. References: <i>Sanrock, JW 2008. Educational Psychology. Third Edition. Boston: McGraw-Hill.</i></p>	5%

8	Midterm Evaluation/Midterm Exam	Assessment Indicators part 1 to 7	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities, Tests</p>	Scheduled offline 2 x 50 minutes	There isn't any	<p>Material: All material from meetings 1 to meeting 7 References: <i>Slavin, RE 2011. Educational Psychology Theory and Practice. Ninth Edition Volume 1. Jakarta: PT Index.</i></p>	15%
9	Analyzing constructivist theories and their application in learning	<ol style="list-style-type: none"> 1.Explain the constructivist view of learning 2.Comparing Piaget's theory and Vygotsky's theory 3.Explain the implications of Piaget's theory in learning 4.Explain the implications of Vygotsky's theory in learning 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities</p>	<input type="checkbox"/> Interactive discussions <input type="checkbox"/> Group assignments	Exploration of material related to constructivist theory	<p>Material: Constructivist Theory: constructivist views on learning, Piaget's theory, Vygotsky's theory, and the application of constructivist theory in learning. References: <i>Slavin, RE 2011. Educational Psychology Theory and Practice. Ninth Edition Volume 2. Jakarta: PT Index.</i></p>	5%
10	Analyzing constructivist theories and their application in learning	<ol style="list-style-type: none"> 1.Describe how to use cooperative learning in learning 2.Provide examples of the application of cooperative learning in learning based on research results that can be accessed via the internet 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities</p>	<input type="checkbox"/> Case Method <input type="checkbox"/> Presentation <input type="checkbox"/> Question and answer	Exploration regarding cooperative learning materials	<p>Material: Constructivist Theory: cooperative learning Reference: <i>Slavin, RE 2011. Educational Psychology Theory and Practice. Ninth Edition Volume 2. Jakarta: PT Index.</i></p>	5%
11	Analyzing constructivist theories and their application in learning	<ol style="list-style-type: none"> 1.Describe how to teach problem solving and thinking skills 2.Provide examples of the application of problem solving and thinking skills in learning based on research results that can be accessed via the internet 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities</p>	<input type="checkbox"/> Case method <input type="checkbox"/> Group assignment <input type="checkbox"/> Presentation <input type="checkbox"/> Question and answer	Exploration related to problem solving skills material	<p>Material: Constructivist Theory: Problem solving and thinking skills References: <i>Slavin, RE 2011. Educational Psychology Theory and Practice. Ninth Edition Volume 2. Jakarta: PT Index.</i></p>	5%

12	Analyzing constructivist theories and their application in learning	<ol style="list-style-type: none"> Describe how to teach problem solving and thinking skills Provide examples of the application of problem solving and thinking skills in learning based on research results that can be accessed via the internet 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities</p>	<input type="checkbox"/> Case method <input type="checkbox"/> Group assignment <input type="checkbox"/> Presentation <input type="checkbox"/> Question and answer	The assignment looks for case examples of the application of problem solving and thinking skills in learning	<p>Material: Constructivist Theory: Problem solving and thinking skills References: <i>Slavin, RE 2011. Educational Psychology Theory and Practice. Ninth Edition Volume 2. Jakarta: PT Index.</i></p>	5%
13	Analyzing motivation theories and their application in learning	<ol style="list-style-type: none"> Explain motivation theories Provide examples of the application of motivation theories in learning based on research results that can be accessed via the internet 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities</p>	<input type="checkbox"/> Interactive discussions <input type="checkbox"/> Group assignments	Exploration of motivation theory material	<p>Material: Motivation in Learning: definition of motivation and motivation theories References: <i>Slavin, RE 2011. Educational Psychology Theory and Practice. Ninth Edition Volume 2. Jakarta: PT Index.</i></p>	5%
14	Analyzing motivation theories and their application in learning	<ol style="list-style-type: none"> Explains how to increase achievement motivation Provides examples of the application of achievement motivation to help students overcome helplessness in learning based on research results that can be accessed via the internet 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities</p>	<input type="checkbox"/> Interactive discussions <input type="checkbox"/> Group assignments	The assignment looks for case examples of the application of achievement motivation to help students overcome helplessness in learning	<p>Material: Motivation in Learning: achievement motivation Reference: <i>1Woolfolk, A. 2010. Educational Psychology, Global Edition. Eleventh Edition. New Jersey: Pearson Education.</i></p>	5%
15	Analyzing motivation theories and their application in learning	<ol style="list-style-type: none"> Explain how teachers increase student motivation to learn Provide examples of how teachers provide rewards for student performance, effort and improvement in learning based on research results that can be accessed via the internet 	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment</p>	<input type="checkbox"/> Case Method <input type="checkbox"/> Group assignment <input type="checkbox"/> Presentation <input type="checkbox"/> Question and answer	The assignment looks for case examples of how teachers reward students' performance, efforts and improvement in learning	<p>Material: Motivation in Learning: students' motivation to learn Reference: <i>Slavin, RE 2011. Educational Psychology Theory and Practice. Ninth Edition Volume 2. Jakarta: PT Index.</i></p>	5%

16	Final exams	Assessment Indicators per 9 to 15	<p>Criteria: Participation with a weight of 20%; Tasks with a weight of 30%; UTS with a weight of 20%; UAS with a weight of 30%; UTS and UAS use Essay questions; Performance assessment is carried out in an integrated manner with learning</p> <p>Form of Assessment : Participatory Activities, Tests</p>	Scheduled offline 2 x 50 minutes	There isn't any	<p>Material: Material from meeting 9 to meeting 15 Reference: <i>Slavin, RE 2011.</i> <i>Educational Psychology Theory and Practice. Ninth Edition Volume 2. Jakarta: PT Index.</i></p>	15%
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Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	76.67%
2.	Project Results Assessment / Product Assessment	6.67%
3.	Portfolio Assessment	1.67%
4.	Test	15%
		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.
- 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** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities 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.