	Universitas Negeri Surabaya **Faculty of Languages and Arts** **German Language Education Undergraduate Study Program**	**Document Code**

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Statistics	8820702154	Compulsory Study Program Subjects	**T=2**	**P=0**	**ECTS=3.18**	3	August 18, 2023

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	Drs. Ari Pujosusanto, M.Pd.	.....	Dwi Imroatu Julaikah, S.Pd., M.Pd.

Learning model	**Project Based Learning**
Program Learning Outcomes (PLO)	**PLO study program that 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	Ability to understand and apply basic concepts of statistics, including collecting, presenting and analyzing data with descriptive statistics and inferential statistics for the purposes of writing related scientific papers (research).
References	**Main :**

1. Hanif, Yulingga Nanda. 2017. Statistik Pendidikan. Yogyakarta: Deepublish (Grup Penerbitan CV Budi Utama)

Supporters:

1. Arikunto, Suharsimi. 2000. Prosedur Penelitian: Suatu Pendekatan Praktis. Jakarta PT Bina Angkasa.
2. Hadi, Soetrisno. 2004. Statistik: Jilid 3 . Yogyakarta: Andi.
3. Riduwan. 2003. Dasar-dasar Statistik . Bandung: Alfabeta.
4. Subana, Rahadi, dan Sudrajat. 2000. Statistik Pendidikan. Bandung: Pustaka Setia.
5. Hariyadi. 2011. Statistik Pendidikan. Jakarta: Prestasi Pustakaraya.
6. Sudijono, Anas. 2011. Pengantar Statistik Pendidikan. Jakarta: PT Raja Grafindo Persada.

Supporting lecturer	Drs. Ari Pujosusanto, 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 basic statistical concepts, understanding statistics and data	1. Students are able to explain the meaning of statistics 2. Students are able to explain Statistical Data Classification 3. Students are able to explain Statistical Data Collection 4. Students are able to explain Data Processing	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Form of Assessment** : Participatory Activities, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** Understanding Statistics, Classifying Statistical Data, Collecting Statistical Data and Processing Statistical Data **Literature:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%
2	Able to understand matters related to data presentation	1. Students are able to explain Data Processing 2. Students are able to explain the Frequency Distribution Table 3. Students are able to explain Histogram graphs, Frequency Polygons 4. Students are able to create data presentations in the form of Frequency Distribution Tables 5. Students are able to create data presentations in the form of Histogram graphs, Frequency Polygons	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** Variables, Frequency Distribution Tables, Histograms and Frequency Polygons **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%

3	Able to understand matters related to data presentation	1. Students are able to explain Data Processing 2. Students are able to explain the Frequency Distribution Table 3. Students are able to explain Histogram graphs, Frequency Polygons 4. Students are able to create data presentations in the form of Frequency Distribution Tables 5. Students are able to create data presentations in the form of Histogram graphs, Frequency Polygons	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** Variables, Frequency Distribution Tables, Histograms and Frequency Polygons **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%
4	Able to understand the size and location of central symptoms	1. Students are able to explain the size of central symptoms 2. Students are able to explain the size of the location	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** size of central symptoms and location **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%

5	Able to understand the size and location of central symptoms	1. Students are able to explain the size of central symptoms 2. Students are able to explain the size of the location	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** size of central symptoms and location **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%
6	Able to understand the size of standard deviation and variance	1. Students are able to explain the range and average deviation 2. Students are able to explain Standard Deviation or Standard Deviation	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** measures of standard deviation and variance **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%
7	Able to understand population, samples and sampling techniques	1. Students are able to explain the population 2. Students are able to explain the sample	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** population and sample **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%

8	Taking Midterm Exams	1. Students are able to explain the sample 2. Work on Learning Evaluation Mid-Semester Exam questions with the material you have studied	**Criteria:** very good, good, average, poor **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	Doing the Mid-Semester Exam with the material that has been studied 2 X 50	Take the Mid-Semester Exam with material that has been studied via gform	**Material:** Understanding Statistics, graphs, **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%
9	Able to understand population, samples and sampling techniques	1. Students are able to explain the sample 2. Students are able to explain sampling techniques 3. Students are able to explain the benefits of sampling 4. Students are able to explain sampling errors	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** sampling technique **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%
10	Able to understand research hypotheses	1. Able to understand the meaning of Null Hypothesis and Alternative Hypothesis 2. Able to explain the concept of hypothesis 3. Able to explain types of hypotheses 4. Able to explain parameters and statistics 5. Able to explain the meaning of Null Hypothesis and Alternative Hypothesis	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** hypothesis, parameters and statistics **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%

11	Able to understand research hypotheses	1. Able to explain the meaning of Null Hypothesis and Alternative Hypothesis 2. Able to explain errors in hypothesis testing 3. Able to explain statistical hypotheses 4. Able to explain Types of Hypothesis Testing	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** hypothesis, parameters and statistics, statistical hypothesis, types of hypothesis testing **Reader:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%
12	Able to understand parametric analysis requirements	1. Students are able to explain the Homogeneity Test 2. Students are able to explain the linearity test 3. Students are able to explain the normality test	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** homogeneity test, linearity test, normality test **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%
13	Able to understand correlation	1. Students are able to explain the concept of correlation 2. Students are able to explain various correlation techniques	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** homogeneity test, linearity test, normality test **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)* **Material:** correlation **Bibliography:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%

14	Able to understand regression analysis	1. Students are able to explain various correlation techniques 2. Students are able to explain Simple Linear Regression 3. Students are able to explain Multiple Linear Regression	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Form of Assessment** : Participatory Activities	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** regression analysis **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%
15	Able to understand comparative hypothesis testing	1. Students are able to explain the Two-Party Test 2. Students are able to explain the Two Sample T Test 3. Students are able to explain the One Free Sample T Test	**Criteria:** 1. 4: correct application of theory, correct explanation, correct sequence of reasoning process, complete explanation. 2. 3: there is one aspect that does not meet the requirements. 3. 2: more than one aspect is ineligible. 4. 1: the description is wrong. 5. 0: did not answer. **Forms of Assessment** : Participatory Activities, Portfolio Assessment, Tests	lectures, discussions, assignments 2 X 50	lectures, discussions, assignments	**Material:** regression analysis **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)* **Material:** comparative hypothesis testing **References:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%
16	Students are able to solve UAS questions completely	Complete the Final Semester Exam questions according to the time given	**Criteria:** 1. 4: correct application of theory, correct use of formulas, correct sequence of calculation processes, correct calculation process, correct final results. 2. 3: all aspects are correct except the final result. 3. 2: all aspects are correct except the final result and one other aspect. 4. 1: the description is wrong. 5. 0: did not answer. **Form of Assessment** : Participatory Activities	Doing 2 X 50 Semester Final Exam questions	Do Final Semester Exam questions online via gform	**Material:** All material that has been studied **Reader:** *Hanif, Yulingga Nanda. 2017. Education Statistics. Yogyakarta: Deepublish (CV Budi Utama Publishing Group)*	5%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	34.21%
2.	Portfolio Assessment	21.71%
3.	Test	24.21%
		80.13%

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.