

**SEMESTER LESSON PLAN (RPS)**

**(FOOD PRESERVATION)**



**Lecturer:**




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**CULINARY EDUCATION STUDY PROGRAM  
DEPARTMENT OF FAMILY WELFARE EDUCATION  
FACULTY OF TECHNOLOGY AND VOCATIONAL EDUCATION  
UNIVERSITAS PENDIDIKAN INDONESIA**

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	<b>SEMESTER LESSON PLAN (RPS)</b>	Doc. No. : FPTK-UPI-RPS-E0851-7
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	<b>FOOD PRESERVATION</b>	Date : 27 Oct 2021 Page : 10 pages
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<b>SEMESTER LESSON PLAN (RPS)</b>		
<b>1. Course Identity</b>		
Name of Study Program : Culinary Education		
Name of Course : Food Preservation		
Code of Course : BG 402		
Group of Course : Study Program Expertise Course		
SKS weight : 3		
Level : S-1		
Semester : Odd		
Prerequisite : Food Science, Occupational Health and Food Service Safety		
Status (mandatory/optional) : Mandatory		
Lecturer name and code : Dr. Ellis Endang Nikmawati, M.Si / 1415 Dr. Ai Mahmudatussa'adah., S.Pd		
<b>2. Course Description (1 paragraph)</b>		
This course discusses the basic concepts of food preservation, definition, scope, principles, and goals of Food Preservation, types of food preservation, causes of food spoilage, damage caused by microorganisms, biology, physical, mechanical, environmental,		

principles of packaging and labeling of food products, practices of making preserved food: Drying, salting, adding sugar, adding spices, heating, and fermentation.

### **3. Outcomes of Referenced Study Program Learning (RSPL)**

**S** Demonstrate scientific, educative, and religious attitudes and behaviors contributing to improving the quality of life in society, nation, and state, based on academic norms and ethics

**P1** Proficient in the theoretical concepts of educational science, strategy, lesson planning, media, methodology and evaluation of learning and educational psychology

**P3** Proficient in theoretical concepts in the area of Culinary education

**P4** Proficient in the theoretical concepts of Culinary in the area of Culinary expertise

**KU** Can apply logical, critical, systematic, and innovative thinking in the context of science and technology development or implementation that pays attention to and applies humanities values corresponding to their area of expertise;

**KK1** Can plan, implement, and evaluate the implementation of technology and vocational education in the area of Culinary on a professional basis, both in formal, non-formal, and informal education

**KK 2** Can plan, implement, and imitate the learning outcomes of technology and vocational education in the field of culinary education in formal and non-formal education units

### **4. Course Learning Outcomes (CLO)**

**M1** Internalize the quality culture in carrying out daily activities

**M2** Understand the Concept of Food Preservation

**M3** Make Food Preservation Products

**M4** Design a food preservation product business plan

## **5. Description of Learning Plan**

Meeting	Sub-CLO of Course Learning Outcome Indicators	Study Modules	Learning Format	Time	Assignment and Evaluation	References
1	<p><b>Sub-CLO:</b> Overview of the course.</p> <p><b>Indicators :</b> Students can understand the general description and lecture rules <b>(C2)</b></p>	Overview and course rules	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p> <p>Listening to explanations from lecturers, asking questions, and discussing.</p>	150	Searching some learning resources related to Food Technology	b,d,e,f,g,i
2	<p><b>Sub-CLO</b> Understand and apply the Food Preservation Concept</p> <p><b>Indicators :</b> Students can understand and apply the definition, scope, principles, and objectives of</p>	Definition, scope, principles, and objectives of Food Technology	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p>	150	Searching some learning resources related to Food Technology	b,d,e,g,h,i

	Food Technology (C2)		Listening to explanations from lecturers, asking questions, and discussing.			
3	<b>Sub-CLO</b> Understand and apply the Food Preservation Concept <b>Indicators :</b> Students can understand and apply packaging: purpose, types, and packaging techniques (C1)	Packaging: purpose, types, packaging techniques	<i>Synchronous:</i> Meeting via zoom meeting  <i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)  Listening to explanations from lecturers, asking questions, and discussing.	150	Searching some learning resources related to Food Technology	b,d,e,g,h
4	<b>Sub-CLO</b> Understand and apply the Food Preservation Concept <b>Indicators :</b> Students are able and apply labeling: function, purpose	Labeling: function, purpose, and technique of labeling	<i>Synchronous:</i> Meeting via zoom meeting  <i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)	150	Searching some learning resources related to Food Technology	a,c,d,e,i

	and labeling technique (C2)		Listening to explanations from lecturers, asking questions, and discussing.			
5	<p><b>Sub-CLO</b> Understand and apply the Food Preservation Concept</p> <p><b>Indicators :</b> Students can investigate the causes of food spoilage caused by microorganisms and the environment (oxygen, heating, light) (C3)</p>	Causes of food spoilage caused by microorganisms and the environment (oxygen, heating, light)	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p> <p>Listening to explanations from lecturers, asking questions, and discussing.</p>	150	Searching some learning resources related to Food Technology	c,d,e,i

6	<p><b>Sub-CLO</b> Understand and apply the Food Preservation Concept</p> <p><b>Indicators :</b> Students investigate defects caused by storage time, and biological (C3)</p>	Defects caused by storage time, and biological	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p> <p>Listening to explanations from lecturers, asking questions, and discussing.</p>	150	Searching some learning resources related to Food Technology	b,g,h,i
7	<p><b>Sub-CLO</b> Understand and apply the Food Preservation Concept</p> <p><b>Indicators :</b> Students can detect defects due to mechanical, biological, physiological, physical and chemical causes (C4)</p>	Defects due to mechanical, biological, physiological, physical and chemical causes	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p> <p>Listening to explanations from lecturers, asking questions, and discussing.</p>	150	Searching some learning resources related to Food Technology	c,d,e,i

8	<i>MID-TERM EXAM</i>					
9	<p><b>Sub-CLO</b> Make Food Preservation Products (</p> <p><b>Indicators :</b></p> <p>Students can conduct preservation practicum with the addition of salt (P2)</p>	Preservation practicum with the addition of salt	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p> <p>Listening to explanations from lecturers, asking questions, and discussing.</p>	150	Searching some learning resources related to Food Technology	c,d,e,i
10	<p><b>Sub-CLO</b> Make Food Preservation Products</p> <p><b>Indicators :</b> Students can conduct preservation practicum with added sugar (P2)</p>	Preservation practicum with the addition of sugar	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p> <p>Listening to explanations from lecturers, asking</p>	150	Searching some learning resources related to Food Technology	b,f,g,h



			questions, and discussing.			
11	<p><b>Sub-CLO</b> Make Food Preservation Products</p> <p><b>Indicators :</b> Students can carry out preservation practicum with the addition of spices (P2)</p>	Preservation practicum with the addition of spices	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p> <p>Listening to explanations from lecturers, asking questions, and discussing.</p>	150	Searching some learning resources related to Food Technology	c,d,e,i
12	<p><b>Sub-CLO</b> Make Food Preservation Products (</p> <p><b>Indicators :</b> Students can carry out preservation practicum with fermentation (P2)</p>	Preservation practicum with fermentation	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p> <p>Listening to explanations from lecturers, asking</p>	150	Searching some learning resources related to Food Technology	b,e,g,h

			questions, and discussing.			
13	<p><b>Sub-CLO</b> Make Food Preservation Products (S8,P6,KU1,KK8) <b>Indicators :</b> Students can carry out the presentation of the Food Processing Project wave 1 (P2)</p>	First session of Food Processing Project Presentation	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p> <p>Listening to explanations from lecturers, asking questions, and discussing.</p>	150	Searching some learning resources related to Food Technology	c,d,e,i
14	<p><b>Sub-CLO</b> Make Food Preservation Products <b>Indicators :</b> Students can carry out the presentation of the Food Processing Project wave 2 (P2)</p>	Second session of Food Processing Project Presentation	<p><i>Synchronous:</i> Meeting via zoom meeting</p> <p><i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)</p> <p>Listening to explanations from lecturers, asking</p>	150	Searching some learning resources related to Food Technology	b,f,g,h

			questions, and discussing.			
15	<b>Sub-CLO</b> Make Food Preservation Products <b>Indicators :</b> Students can carry out the presentation of the Food Processing Project wave 3 (P2)	Third session of Food Processing Project Presentation	<i>Synchronous:</i> Meeting via zoom meeting  <i>Asynchronous:</i> Self study via spot.upi.edu, Discussion forums (group discussion)  Listening to explanations from lecturers, asking questions, and discussing.	150	Searching some learning resources related to Food Technology	c,d,e,i
16	<b>SEMESTER FINAL EXAM</b>					

## 6. References

- a. Dr. H. Panda. 2013. The Complete Book on Fruits, Vegetables and Food Processing.
- b. Ronald Ross. 2015. Food and Dietary Supplements in The Prevention. Academic Press.
- c. Monica Lizeth. 2019. Handbook of Research on Food Science Technology. CRC Press.
- d. Food Processing and Preservation Technology, 2015, Prof. Dr. Ir. H. Supli Effendi, M.Si
- e. Food Technology Science, First Edition, October 2017 Author : 1. Maryam Razak, STP., M.Si. 2. Muntikah, SP., M.Pd.
- f. Food Preservation Technology 2014, Dr. Ir. Leni Herliani Afrianti, M.P.
- g. NATURAL AND SYNTHETIC FOOD PRESERVING BOOK - LENI HERLIANI AFRIANTI – ALFABETA
- h. E-book Asian Pickles sweet, sour, salty, cured and fermented preserves , 2018

- i. Technology of Preservation and Processing of Fishery Products, Latif Sahubawa, Ustadi, Published on 2018-04-26 by UGM PRESS
- j. MEAT PROCESSING TECHNOLOGY, 2020, Edition: 1, Publisher: CV. Anugrah Pangeran Jaya Press, ISBN: 978-623-92073-6-6Peni Patriani, University of Sumatera Utara

## **1. Appendix-2 Evaluation Instrument**

**INDONESIAN UNIVERSITY OF EDUCATION  
FACULTY OF TECHNOLOGY AND VOCATIONAL EDUCATION  
FAMILY WELFARE EDUCATION DEPARTMENT**

**MID SEMESTER**

Course : Food Technology

Program/Level : Culinary Arts Education Specialization/III  
Day/Date : Monday/26 October 2020  
Lecturer : Dr. Ellis Endang Nikmawati, M.Si  
Dr. Ai Mahmudatussaadah, M.Si

Please answer the following questions completely and clearly!

1. What does preservation mean. Explain the difference between food preservation and processing.
2. Explain the complete preservation classification with the various products from that classification
3. Explain about the manufacture of preservation products that you have practiced completely and clearly.
4. Explain what causes food spoilage and how to deal with it so as not to harm.
5. What parents did in the past in an effort to preserve food, so that it lasts for months.
6. Explain mechanical, biological, chemical and physiological defects to foodstuffs and how to overcome them.
7. Why does water content in foodstuffs affect the shelf life of these foodstuffs.
8. Explain (a) the meaning and (b) the function of packaging at least 5 functions of packaging for food ingredients
9. Explain the classification of packaging based on the structure of the complete packaging system with examples of at least 5 kinds of products for each classification
10. Explain what information should be included on the food packaging/label?

