	Universitas Negeri Surabaya **Faculty of Sports and Health Sciences** **S1 Sports Coaching Education Study Program**	**Document Code**

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Statistics	8520202213	Compulsory Study Program Subjects	**T=2**	**P=0**	**ECTS=3.18**	4	July 17, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
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Learning model	**Project Based Learning**

Program Learning Outcomes (PLO)

PLO study program that is charged to the course

Program Objectives (PO)

PO - 1	Able to collect research data using various sampling techniques
PO - 2	Able to analyze research data with various descriptive statistical techniques according to the type of data
PO - 3	Able to analyze correlational research data with various statistical techniques according to the type of data
PO - 4	Able to analyze comparative research data with various statistical techniques according to the type of data

PLO-PO Matrix

P.O
PO-1
PO-2
PO-3
PO-4

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																
PO-3																
PO-4																

Short Course Description	Discussion of basic concepts of statistics in general for research purposes, and mastery of the steps of various descriptive and inferential statistical techniques, based on the type of data, number of variables in accordance with the research objectives

References

Main :

1. Subagyo Pengestu (1988). Statistik Deskriptif. Yogyakarta: BPFE Yogyakarta.
2. Sugiyono (1997). Statistika untuk Penelitian. Bandung: Penerbit CV. Alfabeta
3. Djarwanto, P.S. (1994). Statistik Induktif (Edisi Keempat). Yogyakarta: BPFE.
4. Siegel Sidney (1989). Statistik Non-parametrik untuk Ilmu-ilmu Sosial. Jakarta: PT. Gramedia.
5. Walpole, Ronald E. (1988). Pengantar Statistika (Edisi Ketiga). Jakarta: PT. Gramedia.

Supporters:

Supporting lecturer	Prof. Dr. I Made Sri Undy Mahardika, M.Pd. Dr. Imam Syafii, M.Kes. Dr. Or. Muhammad, S.Pd., M.Pd. Mohammad Faruk, S.Pd., M.Kes. Afif Rusdiawan, S.Pd., M.Kes. Shery Iris Zalillah, S.Pd..M.Kes. Yanuar Alfan Triardhana, S.Or., M.Kes.

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 important role of statistics in educational and sports research	Students can explain at least 80% correctly about: a. The important role of statistics in quantitative research b. Types of data from educational and sports measurements and tests	**Criteria:** Full marks will be given if the explanation is correct	Lectures, discussions and questions and answers 2 X 50		**Material:** introduction to statistics **Reference:** *Sugiyono (1997). Statistics for Research. Bandung: CV Publisher. Alphabet*	0%
2	Able to understand descriptive statistics, descriptive analysis techniques for nominal data	Students can explain/use at least 80% correctly about: a. Characteristics of nominal data b. Analyze nominal data with appropriate statistical techniques	**Criteria:** Analyze nominal scale variable data using appropriate descriptive analysis techniques **Form of Assessment** : Participatory Activities	Lectures, discussions, questions and answers, and 1 X 1 practice		**Material:** Descriptive statistics **Bibliography:** *Subagyo Pengestu (1988). Descriptive statistics. Yogyakarta: BPFE Yogyakarta.*	5%
3	Able to understand descriptive statistics, descriptive analysis techniques for nominal data	Students can explain/use at least 80% correctly about: a. Characteristics of nominal data b. Analyze nominal data with appropriate statistical techniques	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Form of Assessment** : Participatory Activities, Practice/Performance	Lectures, discussions, questions and answers, and 1 X 1 practice		**Material:** Descriptive statistics **Bibliography:** *Subagyo Pengestu (1988). Descriptive statistics. Yogyakarta: BPFE Yogyakarta.*	5%
4		1. Interval data characteristics 2. Descriptive analysis of interval data with appropriate statistical techniques	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Form of Assessment** : Participatory Activities, Practice/Performance	lectures, questions and answers and discussions 2 x 50		**Material:** descriptive data analysis **Reference:** *Subagyo Pengestu (1988). Descriptive statistics. Yogyakarta: BPFE Yogyakarta.*	0%
5		1. Interval data characteristics 2. Descriptive analysis of interval data with appropriate statistical techniques	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Form of Assessment** : Participatory Activities, Practice/Performance	lectures, questions and answers and discussions 2 x 50		**Material:** descriptive data analysis **Reference:** *Subagyo Pengestu (1988). Descriptive statistics. Yogyakarta: BPFE Yogyakarta.*	5%
6	Able to understand statistical techniques for correlation of two discrete/nominal scale variables	Students can explain/use at least 80% correctly about: a. Correlation of two discrete/nominal scale variables b. Contingency correlation technique	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Forms of Assessment** : Participatory Activities, Practical Assessment, Practical / Performance	Lectures, discussions, questions and answers, and assignments 2 X 50		**Material:** contingency correlation **Bibliography:** *Walpole, Ronald E. (1988). Introduction to Statistics (Third Edition). Jakarta: PT. Scholastic.*	5%

7	Able to understand correlational statistical techniques for two ordinal scale variables	Students can explain at least 80% correctly about: a. Correlation of two ordinal scale variables b. Rho coefficient correlation/Spearman statistical technique	**Form of Assessment** : Participatory Activities	Lectures, discussions, questions and answers, and assignments 2 X 50		**Material:** correlational analysis **References:** *Walpole, Ronald E. (1988). Introduction to Statistics (Third Edition). Jakarta: PT. Scholastic.*	4%
8	Midterm exam	Midterm exam	**Criteria:** Midterm exam **Form of Assessment** : Test	Midterm Exam 2 X 50		**Material:** material 1-7 **References:** *Walpole, Ronald E. (1988). Introduction to Statistics (Third Edition). Jakarta: PT. Scholastic.*	20%
9	Able to understand correlational statistical techniques for two variables on an interval or ratio scale	Students can explain at least 80% correctly about: a. Correlation of two variables on an interval or ratio scale b. Product of moment/Pearson correlation statistical technique	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Form of Assessment** : Participatory Activities, Practice/Performance	Lectures, discussions, questions and answers, and assignments 2 X 50		**Material:** correlation **Bibliography:** *Walpole, Ronald E. (1988). Introduction to Statistics (Third Edition). Jakarta: PT. Scholastic.*	10%
10	Able to understand correlational statistical techniques for two mixed scale variables	Students can explain at least 80% correctly about: a. Correlation of two mixed scale variables b. Point Biserial correlation statistical technique	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Form of Assessment** : Participatory Activities	Lectures, discussions, questions and answers, and assignments 2 X 50		**Material:** correlation **Bibliography:** *Walpole, Ronald E. (1988). Introduction to Statistics (Third Edition). Jakarta: PT. Scholastic.*	5%
11	Able to understand correlational statistical techniques of more than two variables	Students can explain at least 80% correctly about: a. Multiple correlation (one dependent variable with several independent variables) b. Multiple correlation statistical techniques	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Form of Assessment** : Participatory Activities	Lectures, discussions, questions and answers, and assignments 2 X 50		**Material:** correlation **Bibliography:** *Walpole, Ronald E. (1988). Introduction to Statistics (Third Edition). Jakarta: PT. Scholastic.*	10%
12	Able to understand simple and multiple regression statistical techniques	Able to explain at least 80% correctly about: a. Simple Regression Analysis b. Multiple regression analysis	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Form of Assessment** : Participatory Activities, Practice/Performance	Lectures, discussions, questions and answers, and 4 X 50 assignments		**Material:** regression **Reference:** *Sugiyono (1997). Statistics for Research. Bandung: CV Publisher. Alphabet*	5%
13	Able to understand simple and multiple regression statistical techniques	Able to explain at least 80% correctly about: a. Simple Regression Analysis b. Multiple regression analysis	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Form of Assessment** : Participatory Activities, Practice/Performance	Lectures, discussions, questions and answers, and 4 X 50 assignments		**Material:** regression **Reference:** *Sugiyono (1997). Statistics for Research. Bandung: CV Publisher. Alphabet*	10%

14	Able to understand inferential statistical techniques	Able to explain at least 80% correctly about: a. Normal distribution b. Level of significance/ ;1 c. Level of confidence/ 66 d. t-test for independent samples e. t-test for correlational samples f. U Mann-Whitney g. Chi squared	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Form of Assessment** : Participatory Activities, Practice/Performance	Lectures, discussions, questions and answers, and 4 X 50 assignments		**Material:** inferential **Reference:** *Sugiyono (1997). Statistics for Research. Bandung: CV Publisher. Alphabet*	5%
15	Able to understand inferential statistical techniques	Able to explain at least 80% correctly about: a. Normal distribution b. Level of significance/ ;1 c. Level of confidence/ 66 d. t-test for independent samples e. t-test for correlational samples f. U Mann-Whitney g. Chi squared	**Criteria:** Full marks will be given if the analysis technique and analysis results are precise and correct **Form of Assessment** : Participatory Activities	Lectures, discussions, questions and answers, and 4 X 50 assignments		**Material:** inferential **Reference:** *Sugiyono (1997). Statistics for Research. Bandung: CV Publisher. Alphabet*	10%
16		UAS	**Criteria:** UAS	Written Exam 2 x 50		**Material:** all lecture materials **Reader:** *Sugiyono (1997). Statistics for Research. Bandung: CV Publisher. Alphabet*	30%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	55.67%
2.	Practical Assessment	1.67%
3.	Practice / Performance	21.67%
4.	Test	20%
		99.01%

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.