



**Universitas Negeri Surabaya  
Vocational Faculty  
D4 Culinary Management Study Program**

**Document  
Code**

**SEMESTER LEARNING PLAN**

<b>Courses</b>	<b>CODE</b>	<b>Course Family</b>	<b>Credit Weight</b>	<b>SEMESTER</b>	<b>Compilation Date</b>																																																																																														
<b>Product Development</b>	6230503107	Compulsory Study Program Subjects	T=3 P=0 ECTS=4.77	4	January 25, 2023																																																																																														
<b>AUTHORIZATION</b>	<b>SP Developer</b>		<b>Course Cluster Coordinator</b>	<b>Study Program Coordinator</b>																																																																																															
	Ita Fatkhur Romadhoni, S.Pd.,M.Pd		Dra. Niken Purwidiani, M.Pd	Lilis Sulandari, S.Pt., M.P.																																																																																															
<b>Learning model</b>	<b>Project Based Learning</b>																																																																																																		
<b>Program Learning Outcomes (PLO)</b>	<b>PLO study program which is charged to the course</b>																																																																																																		
	<b>PLO-7</b>	Able to apply logical, critical, innovative, quality and measurable thinking in carrying out specific work in the catering sector according to work competency standards																																																																																																	
	<b>PLO-9</b>	Able to design, plan, make, present and store food, drink or cooking products in accordance with applicable recipe standards, product quality standards, food hygiene standards, meet aesthetic values by implementing K3 in the work environment																																																																																																	
	<b>PLO-13</b>	Master in-depth theoretical concepts regarding the science and techniques of processing various foods/cuisine by applying food hygiene, Occupational Safety and Health (K3) to produce innovative, nutritious, safe and aesthetic products.																																																																																																	
	<b>Program Objectives (PO)</b>																																																																																																		
	<b>PO - 1</b>	Able to design and plan the development of culinary and cake products (requirements for ingredients, tools, labor, manufacturing time, packaging) by taking into account marketable aspects and competitiveness (quality), consumer preferences, availability of raw materials, consumer purchasing power in the form of a portfolio.																																																																																																	
	<b>PO - 2</b>	Able to prepare facilities and instruments (validated) required for product development.																																																																																																	
	<b>PO - 3</b>	Able to work according to plan by paying attention to aspects of knowledge, skills and efficiency according to procedures, by paying attention to aspects of cleanliness and safety according to procedures																																																																																																	
	<b>PLO-PO Matrix</b>																																																																																																		
		<table border="1" style="width: 100%; text-align: center;"> <tr> <td>P.O</td> <td>PLO-7</td> <td>PLO-9</td> <td colspan="2">PLO-13</td> </tr> <tr> <td>PO-1</td> <td></td> <td></td> <td colspan="2"></td> </tr> <tr> <td>PO-2</td> <td></td> <td></td> <td colspan="2"></td> </tr> <tr> <td>PO-3</td> <td></td> <td></td> <td colspan="2"></td> </tr> </table>				P.O	PLO-7	PLO-9	PLO-13		PO-1					PO-2					PO-3																																																																														
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	<b>PO Matrix at the end of each learning stage (Sub-PO)</b>																																																																																																		
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<b>Short Course Description</b>	This course teaches about food product development, product development concepts, the role of product development in increasing competitiveness in business, product development strategies, innovation and creativity concepts, developing new product model designs including packaging (if any) in the form of a portfolio, determining and preparing instruments ( consumer perceptions and preferences for the product), instrument validation and revision, product pre-trial, product trial (quality and preferences), product analysis (reviewed from the aspects of quality, consumer preferences, packaging, availability of raw materials, economics), preparation and presentation reports, and documentation of product development results.																																																																																																		
<b>References</b>	<b>Main :</b>																																																																																																		

1. Beckley, Jacqueline H. and Leslie J. Herzog. 2017. Accelerating New Food Product Design and Development . 2nd Edition. English: Wiley-Blackwell.
2. Buchari Alma , 2000 . Manajemen Pemasaran Dan Pemasaran Jasa. Penerbit Alfabet,. Bandung
3. Fuller, Gordon W. 2011. New Food Product Development: From Concept to Marketplace , Third Edition. English: CRC Taylor & Francis Group
4. IFT Basic Symposium. 2002. Food Product Development Based on Experience . Iowa State Press (15-07-2002)
5. Kotler , Philip. 2000 . Manajemen Pemasaran, Edisi Milenium. Jakarta: Prehallindo
6. Marcus Vinicius Pereira and Trabasso, Luis Gonzaga. 2017. The Lean Product Design and Development Journey: A Practical View Pessôa . English: Springer
7. Moskowitz, Howard R.; Beckley, Jacqueline H.; and Resurreccion, Anna V. A. 2012. Sensory and Consumer Research in Food Product Design and Development . English: Wiley-Blackwell
8. Pope, Rob. 2005. Creativity: Theory, History, Practice. New York: Routledge Taylor & Francis Group
9. Reisner, Michele. 2009. Packaging Research in Food Product Design and Development . English: Wiley-Blackwell
10. Saladin, Djaslim. 2002. Intisari Pemasaran dan Unsur-unsur Pemasaran. Cetakan kedua. Bandung: Linda Karya.

**Supporters:**

**Supporting lecturer**

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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	Understanding the Contents of the Product Development RPS	Understand the purpose of studying product development courses, obligations and tasks that must be carried out.	<p><b>Criteria:</b> There isn't any because it's just RPS orientation</p> <p><b>Form of Assessment :</b> Participatory Activities, Project Results Assessment / Product Assessment</p>	Lectures and Questions and Answers 2 X 50		<p><b>Material:</b> Product Development Concepts</p> <p><b>References:</b> <i>Beckley, Jacqueline H. and Leslie J. Herzog. 2017. Accelerating New Food Product Design and Development. 2nd Edition. English: Wiley-Blackwell.</i></p>	5%
2	Able to understand the basic concepts of product development correctly, independently and responsibly	<ol style="list-style-type: none"> <li>1.Explain the meaning of product development,</li> <li>2.Differentiate new products from product development</li> <li>3.Identify product levels,</li> <li>4.Explain the criteria for new products and developed products,</li> <li>5.Explain the purpose or importance of developing new products, correctly, independently and responsibly</li> </ol>	<p><b>Criteria:</b></p> <ol style="list-style-type: none"> <li>1.Full mark (maximum) if you answer the question correctly (according to the answer key) (weight 20%)</li> <li>2.Attitude assessment on a scale of 1 - 5 (Very Good), Good, Fair, Not Good, Not Good)</li> </ol> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Independent Assignment Presentation (TMD)1 by students; Questions and answers by lecturers and students; Discussion and drawing conclusions by the lecturer 2 X 50		<p><b>Material:</b> Product Development Concepts</p> <p><b>Reference:</b> <i>Buchari Alma, 2000. Marketing Management and Services Marketing. Alfabet Publishers,. Bandung</i></p>	5%

3	Able to understand new product development correctly, independently, confidently and responsibly	<ol style="list-style-type: none"> <li>1.Explain the factors that influence product development,</li> <li>2.Explain the factors that hinder the development of new products,</li> <li>3.Explain the difference between creativity and innovation,</li> <li>4.Explain various types of product innovation, correctly, independently, confidently and responsibly</li> </ol>	<p><b>Criteria:</b></p> <ol style="list-style-type: none"> <li>1.Maximum score if you answer the question correctly (according to the answer key)</li> <li>2.Attitude assessment on a scale of 1 - 5 (Very Good), Good, Fair, Not Good, Not Good)</li> </ol> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment, Portfolio Assessment</p>	Tmd2 presentation by students Questions and answers by lecturers and students Discussion and drawing conclusions by lecturers 2 X 50		<p><b>Material:</b> Product development procedures <b>Reference:</b> <i>IFT Basic Symposium. 2002. Food Product Development Based on Experience. Iowa State Press (2002-07-15)</i></p>	5%
4	Able to understand the stages/strategy of product development correctly, independently, confidently, and responsibly, committed, action and results oriented	<ol style="list-style-type: none"> <li>1.Explain the meaning of product development strategy,</li> <li>2.Identifying stages of product development,</li> <li>3.Distinguish between generating and filtering ideas in product development,</li> <li>4.Explain concept testing in product development,</li> <li>5.Explain business analysis in product development,</li> <li>6.Explain the purpose of product development, correctly, independently, confidently, and responsibly, committed, action and results oriented</li> </ol>	<p><b>Criteria:</b></p> <ol style="list-style-type: none"> <li>1.Maximum score if you answer the question correctly (according to the answer key)</li> <li>2.Attitude assessment on a scale of 1 - 5 (Very Good), Good, Fair, Not Good, Not Good)</li> </ol> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Tmd3 Presentation; Cooperative learning; Ask Java; and Lecturer explanation regarding PBM TM-4 2 X 50 material		<p><b>Material:</b> Product development strategy <b>References:</b> <i>Reisner, Michele. 2009. Packaging Research in Food Product Design and Development. English: Willey-Blackwell</i></p>	5%

5	Able to understand concept testing and business analysis operations, correctly, independently, confidently, and responsibly, committed, action and results oriented	<ol style="list-style-type: none"> <li>1. Predicting purchasing intensity based on purchasing data from respondents (consumers),</li> <li>2. Explaining product descriptions to respondents (potential potential customers),</li> <li>3. Dig up information about the possibility of respondents (consumers) buying the product or not,</li> <li>4. Evaluate and revise the product if the purchase estimate is in the low category, correctly, independently, confidently, and responsibly, committed, action and results oriented</li> </ol>	<p><b>Criteria:</b></p> <ol style="list-style-type: none"> <li>1. Maximum score if you answer the question correctly (according to the answer key). The total assessment weighs 20 of the total value.</li> <li>2. Attitude assessment on a scale of 1 - 5 (Very Good), Good, Fair, Not Good, Not Good)</li> </ol> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Tmd4 Presentation Cooperative learning Questions and answers Lecturer's explanation regarding concept testing of selected ideas 2 X 50		<p><b>Material:</b> Business analysis <b>Bibliography:</b> <i>Moskowitz, Howard R.; Beckley, Jacqueline H.; and Resurreccion, Anna VA 2012. Sensory and Consumer Research in Food Product Design and Development. English: Wiley-Blackwell</i></p>	5%
6	Able to carry out Product Development operations (product testing) according to the design (portfolio) responsibly.	Able to carry out Product Development operations (Product Testing) according to the portfolio	<p><b>Criteria:</b> Demonstrate product design 30% in accordance with SOP</p> <p><b>Forms of Assessment :</b> Project Results Assessment / Product Assessment, Practical Assessment</p>	2 X 50		<p><b>Material:</b> Product development operations <b>Reference:</b> <i>IFT Basic Symposium. 2002. Food Product Development Based on Experience. Iowa State Press (2002-07-15)</i></p>	5%
7	Able to carry out product testing according to design (portfolio) correctly and responsibly.	Able to carry out product testing according to design (portfolio) correctly and responsibly.	<p><b>Criteria:</b> Able to carry out product testing according to design (portfolio)</p> <p><b>Form of Assessment :</b> Assessment of Project Results / Product Assessment, Practices / Performance</p>	Presentation and discussion 2 X 50		<p><b>Material:</b> Presentation of product development progress results <b>Readers:</b> <i>Kotler, Philip. 2000 . Marketing Management, Millennium Edition. Jakarta: Prehallindo</i></p>	10%
8	Able to carry out product testing according to design (portfolio) correctly and responsibly.	Able to carry out product testing according to design (portfolio) correctly and responsibly.	<p><b>Criteria:</b> Able to carry out product testing according to design (portfolio)</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment, Test</p>	Presentation and discussion 2 X 50		<p><b>Material:</b> Presentation of product development progress results <b>Readers:</b> <i>Kotler, Philip. 2000 . Marketing Management, Millennium Edition. Jakarta: Prehallindo</i></p>	10%

9	Able to carry out operational product development activities (retest-1) correctly and responsibly	Able to carry out operational product development activities (retest-1) correctly and responsibly	<p><b>Criteria:</b> Criteria for test results are a minimum organoleptic value of 70%</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment, Portfolio Assessment</p>	Product trial 2 X 50		<p><b>Material:</b> Retest 1 <b>References:</b> <i>Reisner, Michele. 2009. Packaging Research in Food Product Design and Development. English: Willey-Blackwell</i></p>	5%
10	Able to carry out operational product development activities (retest-2) correctly and responsibly	Able to carry out operational product development activities (retest-2) correctly and responsibly	<p><b>Criteria:</b> Criteria for test results are a minimum organoleptic value of 70%</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Product trial 2 X 50		<p><b>Material:</b> Product trials <b>Readers:</b> <i>Kotler, Philip. 2000 . Marketing Management, Millennium Edition. Jakarta: Prehallindo</i></p>	5%
11	Able to carry out product development operations (retest-3) and documentation correctly and responsibly	Able to carry out product development operations (retest-3) and documentation correctly and responsibly	<p><b>Criteria:</b> Criteria for test results are a minimum organoleptic value of 80%</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Product Test 2 X 50		<p><b>Material:</b> Product trials 3 <b>References:</b> <i>Marcus Vinicius Pereira and Trabasso, Luis Gonzaga. 2017. The Lean Product Design and Development Journey: A Practical View Pessôa. English: Springer</i></p>	5%
12	Able to report (with PPT) the results of product development that has been implemented correctly and has good performance	Able to report (with PPT) the results of product development that has been implemented correctly and has good performance	<p><b>Criteria:</b> Criteria for test results are a minimum organoleptic value of 85%</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Presentation and Discussion 2 X 50		<p><b>Material:</b> Presentation of product development results <b>Readers:</b> <i>Marcus Vinicius Pereira and Trabasso, Luis Gonzaga. 2017. The Lean Product Design and Development Journey: A Practical View Pessôa. English: Springer</i></p>	5%
13	Able to report (with PPT) the results of product development that has been implemented correctly and has good performance	Able to report (with PPT) the results of product development that has been implemented correctly and has good performance	<p><b>Criteria:</b> The reported results are 90% in accordance with the portfolio design</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment, Portfolio Assessment</p>	Presentation and Discussion 2 X 50		<p><b>Material:</b> Presentation of product development results <b>Readers:</b> <i>Marcus Vinicius Pereira and Trabasso, Luis Gonzaga. 2017. The Lean Product Design and Development Journey: A Practical View Pessôa. English: Springer</i></p>	5%

14	Able to secure product development results in the form of a product development recipe book.	Able to secure product development results in the form of a product development recipe book	<b>Criteria:</b> Recipe books can be arranged according to SOP  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment, Portfolio Assessment	Compiling a 2 X 50 recipe book		<b>Material:</b> Recipe book <b>Reader:</b> <i>Pope, Rob. 2005.</i> <b>Creativity:</b> <i>Theory, History, Practic e. New York: Routledge Taylor &amp; Francis Group</i>	5%
15	Able to secure product development results in the form of a product development recipe book.	Able to secure product development results in the form of a product development recipe book	<b>Criteria:</b> Recipe books can be arranged according to SOP  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment, Portfolio Assessment	Compiling a 2 X 50 recipe book		<b>Material:</b> Recipe book <b>Reader:</b> <i>Pope, Rob. 2005.</i> <b>Creativity:</b> <i>Theory, History, Practic e. New York: Routledge Taylor &amp; Francis Group</i>	10%
16	Able to explain the results of product development projects	Present the results of product development projects	<b>Criteria:</b> Capable of product development project results 100% in accordance with the portfolio  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment	Presentation and discussion 2 x 50		<b>Material:</b> Presentation of project results <b>References:</b> <i>Kotler, Philip. 2000 . Marketing Management, Millennium Edition. Jakarta: Prehallindo</i>	10%

#### Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	2.5%
2.	Project Results Assessment / Product Assessment	70%
3.	Portfolio Assessment	15%
4.	Practical Assessment	2.5%
5.	Practice / Performance	5%
6.	Test	5%
		100%

#### 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Forms of assessment:** test and non-test.
- 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.
- 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.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- 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%.
- TM=Face to face, PT=Structured assignments, BM=Independent study.

