						Document Code
	Universitas Negeri Surabaya **Faculty of Engineering** **, Undergraduate Culinary Education Study Program**					

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Food Ingredient Knowledge	8321103059		**T=3**	**P=0**	**ECTS=4.77**	1	July 17, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	....	....	Dr. Hj. Sri Handajani, S.Pd., M.Kes.

Learning model	**Case Studies**

Program Learning Outcomes (PLO)	**PLO study program which 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	Study of various scientific aspects that are closely related to plant and animal food ingredients. The discussion includes the physical and chemical properties of the components that make up staple foods, side dishes, fruit and vegetables, milk, including their nutritional value and the reactions that occur in food ingredients when their conditions change during the preparation, processing, storage and decay.

References	**Main :**	
	1.	1. Tien R. Muchtadi, dkk. 2010.Ilmu Pengetahuan Bahan Pangan. Bandung: Alfabeta2. Gaman P.M., dan Sherington. 2008.Ilmu Pangan Pengantar Ilmu Pangan Nutrisi dan Mikrobiologi.Terjemahan Murdijati Gardjito dkk.Yogyakarta: Gajah Mada Unipress.3. Winarno FG. 2010.Kimia Pangan Dan Gizi. Jakarta : Gramedia4. Marion, Bennion. 1980.The Science of Food.Singapore: John Wiley & Sons5. Purnomo A., Hari. 1985.Ilmu Pangan (Terjemahan). Jakarta: UI Press
	Supporters:	

Supporting lecturer	Dra. Hj. Suhartiningsih, M.Pd. Andika Kuncoro Widagdo, 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	Able to understand the concept of food ingredients, classification and types of food ingredients	- Explaining the relationship between humans and food - Explaining the classification of food - Mastering RPS	**Criteria:** If you answer all questions correctly, score 100	Lecture, question and answer and assignment summary report 2 X 50			0%

No.	Ability	Study Materials	Criteria	Method				Weight
2	Able to understand the types and physical and chemical properties of carbohydrates contained in plant foods, as well as being able to explain the processed products	1. Explain the structure and types of carbohydrates. 2. Explain the physical and chemical properties of carbohydrates 3. Explain the processed results of carbohydrates	**Criteria:** If answered correctly, the score is 100	Discussion, presentation and question and answer 2 X 50				0%
3	Able to understand the physical and chemical properties of the components composed of plant foods, namely cereals. Able to choose the type of cereal that suits your needs. Able to describe types of processed cereals.	1. Explain the physical & chemical properties of cereals 2. Able to choose the type of cereal needed 3. Explain the types of processed cereals	**Criteria:** If you answer all three questions correctly, you get a score of 100	Presentation, discussion and questions and answers 2 X 50				0%
4	Able to understand the physical and chemical properties of the components composed of plant foods, namely tubers. Able to choose the type of cereal that suits your needs. Able to describe types of processed tubers.	1. Able to understand the physical and chemical properties of the components composed of plant foods, namely tubers 2. Able to choose the type of cereal that suits your needs 3. Be able to describe the types of processed tubers.	**Criteria:** If you answer all three questions correctly, you get a score of 100	Presentation, discussion and questions and answers 2 X 50				0%
5	Able to understand the physical and chemical properties of the components contained in animal and vegetable food ingredients.	- Explain the physical and chemical properties of proteins - Explain the structure and types of proteins - Explain the classification of proteins	**Criteria:** If you answer all three questions correctly, you get a score of 100	Presentation, discussion and questions and answers 2 X 50				0%
6	able to choose quality food ingredients, protein sources, milk	- Explain the physical and chemical properties of milk - Explain the structure and types of milk - Explain the factors that influence the quality of milk - Choose good dairy products	**Criteria:** Each question item has a score of 25	Discussion, Presentation, questions and answers and assignments 2 X 50				0%
7	able to choose quality food ingredients, protein sources.	1. Explain the physical and chemical properties of eggs 2. Explain the structure/composition and physical/chemical properties of eggs 3. Explain the factors that influence egg quality 4. Choose good processed egg products	**Criteria:** Each item has a weight of 20	Learning based on 2 X 50 problems				0%
8		Can do UTS	**Criteria:** Each question item has a weight of 20	Test 2 X 50				0%
9	Able to choose quality food ingredients, protein sources. Able to design processed meat products	- Explain the physical and chemical properties of meat - Explain the structure and types of meat based on the meat map and the physical form of the animal - Explain the factors that influence the quality of meat - Choose to design good processed meat products	**Criteria:** Each question item has a weight of 20	Carrying out LKM assignments, discussions, presentations and questions and answers 2 X 50				0%
10	Able to understand the concept of fat/oil, classification and physical and chemical properties of fat/oil	1. Explain the physical and chemical properties of fats/oils 2. Explain the structure and types of fats/oils 3. Explain the classification of fats/oils	**Criteria:** If answered correctly, then score 100	Discussion, presentation and question and answer 2 X 50				0%

No	Sub-PO	Indicators	Assessment Criteria	Forms of assessment			Percentage
11	able to choose quality food ingredients, protein sources.	- Explain the physical and chemical properties of poultry and fish - Explain the structure/composition and types of poultry and fish - Explain the factors that influence the quality of poultry and fish - Choose good processed poultry/fish products	**Criteria:** Each question item has a weight of 20	Discussion, presentation, question and answer and internet browsing assignments 2 X 50			0%
12	able to choose quality food, fruit and vegetables	1. Explain the classification of fruits and vegetables 2. Explain the physical and chemical properties of fruit/vegetables 3. Understand the structure and nutritional composition of fruits and vegetables 4. Mastering the factors that influence the quality of fruit and vegetables 5. Choose good processed fruit and vegetable products	**Criteria:** Each question item has a weight of 20	Discussion, Presentation and question and answer. Task 2 X 50			0%
13	able to choose quality food ingredients, herbs and spices.	1. Explain the classification of herbs and spices 2. Explain the physical and chemical properties of herbs and spices 3. Explain the structure and nutritional content of herbs and spices 4. Choose various types of good processed herbs and spices	**Criteria:** Each question item has a weight of 25	Problem based Instruction 2 X 50			0%
14	Able to create organoleptic assessment rubrics and carry out organoleptic tests	1. Create assessment instruments / rubrics for organoleptic tests 2. Conduct organoleptic tests 3. Analyze organoleptic test results 4. Summarize organoleptic test results	**Criteria:** If done according to the procedure and correctly, you get a score of 100	Assignments and Exercises 2 X 50			0%
15	search for scientific articles from international journals and present them	1. Find a scientific article from an international journal. 2. Present the findings in the article in front of the class	**Criteria:** according to the assessment rubric	Internet browsing assignments and 2 X 50 Presentations			0%
16							0%

Evaluation Percentage Recap: Case Study

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.