

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

Document Code

## SEMESTER LEARNING PLAN

Courses			CODE		Course Family		Credit Weight		SEMESTER	Compilation Date				
Food Ingredient Chemistry			842010	0102070			T=2	P=0	ECTS=3.18	8	July 18, 2024			
AUTHORIZATION			SP De	SP Developer			Course Cluster Coordinator			Study Program Coordinator				
										Prof. Dr. Erman, M.Pd.				
Learning model	I	Case Studies												
Program		PLO study program that is charged to the course												
Learning Outcomes		Program Objectives (PO)												
(PLO)		PLO-PO Matrix												
		P.0												
		PO Matrix at the end of each learning stage (Sub-PO)												
			P.0	P.O Week										
				1 2 3 4	1 5	6 7	8	9	10 11 2	L2 13 14	15 16			
Short Course Description		This course discusses the chemical components in food ingredients and the physical and chemical changes that occur during the processing, storage and handling of food ingredients. Lectures are carried out with modeling, presentations and discussions.												
References		Main :												
		<ol> <li>De Man, J.M. 1990. Principle of Food Chemistry. New York : Van Nostrand Reinhole</li> <li>Graves, Jeanne H.F. and Gladys, C.P. 1987. Foundations of Food Preparation. Fifth ed. New York: Macmillan Pub. Co</li> </ol>												
		Supporters:												
Support lecturer														
Week-	Final abilities of each learning			Evaluation			Help Learning, Learning methods, Student Assignments, [Estimated time]			Learning materials	Assessment Weight (%)			
	stag		Indicator	Criteria & Fo		fline ( fline )	0	nline	( online )	online) References				
(1)	(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: Case Study

 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.
- 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.