



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

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight	SEMESTER	Compilation Date																																										
Chemistry Bibliography	4720102036		T=2 P=0 ECTS=3.18	4	July 18, 2024																																										
AUTHORIZATION		SP Developer	Course Cluster Coordinator	Study Program Coordinator																																											
		Dr. Amaria, M.Si.																																											
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																																													
PO Matrix at the end of each learning stage (Sub-PO)	PO Matrix at the end of each learning stage (Sub-PO)																																														
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 10%; text-align: center;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 5%; text-align: center;">1</td> <td style="width: 5%; text-align: center;">2</td> <td style="width: 5%; text-align: center;">3</td> <td style="width: 5%; text-align: center;">4</td> <td style="width: 5%; text-align: center;">5</td> <td style="width: 5%; text-align: center;">6</td> <td style="width: 5%; text-align: center;">7</td> <td style="width: 5%; text-align: center;">8</td> <td style="width: 5%; text-align: center;">9</td> <td style="width: 5%; text-align: center;">10</td> <td style="width: 5%; text-align: center;">11</td> <td style="width: 5%; text-align: center;">12</td> <td style="width: 5%; text-align: center;">13</td> <td style="width: 5%; text-align: center;">14</td> <td style="width: 5%; text-align: center;">15</td> <td style="width: 5%; text-align: center;">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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Short Course Description	Study of how to search or review chemical literature and its applications easily, including through catalogues, indexes, the internet, CD ROMs, and printed materials (books, journals, magazines, etc.). Also discussed are periodic publications, publications by scientific institutions and associations, abstracts, reference books, how to account for quotations, and compiling scientific work so that students are able to master concepts, are able to work together and can communicate their knowledge scientifically.																																														
References	Main :																																														
	1. Lutfi Achmad dkk, 2012, <i>KepustakaanKimia</i>, Yogyakarta : Absolute Media																																														
	Supporters:																																														
Supporting lecturer	Prof. Dr. Achmad Lutfi, M.Pd. Dr. I Gusti Made Sanjaya, M.Si. Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. Rusmini, S.Pd., 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	Understand libraries and literature, especially chemistry literature	Explain libraries and bibliography, especially chemistry literature	Criteria: Use the assessment format according to the Unesa guidebook	Lectures, questions and answers, assignments 2 X 50			0%																																								
2	Understand literature search and its application through catalogs	Explains literature search and its application through catalogues	Criteria: format for product assessment reports and activity observations in accordance with the Unesa guidebook with weight (3)	Lectures, questions and answers, assignments 2 X 50			0%																																								

3	Understand literature search through indexes	Explains literature search through indexes	Criteria: The format for assessing activities and assignments is according to the Unesa guidebook	Lecture, question and answer, inquiry, assignment 2 X 50			0%
4	Understand literature searches through bibliography	Explains literature search through bibliography	Criteria: 1. The assessment is carried out on the following aspects: 2.1. Presentation (weight 2) 3.2. Assignment assessments are weighted (3)	Lectures, questions and answers, assignments 2 X 50			0%
5	Understand about online library sources	Distinguish between open source and licensed systems	Criteria: Product assessment Task report, with weighting (3)	Online literacy 2 X 50			0%
6	Understand literature searches via the internet	Utilizing the internet as a source of literature	Criteria: Product assessment in the form of a journal, as an assignment, with a weight of (3)	Online assignment 2 X 50			0%
7	Understanding the online library peer review	Distinguish between peer reviewed and non-reviewed literature based on online library sources	Criteria: Product assessment Journal report as an assignment, with weight (3)	Discussions, assignments & presentations 2 X 50			0%
8	Completing USS according to indicators 1,2,3,4,5,6,7	Indicators 1 to 7	Criteria: The Mid-Semester Examination (UTS) is carried out assessing all relevant indicators through a written exam, with a weight of (2)	written test 2 X 50			0%
9	Understanding Periodical Publishing	Explaining periodic publications	Criteria: Assessment Product assessment and activity observation as a task, with weights (3)	Lectures, questions and answers, assignments 2 X 50			0%
10	Understand the publications of scientific institutions and associations	Explains the publications of scientific institutions and associations	Criteria: Assessment of activity as participation with weight (2) and product as task, with weight (3)	Lectures, questions and answers, assignments 2 X 50			0%
11	Understanding Standards and patents	Understanding Standards and patents	Criteria: Product assessment as a task, with a weight of (3) and observation as a participation value with a weight of (2)	Lectures, questions and answers, assignments 2 X 50			0%
12	Understand reference books	Explain reference books	Criteria: Assessment of participation and activities as participation, with weight (2)	Lectures, questions and answers, assignments 2 X 50			0%
13	Understanding Abstracts	Compiling an Abstract	Criteria: Assessment of activity and participation observations, as participation value, with weight (2)	Lecture, question and answer, inquiry, assignment 2 X 50			0%
14	Understanding scientific essays	Compiling scientific essays	Criteria: Presentation assessment and assignment assessment with weights (3)	Lecture, question and answer, inquiry, assignment 2 X 50			0%

15	Understanding scientific accountability Understanding scientific publications	1. Explain scientific accountability techniques 2. Explain scientific publications	Criteria: 1. The assessment is carried out on the following aspects: 2.1. Participation during lectures (weight 2) 3.2. Assessment of presentations and papers, considered as assignments, then given weight (3)	Lecture, question and answer, inquiry, assignment 2 X 50			0%
16	Completed the US test	Indicators 8 to 15	Criteria: The Summative Examination (US) is carried out assessing all relevant indicators through a written examination, with a weight of (3)	Written Test 2 X 50			0%

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.