	Universitas Negeri Surabaya Faculty of Mathematics and Natural Sciences Science Education Doctoral Study Program	Document Code		

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Instrument Development	8400103019		T=3	P=0	ECTS=7.56	2	July 18, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	....	....	Prof. Dr. Suyatno, 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)

P.O	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Short Course Description	Students will be able to summarize some core information about how to write a high-quality dissertation literature review. Important ideas about Introduction to Classical Test Theory, especially about the test preparation process, reliability, validity, and item analysis. Development and validation of integrated science process tests. Important ideas in Nieveen, N. 2007. Formative Evaluation in Educational Design Research, especially important ideas about criteria for high quality interventions, namely content validity, construct validity, practice, and effectiveness. Developing instruments to validate a learning model and RPP tools based on this model includes content validity, construct validity, practicality and effectiveness. Important ideas about test development, observation sheets, assessment sheets include validity and reliability.
References	Main :

1. Anderson, L.W. and Krathwohl, D.R. 2001. A Taxonomy for Learning, Teaching, and Assessing. New York: Longman.
2. Bloom's Revised Taxonomy. Presented by Denise Tarlinton. Pupil Free Day. Monday 14 July 2003.
3. Borich, Gary D. 1994. Observation Skills for Effective Teaching. Merril: New York.
4. Brookhart, Susan M. 2010. How to Assess Higher-Order Thinking Skills in Your Classroom. Alexandria: ASCD.
5. Crocker, Linda & Algina, James. 2008. Introduction to Classical & Modern Test Theory. United States of America: Cengage Learning.
6. Pellegrino, James W., Wilson, Mark R., Koenig, Judith, A., Beatty, Alexandra S. 2014 Developing Assessments for The Next Generation Science Standard. Wahington, D.C.: National Academy of Sciences.
7. Monica, K. M. K. 2005. Development and Validation of a Test of Integrated Science Process Skills for The Further Education and Training Learners. A Dissertation Submitted in Partial Fulfilment of The Requirements for Degree of Master in Science Education.
8. Nieveen, N. 2007. Formative Evaluation in Educational Design Research. Merupakan salah satu artikel dalam naskah berjudul An introduction to educational research. 2007. Editors: Tjeerd Plomp & Nienke Nieveen. SLO . Netherlands institute for curriculum development.
9. Nur, Mohamad. 1987. Pengantar Teori Tes. Naskah Bahan Pengajaran/Buku Teks Program Refresher Proyek Pengembangan Lembaga Pendidikan Tenaga Kependidikan Direktotat Jenderal Pendidikan Tinggi Separtemen Pendidikan dan Kebudayaan.
10. Performance Assessment in the Science Classroom. New York: Glencoe McGraw-Hill.
11. Randolph, Justus J. A Guide to writing the dissertation literature review

Supporters:	

Supporting lecturer	MOHAMAD NUR Prof. Dr. Endang Susantini, M.Pd. Prof. Dr. Wasis, 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							0%
2							0%
3							0%
4							0%
5							0%
6							0%
7							0%
8							0%
9							0%
10							0%
11							0%
12							0%
13							0%
14							0%
15							0%

16							0%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
		0%

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** 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.
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.