



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

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight	SEMESTER	Compilation Date																																																																		
Statistics	6230502068	Compulsory Study Program Subjects	T=2 P=0 ECTS=3.18	4	January 23, 2023																																																																		
AUTHORIZATION		SP Developer	Course Cluster Coordinator	Study Program Coordinator																																																																			
		Ita Fatkhur Romadhoni	Dra. Niken Purwidiani, M.Pd	Lilis Sulandari, S.Pt., M.P.																																																																			
Learning model	Case Studies																																																																						
Program Learning Outcomes (PLO)	PLO study program which is charged to the course																																																																						
	PLO-5	Able to work together, have social sensitivity and concern for the environment as well as a professional personality																																																																					
	PLO-7	Able to apply logical, critical, innovative, quality and measurable thinking in carrying out specific work in the catering sector according to work competency standards																																																																					
	PLO-10	Able to organize cooperation between the kitchen and service departments by ensuring the readiness of food and drinks according to orders, preparing the service area and communicating when there are changes to service																																																																					
	PLO-13	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.																																																																					
	Program Objectives (PO)																																																																						
	PO - 1	Able to apply descriptive statistics, estimate population parameters, principles of hypothesis testing, parametric statistics, test analysis requirements, non-parametric statistics manually and apply statistical computer programs (SPSS) for research data analysis.																																																																					
	PO - 2	Able to internalize academic values, norms and ethics; obey the provisions of campus rules and regulations; Demonstrate an attitude of independent responsibility.																																																																					
	PLO-PO Matrix																																																																						
		<table border="1" style="margin: auto;"> <tr> <td>P.O</td> <td>PLO-5</td> <td>PLO-7</td> <td>PLO-10</td> <td>PLO-13</td> </tr> <tr> <td>PO-1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PO-2</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>				P.O	PLO-5	PLO-7	PLO-10	PLO-13	PO-1					PO-2																																																							
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	PO Matrix at the end of each learning stage (Sub-PO)																																																																						
		<table border="1" style="margin: auto;"> <tr> <td rowspan="2">P.O</td> <td colspan="16">Week</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td> </tr> <tr> <td>PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>PO-2</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>				P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																	PO-2															
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PO-2																																																																							
Short Course Description	Conduct studies and provide an understanding of the role of statistics through lectures adapted to the structure of the applied culinary arts undergraduate curriculum. Statistics courses consist of: descriptive statistics such as: understanding statistics, the role of statistics, data presentation, centralization measures, deviations, population models. Population, sample, and sampling techniques, data homogeneity tests, and inferential statistics such as: hypothesis testing, difference tests, correlation tests, and influence tests. The assessment is carried out during the learning process with participation during face-to-face, USS and UAS. Learning is carried out by applying a combination of scientific approaches, cooperative and classical learning models. The learning activity ended with a paper presentation on the application of statistics in the field of applied undergraduate culinary arts.																																																																						
References	Main :																																																																						
	<ol style="list-style-type: none"> 1. Sudjana. 2010. Metoda Statistika. Bandung: Tarsito 2. Sugiyono, Eri Wibowo. 2004. Statistika untuk Penelitian dan Aplikasinya dengan SPSS. Bandung: Alfabeta 3. Sugiyono. 2013. Statistika untuk Penelitian. Alfabeta: Bandung 4. Rosner, Bernard. 1986. Fundamental of Biostatistics, second edition. Massachusetts: PWS Publishers 																																																																						
	Supporters:																																																																						
Supporting lecturer	Dr. Ir. Asrul Bahar, M.Pd. Lilis Sulandari, S.Pt., M.P. Ita Fatkhur Romadhoni, S.Pd., 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 basic concepts of statistics, and the role of statistics in research	1. Analyze the basic concepts of statistics and statistics, the scope of statistics 2. Evaluate the role of statistics in research	Criteria: Each question item has a weight of 3 Form of Assessment : Participatory Activities	Lectures, discussions 3 X 50		Material: Statistical concepts in research Library: Sudjana. 2010. <i>Statistical Methods</i> . Bandung: Tarsito	5%
2	Able to understand the concept of descriptive statistics	1. Restate the meaning of descriptive statistics 2. Details the various types of data presentation 3. Discuss measures of central tendency 4. Discuss location size 5. Discuss measures of dispersion 6. Explain population models 7. Discuss moment, skewness and kurtosis	Criteria: If answered correctly, the score is 10 Form of Assessment : Participatory Activities, Portfolio Assessment	Brainstorming, Discussion and reflection 3 X 50		Material: Descriptive statistics Bibliography: Sugiyono, Eri Wibowo. 2004. <i>Statistics for Research and Applications with SPSS</i> . Bandung: Alfabeta	5%
3	Able to understand the concept of normal distribution and apply normal curves	1. Explain the meaning of a normal curve 2. Counting cases using a normal curve	Criteria: If answered correctly, the score is 10 Form of Assessment : Participatory Activities, Practical Assessment	Lectures, discussions, presentations 3 X 50		Material: Normal curve Reference: Rosner, Bernard. 1986. <i>Fundamentals of Biostatistics, second edition</i> . Massachusetts: PWS Publishers	5%
4	Able to understand the concepts of Population, Sample and Sampling Techniques	1. Discuss the meaning of population, sample, and sampling techniques 2. Discuss various sampling techniques 3. Give an example of a probability sampling technique 4. Create examples of non-probability sampling techniques	Criteria: If answered correctly, the score is 10 Form of Assessment : Participatory Activities, Practice/Performance	Lectures, discussions, presentations 3 X 50		Material: Sampling Techniques Literature: Sugiyono, Eri Wibowo. 2004. <i>Statistics for Research and Applications with SPSS</i> . Bandung: Alfabeta	5%

5	Understand the basic concepts of hypothesis testing	<ol style="list-style-type: none"> 1.Explain the basic concept of hypothesis testing 2.Explains three forms of hypothesis formulation, both descriptive, comparative and associative hypotheses 3.Explain the meaning of error rate in a hypothesis 4.Apply descriptive hypothesis testing 	<p>Criteria: If done correctly, the score is 10</p> <p>Form of Assessment : Participatory Activities</p>	Lectures, exercises and Assignments 3 X 50		<p>Material: Hypothesis testing Reader: Sugiyono. 2013. <i>Statistics for Research</i>. Alfabeta: Bandung</p>	5%
6	Understanding one-sample descriptive hypothesis testing (nonparametric)	<ol style="list-style-type: none"> 1.Explain the meaning of non-parametric one-sample descriptive hypothesis testing 2.Explain the binomial test 3.Explain and perform the chi Square test 	<p>Criteria: If done correctly, score 10</p> <p>Form of Assessment : Participatory Activities</p>	Lectures, exercises and assignments 3 X 50		<p>Material: Descriptive hypothesis of one sample References: Sugiyono, Eri Wibowo. 2004. <i>Statistics for Research and Applications with SPSS</i>. Bandung: Alfabeta</p>	5%
7	Understand comparative hypothesis testing of two samples	<ol style="list-style-type: none"> 1.Explains comparative hypothesis testing for two samples 2.Carrying out comparative hypothesis testing of two correlated samples 	<p>Criteria: If answered correctly then the score is 10</p> <p>Form of Assessment : Participatory Activities, Practical Assessment</p>	Discussion, question and answer and presentation 3 X 50		<p>Material: Comparative hypothesis of two samples References: Sugiyono, Eri Wibowo. 2004. <i>Statistics for Research and Applications with SPSS</i>. Bandung: Alfabeta</p>	5%
8	Can work on results	Can do UTS questions	<p>Criteria: If answered correctly, the score is 100</p> <p>Form of Assessment : Participatory Activities, Tests</p>	Presentation 3 X 50		<p>Material: Presentation of work results Reader: Sugiyono. 2013. <i>Statistics for Research</i>. Alfabeta: Bandung</p>	15%
9	<ol style="list-style-type: none"> 1.Understand comparative hypothesis testing of two samples 2.Understand k sample hypothesis testing 	<ol style="list-style-type: none"> 1.Can carry out comparative hypothesis testing of two samples 2.Can carry out hypothesis testing for k samples 	<p>Criteria: If done correctly, you get a score of 100</p> <p>Form of Assessment : Participatory Activities</p>	discussion, exercises and assignments 3 X 50		<p>Material: Comparative hypothesis of two samples Reference: Sugiyono. 2013. <i>Statistics for Research</i>. Alfabeta: Bandung</p>	5%
10	<ol style="list-style-type: none"> 1.Explain and carry out parametric associative hypothesis testing 2.Conduct Product Moment correlation testing 	<ol style="list-style-type: none"> 1.Can perform parametric associative hypothesis testing 2.Can carry out Product Moment correlation testing 	<p>Criteria:</p> <ol style="list-style-type: none"> 1.Can carry out parametric associative hypothesis testing in accordance with SOP 2.Can carry out Product Moment correlation testing in accordance with SOP <p>Form of Assessment : Participatory Activities</p>	Exercises and assignments 3 X 50		<p>Material: Parametric associative hypothesis Reader: Sugiyono. 2013. <i>Statistics for Research</i>. Alfabeta: Bandung</p>	5%

11	Understand non-parametric associative hypothesis testing	<ol style="list-style-type: none"> 1.Explaining non-parametric associative statistics 2.Explain and determine the contingency coefficient 3.Explain and determine spearman rank 	<p>Criteria: If you do everything correctly, you get a score of 100</p> <p>Form of Assessment : Participatory Activities, Practical Assessment</p>	Practice and solve 3 X 50 problems		<p>Material: non-parametric associative hypothesis References: Rosner, Bernard. 1986. <i>Fundamentals of Biostatistics, second edition.</i> Massachusetts: PWS Publishers</p>	5%
12	Understand simple linear regression analysis	<ol style="list-style-type: none"> 1.Explain the meaning of simple linear regression 2.Mention an example of a simple linear regression calculation 3.Carrying out regression linearity tests 4.Calculate the prices of a and b 5.Drawing up a regression equation 6.Create a regression line 	<p>Criteria: If you do everything correctly, you get a score of 100</p> <p>Form of Assessment : Participatory Activities</p>	Lectures and Practice Questions 3 X 50		<p>Material: simple linear regression analysis Reader: Sugiyono. 2013. <i>Statistics for Research.</i> Alfabeta: Bandung</p>	5%
13	Understand multiple regression analysis	<ol style="list-style-type: none"> 1.Explains multiple regression analysis for two predictors 2.Explains regression analysis of three predictors 	<p>Criteria: If answered all correctly, score 100</p> <p>Form of Assessment : Participatory Activities</p>	Lectures and Practice Questions 3 X 50		<p>Material: multiple regression analysis Reference: Sudjana. 2010. <i>Statistical Methods.</i> Bandung: Tarsito</p>	5%
14	Understand testing the validity and reliability of research instrument items	<ol style="list-style-type: none"> 1.Explain the meaning of instrument validity testing 2.Explain construct validity testing 3.Explain content validity testing 4.Explain external validity testing 5.Explain instrument reliability testing 	<p>Criteria: If you do everything correctly, you get a score of 100</p> <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Questions and answers, Practice questions 3 X 50		<p>Material: testing the validity and reliability of research instrument items Library: Sugiyono. 2013. <i>Statistics for Research.</i> Alfabeta: Bandung</p>	5%
15	Understanding k sample comparative hypothesis testing (Non Parametric)	Able to carry out comparative hypothesis testing for k samples (Non Parametric)	<p>Criteria: If you do everything correctly, you get a score of 100</p> <p>Form of Assessment : Participatory Activities, Practical Assessment</p>	Practice questions 3 X 50		<p>Material: comparative hypothesis testing k samples (Non Parametric) Reference: Sugiyono. 2013. <i>Statistics for Research.</i> Alfabeta: Bandung</p>	5%
16	Able to present work results	Presenting work results	<p>Criteria: Able to present work results in accordance with SOP</p> <p>Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment</p>	Presentation and Discussion 2 x 50		<p>Material: Report presentation Bibliography: Sugiyono, Eri Wibowo. 2004. <i>Statistics for Research and Applications with SPSS.</i> Bandung: Alfabeta</p>	15%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	67.5%
2.	Project Results Assessment / Product Assessment	7.5%
3.	Portfolio Assessment	2.5%
4.	Practical Assessment	10%
5.	Practice / Performance	5%
6.	Test	7.5%
		100%

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** 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.
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.