



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

Document Code

## SEMESTER LEARNING PLAN

<b>Courses</b>	<b>CODE</b>	<b>Course Family</b>	<b>Credit Weight</b>	<b>SEMESTER</b>	<b>Compilation Date</b>												
Innovative Assessment	1234502023	Compulsory Study Program Subjects	T=2 P=0 ECTS=4.48	2	April 29, 2023												
<b>AUTHORIZATION</b>		<b>SP Developer</b>	<b>Course Cluster Coordinator</b>	<b>Study Program Coordinator</b>													
		Dr. Raharjo, M.Si, Dr. Sifak Indana M.Pd, Dr. Muji Sri Prastiwi, M.Pd	Dr. Raharjo, M.Si	Prof. Dr. Yuliani, M.Si.													
<b>Learning model</b>	<b>Case Studies</b>																
<b>Program Learning Outcomes (PLO)</b>	<b>PLO study program which is charged to the course</b>																
	<b>PLO-6</b>	Able to show a responsible attitude towards work in their field of expertise by paying attention to academic ethics in carrying out their professional duties, and able to embody the character of faith, intelligence, independence, honesty, caring and toughness in daily behavior.															
	<b>PLO-9</b>	Able to manage learning and solve problems in the field of Biology education by developing an innovative model (HOTS or TPACK) characterized by eduecopreneurship based on local wisdom.															
	<b>Program Objectives (PO)</b>																
	<b>PLO-PO Matrix</b>																
		P.O	PLO-6	PLO-9													
	<b>PO Matrix at the end of each learning stage (Sub-PO)</b>																
	P.O	Week															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Short Course Description</b>	This course examines (a) concepts, principles, roles, functions and objectives of assessment, learning outcomes assessment strategies, as well as government policies in the government sector; (b) assessment as learning, assessment for learning, assessment of learning; (c) Cognitive, process, psychomotor and attitude learning outcomes; (d) Instruments for measuring learning outcomes (test and non-test) and their characteristics; (e) alternative assessment and authentic assessment; (f) Development of assessment items to measure learning processes and outcomes; (g) interpretation of the results of the learning outcomes assessment; (h) The concept of high order thinking skills (HOTS), types of HOTS, (i) The concept of critical thinking skills and how to assess them, (j) the concept of creative thinking and how to assess them, (k) the concept of problem solving and how to measure it, (l) the concept of decision making skills and how to assess them, (m) the concept of thinking skills according to Solo's taxonomy and how to measure them. Lectures are presented in theory, assignments and workshops.																
<b>References</b>	<b>Main :</b>																
	1. Brookhart, Susan M. 2010. How to assess higher-order thinking skills in your classroom. Alexandria: ASCD 2. Glencoe Series. Tanpa Tahun. Performance Assessment in The Science Classroom. New York: McGraw- Hill 3. I. Naik, S.P. 2004. Role of evaluation in education . New Delhi: Anmol Publications PVT. 4. Johnson, David W. and Johnson, Robert T. 2002. Meaningful Assessment Manageable and Cooperative process. Boston: Allyn and Bacon.																
	<b>Supporters:</b>																
<b>Supporting lecturer</b>	Dr. Raharjo, M.Si. Dr. Sifak Indana, M.Pd. Dr. Muji Sri Prastiwi, S.Pd., M.Pd.																
<b>Week-</b>	<b>Final abilities of each learning stage (Sub-PO)</b>	<b>Evaluation</b>		<b>Help Learning, Learning methods, Student Assignments, [ Estimated time]</b>		<b>Learning materials [ References ]</b>	<b>Assessment Weight (%)</b>										
		<b>Indicator</b>	<b>Criteria &amp; Form</b>	<b>Offline ( offline )</b>	<b>Online ( online )</b>												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)										

1	Understand the concepts of assessment, evaluation, measurement and assessment principles	<ul style="list-style-type: none"> <li>Explain the meaning of assessment</li> <li>Distinguish between assessment, evaluation and measurement</li> <li>Explain the principles of learning outcomes assessment</li> </ul>	<b>Criteria:</b> <ul style="list-style-type: none"> <li>Written test</li> <li>Essay test</li> </ul> <b>Form of Assessment:</b> Participatory Activities	Explaining RPS Discussing the terms measurement, assessment and evaluation based on reference books and lecturer presentations (2 x 50 minutes) 100 minutes			5%
2	Understand the concept of assessment for learning, assessment of learning, assessment as learning	<ul style="list-style-type: none"> <li>Explain the concepts of assessment for learning, assessment of learning, assessment as learning</li> <li>Compare the concepts of assessment for, as, and of learning</li> </ul>	<b>Criteria:</b> <ul style="list-style-type: none"> <li>Written test</li> <li>Essay test</li> </ul> <b>Form of Assessment:</b> Participatory Activities	Discuss the meaning of assessment of/for/as learning, characteristics, and examples of each learning outcome based on the lecturer's presentation (2 x 50 minutes) 100 minutes	<ul style="list-style-type: none"> <li>Visit the website for online lectures</li> <li>Chat regarding assessment of/for/as learning</li> <li>Provide feedback regarding assessment of/for/as learning (1 x 50 minutes)</li> </ul> 50 minutes		5%
3	1.1. Able to analyze the role, function and objectives of assessment 2.2. Understand and be able to describe government policies in the field of assessment	<ul style="list-style-type: none"> <li>Analyze the role, function and objectives of assessment</li> <li>Identify and describe government policy in the field of assessment</li> </ul>	<b>Form of Assessment:</b> Participatory Activities, Tests	Determine cases of biology learning assessment that are not in accordance with the role, function and objectives of the assessment. Discuss the results of the case study analysis. Summarize the results of the case study analysis regarding the role/function/purpose of the assessment that is violated. Carry out reflection and evaluation. 2 X 50 minutes			5%
4	1.1. Understand the concept and characteristics of learning outcomes 2.2. Understand the concept and characteristics of instruments for measuring learning outcomes	<ol style="list-style-type: none"> <li>Identify the characteristics of learning outcomes</li> <li>Explain examples of each learning outcome</li> <li>Identify forms of instruments to measure learning outcomes</li> <li>Distinguish between test and non-test characteristics</li> <li>Identify the characteristics of instruments to measure cognitive, attitudinal and psychomotor learning outcomes</li> </ol>	<b>Form of Assessment:</b> Participatory Activities, Tests	Discuss the meaning, characteristics and examples of each type of assessment. 2 x 50 minutes	- -		5%

5	Understand the concepts of conventional assessment, alternative assessment, and authentic assessment		<p><b>Criteria:</b></p> <ol style="list-style-type: none"> <li>1. Explain the meaning, characteristics and examples of conventional assessment</li> <li>2. Explain the meaning, characteristics and examples of alternative assessments</li> <li>3. Explain the meaning, characteristics and examples of authentic assessment</li> </ol> <p><b>Forms of Assessment :</b> Participatory Activities, Project Results Assessment / Product Assessment</p>	Discuss the meaning, characteristics and examples of each type of assessment based on books 1,2, 3 (2 x 50 minutes)	<ul style="list-style-type: none"> <li>• Visit the website for online lectures</li> <li>• Chat regarding conventional assessments and authentic/alternative assessments</li> <li>• Provide feedback regarding conventional assessments, 1 X 50 minutes</li> </ul>		5%
6	Understand the concepts of conventional assessment, alternative assessment, and authentic assessment	<ol style="list-style-type: none"> <li>1. Explain the meaning, characteristics and examples of conventional assessments and their examples</li> <li>2. Explain the meaning, characteristics and examples of alternative assessments</li> <li>3. Explain the meaning of characteristics and examples of alternative assessments</li> </ol>	<p><b>Forms of Assessment :</b> Participatory Activities, Project Results Assessment / Product Assessment</p>	Discuss the meaning, characteristics and examples of each type of assessment based on books 1,2, 3 and lecturer presentations/student assignments (2 x 50 minutes)	- -		5%
7	Understand the concept of higher order thinking skills		<p><b>Form of Assessment :</b> Participatory Activities, Tests</p>	Determining cases of biology learning assessments that are not in accordance with HOTS. Discussing the results of case study analysis. Concluding the results of case study analysis regarding non-conformity of assessments carried out by teachers with HOTS. Carrying out reflection and evaluation. (2 x 50 minutes)	- -		5%
8	MIDTERM EXAM		<p><b>Form of Assessment :</b> Participatory Activities</p>	MIDDLE SEMESTER EXAMINATION MID SEMESTER EXAMINATION	MIDDLE SEMESTER EXAMINATION MID SEMESTER EXAMINATION		5%
9	Able to understand the procedures for preparing and developing assessments	<ol style="list-style-type: none"> <li>1. Explain the concept of preparing and developing assessments</li> <li>2. Identify procedures for preparing and developing assessments</li> </ol>	<p><b>Forms of Assessment :</b> Participatory Activities, Project Results Assessment / Product Assessment</p>	<ul style="list-style-type: none"> <li>• Discuss the stages of preparing an assessment</li> <li>• Stages of preparing an assessment, development components in preparing an assessment (2 x 50 minutes)</li> </ul>	- -		5%

10	Skilled in developing instruments to measure learning outcomes and high-level thinking skills according to indicators (Critical Thinking)	<ol style="list-style-type: none"> <li>1. Explain the meaning of critical thinking</li> <li>2. Identify indicators of critical thinking skills</li> <li>3. Identify adequate instruments to measure critical thinking skills</li> <li>4. Skilled in developing sample instruments to measure critical thinking skills</li> </ol>	<b>Forms of Assessment :</b> Participatory Activities, Project Results Assessment / Product Assessment, Tests	<ul style="list-style-type: none"> <li>• Critical Thinking</li> <li>Ppt lecturer presentation</li> <li>• Discusses the characteristics of critical thinking skills and develops instruments (2 x 50 minutes)</li> </ul>	- -	<b>Material:</b> instruments to measure learning outcomes and higher-order thinking skills according to indicators. <b>References:</b> 1. Brookhart, Susan M. 2010. <i>How to assess higher-order thinking skills in your classroom.</i> Alexandria: ASCD	5%
11	<ol style="list-style-type: none"> <li>1.1. Skilled in developing instruments to measure learning outcomes and high-level thinking skills according to critical thinking indicators.</li> <li>2.2. Able to compose good instruments</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify indicators of problem solving skills and critical thinking skills</li> <li>2. Develop instruments to measure problem solving skills and critical thinking skills</li> <li>3. Arrange instruments according to the selected indicators</li> </ol>	<b>Form of Assessment :</b> Participatory Activities, Tests	<ul style="list-style-type: none"> <li>• Ppt lecturer presentation Creative thinking skills</li> <li>• Problem solving (2 x 50 minutes)</li> </ul>	- -	<b>Material:</b> Measuring HOTS skills <b>References:</b> 1. Brookhart, Susan M. 2010. <i>How to assess higher-order thinking skills in your classroom.</i> Alexandria: ASCD	5%
12	Able to develop assessments according to their interests or thesis plans	<ol style="list-style-type: none"> <li>1. Able to identify indicators according to their interests and thesis plans</li> <li>2. Able to develop instruments according to their interests or thesis plans</li> </ol>	<b>Form of Assessment :</b> Participatory Activities, Tests	<ul style="list-style-type: none"> <li>• Lecturer presentation</li> <li>• Project assignment to develop instruments according to their interests or thesis (2 x 50 minutes)</li> </ul>		<b>Material: -</b> <b>References:</b> 2. Glencoe Series. <i>No Year. Performance Assessment in The Science Classroom.</i> New York: McGraw-Hill	5%
13	Skilled in interpreting assessment results	<ol style="list-style-type: none"> <li>1. Explain the meaning of interpreting assessment results</li> <li>2. Determine the characteristics of the instrument: reliability, validity, success index, sensitivity, distractor effectiveness, etc.</li> </ol>	<b>Criteria:</b> - <b>Form of Assessment :</b> Participatory Activities, Tests	Discuss and practice determining instrument characteristics (2 x 50 minutes)	- -	<b>Material:</b> interpreting assessment results <b>References:</b> 4. Johnson, David W. and Johnson, Robert T. 2002. <i>Meaningful Assessment Manageable and Cooperative process.</i> Boston: Allyn and Bacon.	5%

14	Skilled in interpreting assessment results	1. Explain the meaning of interpreting assessment results 2. Determine the characteristics of the instrument: reliability, validity, success index, sensitivity, distractor effectiveness, etc.	<b>Criteria:</b> - <b>Form of Assessment:</b> Participatory Activities, Tests	Discuss and practice determining instrument characteristics (2 x 50 minutes)	- -	<b>Material:</b> Interpreting assessment results <b>References:</b> 1. Brookhart, Susan M. 2010. <i>How to assess higher-order thinking skills in your classroom.</i> Alexandria: ASCD	5%
15	Ability to end meeting 1st. 14 which have not yet been mastered		<b>Form of Assessment:</b> Participatory Activities, Tests	• Discussion and Exercise 2 x 50 minutes	- -	<b>Material:</b> Reflection on material received from P 1 to P 15 <b>References:</b> 4. Johnson, David W. and Johnson, Robert T. 2002. <i>Meaningful Assessment Manageable and Cooperative process.</i> Boston: Allyn and Bacon.	5%
16	FINAL EXAMS	-	<b>Criteria:</b> -	FINAL SEMESTER EXAMINATION FINAL SEMESTER EXAMINATION	FINAL SEMESTER EXAMINATION FINAL SEMESTER EXAMINATION	<b>Material:</b> ALL MATERIAL <b>Library:</b>	0%

#### Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	44.17%
2.	Project Results Assessment / Product Assessment	9.17%
3.	Test	21.67%
		75.01%

#### 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.

