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

SEMESTER LEARNING PLAN

Courses		CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
STATISTICS		8620202385	Compulsory Study Program Subjects	T=1	P=1	ECTS=3.18	4	January 5, 2023

AUTHORIZATION		SP Developer		Course Cluster Coordinator	Study Program Coordinator
		Muhammad Nurul Ashar, S.Pd., M.Ed.		Dr. Asri Wijiastuti, M.Pd.	Dr. H. Pamuji, M.Kes.

Learning model	**Case Studies**

Program Learning Outcomes (PLO)	**PLO study program that is charged to the course**	
	PLO-13	Master the theoretical concepts of the basics of educational theory relevant to special education
	Program Objectives (PO)	
	PO - 1	Skilled in logical thinking for solving statistical problems according to their expertise based on scientific rules, procedures and ethics in order to produce solutions, ideas and designs.
	PO - 2	Master the theoretical concepts of the basics of educational theory relevant to special education
	PLO-PO Matrix	

P.O	PLO-13
PO-1	
PO-2	

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
PO-1																
PO-2																

Short Course Description	Examining data about: statistical and statistical concepts, statistical classification and characteristics; data studies regarding concepts, classification and functions of data; population and sample and how to determine the sample; descriptive statistics and application to analyze data and/or create graphs/diagrams measuring central values and locations for single data and group data, measuring deviations; testing analytical prerequisites for normality and homogeneity tests; analysis of two samples that are correlated with each other via the Z test, product moment correlation test, Wilcoxon test; Comparative test of two independent samples using the t test, gain test and Mann Whitney test.

References	**Main :**

1. Djarwanto. (2003). Statistik Nonparametrik . Yogyakarta: BPFE.
2. Gunawan, Imam (2016). Pengantar Statistika Eferensia l.Jakarta: PT Rajagrafindo Persada.
3. Kadir. (2019). Statistika Terapan: Konsep, Contoh dan Analisis Data dengan program SPSS/Lisrel dalam Penelitian . Jakarta: PT Rajgrafindo Persada
4. Sudijono, Anas (2006). Pengantar Statistik Pendidikan . Jakarta: RajaGrafindo Persada.
5. Sudjana. (2005). Metoda Statistika. Bandung: Tarsito
6. Sugiyono. (2015). Statistik Non Parametrik untuk Penelitian. Bandung: CV Alvabeta.
7. Sundayana, Rostina. (2015). Statistika Penelitian Pendidikan . Bandung: CV Alvabeta.
8. Supardi. (2016). Aplikasi Statistika dalam Penelitian : Konsep Statistika yang llebih Komprehensif. Jakarta: Change Publication.

	Supporters:

1. Latihan Soal

Supporting lecturer	Prof. Dr. Siti Masitoh, M.Pd. Muhammad Nurul Ashar , S.Pd., M.Ed.

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 recognize statistical and statistical concepts	1. Recognize the differences between statistical and statistical concepts. 2. Recognize statistical classification. 3. Examining differences in classification and statistical characteristics.	**Criteria:** 1. Complete learning with a minimum learning achievement level of 75%. 2. Students are able to complete the tasks on the assignment sheet. **Form of Assessment** : Participatory Activities	Brainstorming, and 3 X 50 direct learning model		**Material:** Statistical concepts **Reference:** *Gunawan, Imam (2016). Introduction to Efferential Statistics l. Jakarta: PT Rajagrafindo Persada.*	3%
2	Able to recognize concepts, classifications, types and functions of data	1. Get to know the concept of data. 2. Recognize classifications and types of data. 3. Recognize data functions	**Criteria:** 1. Complete learning with a minimum learning achievement level of 75% 2. Students are able to complete the tasks on the assignment sheet. **Form of Assessment** : Participatory Activities	Brainstorming, and 3 X 50 group investigative learning model		**Material:** Statistical concepts **Reference:** *Gunawan, Imam (2016). Introduction to Efferential Statistics l. Jakarta: PT Rajagrafindo Persada.*	3%
3	Able to identify populations and samples.	1. Recognize the concept of population. 2. Recognize the concept of samples. 3. Examining differences between populations and samples. 4. Calculate the sample size.	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 80% **Form of Assessment** : Practice / Performance	Think Pair and Share (TPS) 3 X 50 learning model		**Material:** Population and Sample **Literature:** *Sundayana, Rostina. (2015). Educational Research Statistics. Bandung: CV Alvabeta.*	3%
4	Able to analyze descriptive statistical data types	1. Create graphs/histograms. 2. Reading graphs/histograms	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 80% **Form of Assessment** : Participatory Activities, Practice/Performance	Think Pair and Share (TPS) 3 X 50 learning model		**Material:** Data presentation **References:** *Sudijono, Anas (2006). Introduction to Educational Statistics. Jakarta: RajaGrafindo Persada.*	3%
5	Able to apply data analysis related to the size of the central value and location for single data	1. Analyze data by looking for Mean, Median and Mode prices. 2. Analyze data by looking for Quartile, Decile and Percentile prices.	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 80% **Form of Assessment** : Participatory Activities, Practice/Performance	Think Pair and Share (TPS) 3 X 50 learning model		**Material:** Data presentation **References:** *Sundayana, Rostina. (2015). Educational Research Statistics. Bandung: CV Alvabeta.*	3%
6	Able to apply data analysis related to the size of the central value and location for grouped data	1. Analyze grouped data by looking for Mean, Median and Mode prices. 2. Analyze group data by looking for Quartile, Decile and Percentile prices.	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 80% **Form of Assessment** : Participatory Activities, Practice/Performance	Think Pair and Share (TPS) 3 X 50 learning model		**Material:** Data collection **Bibliography:** *Sundayana, Rostina. (2015). Educational Research Statistics. Bandung: CV Alvabeta.*	3%
7	Able to apply data analysis related to deviation measurements	1. Analyze data by looking for deviation prices based on single distribution data. 2. Analyze data by looking for deviation prices based on group distribution data	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 80% **Form of Assessment** : Participatory Activities	Think Pair and Share (TPS) 3 X 50 learning model		**Material:** Data presentation **References:** *Sudijono, Anas (2006). Introduction to Educational Statistics. Jakarta: RajaGrafindo Persada.*	3%

			Criteria / Form of Assessment			Material / Reference	
8	Sub Summative Exam (SS)	UTS	**Criteria:** UT **Form of Assessment** : Participatory Activities, Tests	case study 3 X 50	-	**Material:** uts **Library:** *Practice Questions*	20%
9	Able to apply data analysis Test analysis prerequisites	Analyzing normality data: Lilliefors test and Kolmogorov-Smirnov test	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 80% **Form of Assessment** : Participatory Activities	Direct learning model and Think Pair and Share (TPS) 3 X 50		**Material:** Statistical testing **Reference:** *Djarwanto. (2003). Nonparametric Statistics. Yogyakarta: BPFE.*	3%
10	Able to apply data analysis of two correlated samples	Analyzing Z test data	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 80%. **Form of Assessment** : Participatory Activities	Direct learning model and Think Pair and Share (TPS) 3 X 50		**Material:** Statistical testing **Reference:** *Djarwanto. (2003). Nonparametric Statistics. Yogyakarta: BPFE.*	3%
11	Able to apply data analysis Test analysis prerequisites	Analyzing homogeneity test data: Fisher Test (F)	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 85% **Form of Assessment** : Participatory Activities	Direct learning model and Think Pair and Share (TPS) 3 X 50		**Material:** Statistical testing **Reference:** *Gunawan, Imam (2016). Introduction to Efferential Statistics l. Jakarta: PT Rajagrafindo Persada.*	3%
12	Able to apply data analysis of two correlated samples	Analyzing correlation test data: Product Moment	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 80% **Form of Assessment** : Participatory Activities	Direct learning model and Think Pair and Share (TPS) 3 X 50		**Material:** Statistical testing **Reference:** *Gunawan, Imam (2016). Introduction to Efferential Statistics l. Jakarta: PT Rajagrafindo Persada.*	3%
13	Able to apply data analysis of two correlated samples	Analyzing correlation test data: Wilcoxon	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 85% **Form of Assessment** : Participatory Activities	Direct learning model and Think Pair and Share (TPS) 3 X 50		**Material:** Statistical testing **Reference:** *Gunawan, Imam (2016). Introduction to Efferential Statistics l. Jakarta: PT Rajagrafindo Persada.*	3%
14	Able to apply comparative data analysis of two independent samples	Analyzing data via t test	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 85% **Form of Assessment** : Participatory Activities	Direct learning model and Think Pair and Share (TPS) 3 X 50		**Material:** Statistical testing **Reference:** *Gunawan, Imam (2016). Introduction to Efferential Statistics l. Jakarta: PT Rajagrafindo Persada.*	3%
15	Able to apply comparative data analysis of two independent samples	1. Analyze data through Gain test. 2. Analyzing data using the Mann Whitney test	**Criteria:** TPS group discussion report with a group assignment correctness level of at least 85% **Form of Assessment** : Participatory Activities	Direct learning model and Think Pair and Share (TPS) 3 X 50		**Material:** Statistical testing **Reference:** *Gunawan, Imam (2016). Introduction to Efferential Statistics l. Jakarta: PT Rajagrafindo Persada.*	11%
16	UAS	UAS	**Criteria:** Completeness **Form of Assessment** : Practice / Performance	case study 3 X 50	-	**Material:** UAS **Library:** *Practice Questions*	30%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	52.5%
2.	Practice / Performance	37.5%
3.	Test	10%
		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.