



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																																
Assessment of Learning Processes and Outcomes	8420403012		T=3	P=0	ECTS=4.77	3	July 18, 2024																																
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator																																	
			Prof. Dr. Utiya Azizah, M.Pd.																																	
Learning model	Project Based Learning																																						
Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																						
	Program Objectives (PO)																																						
	PLO-PO Matrix																																						
		P.O																																					
Short Course Description	Study of the meaning, objectives, functions and principles of assessment, taxonomy of cognitive, affective, psychomotor learning outcomes, assessment strategies (paper & pencil and alternative assessments), forms of assessment instruments, rubrics, analysis and interpretation of assessment results, class-based assessments, assessments for science process skills and scientific attitudes (including character)																																						
	<table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td rowspan="2" style="width: 5%;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 3%;">1</td> <td style="width: 3%;">2</td> <td style="width: 3%;">3</td> <td style="width: 3%;">4</td> <td style="width: 3%;">5</td> <td style="width: 3%;">6</td> <td style="width: 3%;">7</td> <td style="width: 3%;">8</td> <td style="width: 3%;">9</td> <td style="width: 3%;">10</td> <td style="width: 3%;">11</td> <td style="width: 3%;">12</td> <td style="width: 3%;">13</td> <td style="width: 3%;">14</td> <td style="width: 3%;">15</td> <td style="width: 3%;">16</td> </tr> </table>							P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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References	Main :																																						
	<ol style="list-style-type: none"> 1. Tim. 2015. Buku Pegangan Mahasiswa: Asesmen.Yogyakarta: Absolute Media. 2. Arends, Richard I. (2004). Guide to FieldExperiences ad Portofolio Development: to accompany ;learning to teach. NewYork: McGraw-Hill Book Company. 3. Arikunto, Suharsimi / I. Jabar, Cepi Safruddin Abdul.2008. Evaluasi program pendidikan:pedoman teoritis bagi mahasiswa dan praktisi pendidikan . Jakarta:BumiAksara. 4. Brookhart, Susan M. 2010. How to assess higher-order thinking skillsin your classroom. Alexandria: ASCD. 5. George, David. 2005. Examination and evaluation in education .New Delhi: Commonwealth. 6. Glencoe Series. TanpaTahun. Performance Assessment in TheScience Classroom. New York: McGraw-Hill Company. 7. I. Naik,S.P. 2004. Roleof evaluation in education . New Delhi:Anmol Publications PVT. 8. Johnson, David W. andJohnson, Robert T. 2002. Meaningful Assessment Manageable andCooperative process. Boston: Allyn and Bacon. 9. Kubiszyn, Tom / I. Borich, Gary.2007. Educational testing and measurement:classroom application and practice. New Jersey: John Wiley & Sons. 10. Kumari, Sarita / I. Srivastava, D.S. 2005. Education: assessment, evaluation andremedial . New Delhi: Isha Books. 11. Rani, T. Swarupa. 2004. Educational measurement and evaluation .New Delhi: DPH. 12. Ross, Kenneth N. (ed).2005. Quantitative research Methods inEducationl Planning, Module 6: Overview of Test Construction. Paris:International Institute for Educational Planning, UNESCO. 13. Walton,John A. 2005. Educational objectives andachievement testing . New Delhi: Commonwealth 																																						
Supporting lecturer	Supporters:																																						
	Prof. Dr. Harun Nasrudin, M.S. Prof. Dr. Hj. Rudiana Agustini, M.Pd. Prof. Dr. Utiya Azizah, M.Pd. Dr. Muchlis, S.Pd., 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 the role of assessment in education and learning. Analyze the suitability of assessment principles	1. Analyze assessment principles that are not applied in the National Examination 2. Provide an opinion if the National Examination/UN is the sole determinant of student graduation. 3. Analyze the incompatibility of assessment principles applied to a case example	Criteria: 1. The assessment is carried out on the following aspects: 2.1. Participation during lectures, carried out through observation (weight 2) 3.2. The Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written examination, with a weight of (2) 4.3. Assignment value for working on questions, writing papers and practical work (weight 2) 5.4. The Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written examination, with a weight of (3) 6.5. The final NA is (participation value x2) (assignment value x 3) (UTS value x 2) UAS value (3) divided by 10	Lectures, discussion-information, assignments 3 X 50			0%

2	Analyze the suitability of assessments with competencies.	<p>1.Analyzing the suitability of KD and examples of assessments in the syllabus.</p> <p>2.Provide suggestions to improve assessments in accordance with KD</p>	<p>Criteria:</p> <p>1.The assessment is carried out on the following aspects:</p> <p>2.Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10</p>	Lectures, information discussions, assignments, presentations, 3 X 50			0%
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3	Explain the differences between the old and revised Bloom's taxonomy.	<ol style="list-style-type: none"> 1. Students can explain the Taxonomy of the attitude domain 2. Students can explain the Taxonomy of knowledge domains 3. Students can explain the taxonomy of skills domains 	<p>Criteria:</p> <ol style="list-style-type: none"> 1. The assessment is carried out on the following aspects: 2. Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10 	Lectures, information discussions, assignments. 3 X 50			0%
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4	Develop assessment indicators for the domains of attitudes, knowledge and skills (cognitive, affective and psychomotor).	Students can develop assessment indicators for the domains of attitudes, knowledge and skills (cognitive, affective and psychomotor).	Criteria: 1. The assessment is carried out on the following aspects: 2. Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10	Lectures, assignments, discussions 3 X 50			0%
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5	Develop learning outcomes tests and rubrics.	<p>1.Students can explain the meaning, advantages and disadvantages of the test</p> <p>2.Students can explain the techniques, types and forms of tests</p>	<p>Criteria:</p> <p>1.The assessment is carried out on the following aspects:</p> <p>2.Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10</p>	Lectures, information discussions, assignments. 3 X 50			0%
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6	Analyze learning outcomes tests and rubrics.	<ol style="list-style-type: none"> 1. Students can explain test assessment rubrics, scoring, converting scores into grades 2. Students can interpret learning results 3. Students can review tests 	<p>Criteria:</p> <ol style="list-style-type: none"> 1. The assessment is carried out on the following aspects: 2. Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10 	Lectures, information discussions, assignments. 3 X 50			0%
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7	Explain the definition, advantages and disadvantages of authentic assessment.	<p>1.Students can explain the meaning of authentic assessment</p> <p>2.Students can explain the advantages and disadvantages of authentic assessment</p>	<p>Criteria:</p> <p>1.The assessment is carried out on the following aspects:</p> <p>2.Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10</p>	Lectures, information discussions, assignments. 3 X 50			0%
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8	final ability of encounters 1-7	indicators from meetings 1-7	<p>Criteria:</p> <p>1.The assessment is carried out on the following aspects:</p> <p>2.Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10</p>	Written Test 3 X 50			0%
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9	Explain the various types of authentic assessments.	Students can explain various types of authentic assessments, for example: performance assessments, journals, project assignments, portfolios, affective domain assessments (characteristic behavior and social skills), etc.	Criteria: 1. The assessment is carried out on the following aspects: 2. Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10	Lectures, information discussions, assignments. 3 X 50			0%
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10	Explain the scoring rubric for authentic assessment.	Students can explain the rubric for authentic assessments, scoring, converting scores into grades,	Criteria: 1. The assessment is carried out on the following aspects: 2. Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10	Lectures, information discussions, assignments. 3 X 50			0%
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11	Developing Authentic Assessment.	<p>1.Students can interpret learning results</p> <p>2.Students can study authentic assessments</p>	<p>Criteria:</p> <p>1.The assessment is carried out on the following aspects:</p> <p>2.Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10</p>	Lectures, discussion-information, assignments 3 X 50			0%
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12	Describe the quality of measuring instruments.	<ol style="list-style-type: none"> 1. Students can explain validity and reliability 2. Students can explain the factors that influence validity 3. Students can explain the factors that influence reliability 	<p>Criteria:</p> <ol style="list-style-type: none"> 1. The assessment is carried out on the following aspects: 2. Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10 	Lectures, information discussions, assignments. 3 X 50			0%
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13	Explain various methods of finding reliability coefficients. Calculating test reliability	<p>1. Students can explain various methods for finding reliability coefficients.</p> <p>2. Students can calculate the reliability of tests based on norms and benchmarks.</p>	<p>Criteria:</p> <p>1. The assessment is carried out on the following aspects:</p> <p>2. Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x 2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10</p>	Lectures, information discussions, assignments. 3 X 50			0%
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14	Analyze the question items.	Students can analyze test items, including: level of achievement of indicators for criteria-referenced items, sensitivity index for criteria-referenced items, level of difficulty of test items, discriminating power, effectiveness of options, validity of norm-referenced items.	Criteria: 1. The assessment is carried out on the following aspects: 2. Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10	Lectures, information discussions, assignments. 10 X 50			0%
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15	Analyze the question items	Students can analyze test items, including: level of achievement of indicators for criteria-referenced items, sensitivity index for criteria-referenced items, level of difficulty of test items, differentiating power, effectiveness of options, validity of norm-referenced items.	Criteria: 1. The assessment is carried out on the following aspects: 2. Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10	Lectures, information discussions 3 X 50			0%
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16	Final ability of encounters 9-15	indicators from the 9-15 meeting	Criteria: 1. The assessment is carried out on the following aspects: 2. Participation during lectures is carried out through observation (weight 2) Mid-Semester Examination (UTS) is carried out by assessing all relevant indicators through a written exam, with a weight of (2) Grades for assignments for working on questions, writing papers and practicums (weight 2) Final Semester Examination (UAS) is carried out by assessing all relevant indicators through a written exam, with the final weight (3) NA being (participation score x2) (assignment score x 3) (UTS score x 2) UAS score (3) divided by 10	written test 3 X 50			0%
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Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
		0%

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.

