	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
STUDY THE SCHOOL CURRICULUM	8420402321	Compulsory Study Program Subjects	T=2	P=0	ECTS=3.18	2	July 1, 2022

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
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Learning model	**Project Based Learning**

Program Learning Outcomes (PLO)

PLO study program which is charged to the course

PLO-7	Applying logical, critical, systematic and innovative thinking in the context of the development or implementation of science, technology and art that pays attention to and applies humanities values appropriate to the field of chemistry education in solving problems (CPL 5)
PLO-12	Able to demonstrate chemical pedagogical knowledge about designing, implementing and evaluating chemistry learning (CPL 2)

Program Objectives (PO)

PO - 1	Have the ability to utilize ICT-based learning resources and learning media in reviewing the curriculum.
PO - 2	Have knowledge about the development of the school curriculum, the principles of curriculum analysis and master the concepts of Mathematics and Natural Sciences and their learning, including misconceptions and strategies for overcoming them.
PO - 3	Have the skills to carry out curriculum analysis to find competency indicators, select material including breadth and depth.
PO - 4	Have a responsible attitude that is reflected in the results of a critical and thorough curriculum review.

PLO-PO Matrix

P.O	PLO-7	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	Study of the meaning of curriculum, development of the school curriculum, adaptation of the latest curriculum to curriculum implementation in schools, curriculum analysis which includes task and material analysis, formulation of goals and indicators of achievement and accommodating inclusive education, essential concepts and learning, misconceptions and more comprehensive strategies for overcoming them. emphasis on chemistry learning

References

Main :

1. Hamdani, Hamid. 2012. Pengembangan Kurikulum Pendidikan. Bandung: Pustaka Setia
2. Ibrahim, dkk. 2013. Kurikulum Dan Pembelajaran. Jakarta: Rajarafindo Persada
3. Sukmadinata, Nana Syaodih. 2013. Pengembangan Kurikulum. Bandung: Remaja Rosdakarya.
4. Ruhimat, T. 2009. Kurikulum dan Pembelajaran. Bandung: Jurusan KTP UPI

Supporters:	
1. Yee, Lee Peng. 2006. Teaching Secondary School Mathematics a Resource Book . McGraw-Hill. 2. Goos, M., Stillman, G., Vale, C. 2007. Teaching Secondary School Mathematics Reasearch and Practice for the 21st Century . Australia: Allen & Unwin.	
Supporting lecturer	Prof. Dr. Achmad Lutfi, M.Pd. Dr.Hj. Rinaningsih, S.Pd., M.Pd. Dian Novita, S.T., 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	Explain the meaning, function and principles of the school curriculum based on the current or past curriculum.	Explain the meaning, function and principles of the curriculum	**Criteria:** Explain the meaning, function and principles of the curriculum **Form of Assessment** : Participatory Activities	1. Explain the meaning of curriculum. 2. Explain the function of the curriculum. 3. Explain curriculum principles.		**Material:** meaning, function and principles of the school curriculum based on the current or past curriculum. **References:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%
2	Explain the basis for curriculum development	Explains the basis for development, development components, and principles of curriculum development.	**Criteria:** Explains the basis for development, development components, and principles of curriculum development. **Form of Assessment** : Project Results Assessment / Product Assessment	1. Explain the basis for curriculum development. 2. Explain the components of curriculum development. 3. Explain the principles of curriculum development.		**Material:** foundations for curriculum development **References:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%
3	Able to follow developments in the school curriculum.	Able to use IT to obtain information and analyze the applicable chemistry curriculum.	**Criteria:** Able to use IT to obtain information and analyze the applicable chemistry curriculum. **Form of Assessment** : Project Results Assessment / Product Assessment	Able to use IT to obtain information and analyze the applicable chemistry curriculum.		**Material:** development of the school curriculum. **References:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%
4	Able to follow developments in the school curriculum	Analyze curriculum developments in Indonesia and develop competency indicators.	**Criteria:** Analyze curriculum developments in Indonesia and develop competency indicators. **Form of Assessment** : Participatory Activities	1. Able to analyze curriculum developments in Indonesia. 2. Develop competency indicators.		**Material:** development of the school curriculum. **References:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%
5	Analyze the chemistry curriculum content standards for SMA and SMK that are currently in effect/used.	Explaining curriculum content standards and analyzing the content of the chemistry curriculum in high school	**Criteria:** Explaining curriculum content standards and analyzing the content of the chemistry curriculum in high school **Form of Assessment** : Participatory Activities	1. Explain the content standards for the chemistry curriculum in high school. 2. Analyze the content of the chemistry curriculum in high school		**Material:** currently applicable/used chemistry curriculum content standards for SMA and SMK. **References:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%

6	Analyze the chemistry curriculum content standards for SMA and SMK that are currently in effect/used.	Explaining curriculum content standards and analyzing the content of the chemistry curriculum in vocational schools	**Criteria:** Explaining curriculum content standards and analyzing the content of the chemistry curriculum in vocational schools **Form of Assessment** : Project Results Assessment / Product Assessment	Explaining curriculum content standards and analyzing the content of the chemistry curriculum in vocational schools		**Material:** currently applicable/used chemistry curriculum content standards for SMA and SMK. **References:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%
7	Analyze the chemistry curriculum content standards for SMA and SMK that are currently in effect/used.	Compiling a chemistry concept map in high school and compiling a chemistry concept map in vocational school.	**Criteria:** Compiling a chemistry concept map in high school and compiling a chemistry concept map in vocational school. **Form of Assessment** : Project Results Assessment / Product Assessment	1. Compile a chemistry concept map in high school. 2. Prepare a chemistry concept map in vocational schools.		**Material:** Compiling a chemistry concept map in high school and compiling a chemistry concept map in vocational school. **References:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%
8	UTS	UTS	**Criteria:** UTS **Form of Assessment** : Test	Writing test			10%
9	Determine essential concepts, competency indicators for chemistry material in SMA/MA and SMK.	Determine the essential concepts of chemistry in high school. Determining competency indicators.	**Criteria:** Determine the essential concepts of chemistry in high school. Determining competency indicators. **Form of Assessment** : Participatory Activities	Determine the essential concepts of chemistry in high school. Determining competency indicators.		**Material:** essential concepts, competency indicators for chemistry material in SMA/MA and SMK. **References:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	105%
10	Determine essential concepts, competency indicators for chemistry material in SMA/MA and SMK.	Determine the essential concepts of chemistry in vocational school. Determining competency indicators.	**Criteria:** Determine the essential concepts of chemistry in vocational school. Determining competency indicators. **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Determine the essential concepts of chemistry in vocational school. Determining competency indicators.		**Material:** essential concepts, competency indicators for chemistry material in SMA/MA and SMK. **References:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%

11	Determine essential concepts, competency indicators for chemistry material in SMA/MA and SMK.	Analyzing chemical misconceptions.	**Criteria:** Analyzing chemical misconceptions. **Form of Assessment** : Project Results Assessment / Product Assessment	Analyzing chemical misconceptions.		**Material:** essential concepts, competency indicators for chemistry material in SMA/MA and SMK. **References:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%
12	Planning chemistry learning strategies in class	Looking for solutions to overcome misconceptions	**Criteria:** Looking for solutions to overcome misconceptions **Form of Assessment** : Project Results Assessment / Product Assessment	Looking for solutions to overcome misconceptions		**Material:** chemistry learning strategies in the classroom **Reference:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%
13	Planning chemistry learning strategies in class	Discover misconceptions and their causes.	**Criteria:** Discover misconceptions and their causes. **Form of Assessment** : Participatory Activities	Discover misconceptions and their causes.		**Material:** chemistry learning strategies in the classroom **Reference:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	5%
14	Planning chemistry learning strategies in class	Determine how to reduce misconceptions.	**Criteria:** Determine how to reduce misconceptions. **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Determine how to reduce misconceptions.		**Material:** chemistry learning strategies in the classroom **Reference:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	10%
15	Planning chemistry learning strategies in class	Planning chemistry lessons.	**Criteria:** Planning chemistry lessons. **Form of Assessment** : Project Results Assessment / Product Assessment	Planning chemistry lessons.		**Material:** chemistry learning strategies in the classroom **Reference:** *Ibrahim, et al. 2013. Curriculum and Learning. Jakarta: Rajarafindo Persada*	10%
16	UAS	Planning chemistry lessons.	**Criteria:** Planning chemistry lessons. **Form of Assessment** : Test	Writing test			10%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	132.5%
2.	Project Results Assessment / Product Assessment	47.5%
3.	Test	20%
		100%

Notes

1. **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** 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.
6. **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.