

Universitas Negeri Surabaya Faculty of Engineering , Information Technology Education Undergraduate Study Program

SEMESTER LEARNING PLAN

Countser teaming Research methodology B320703054 Te3 Pe0 ECTS=4.77 Study Program Coordinator AUTHORIZATION SP Developer Course Cluster Coordinator Study Program Coordinator Study Program Learning model Project Based Learning Course Cluster Coordinator Study Program Coordinator Drs. Bambang Sujatmiko, M.T. Learning model Program PLO study program which is charged to the course Use teambang Sujatmiko, M.T. PLO-12 Able to make decisions based on data/information and able to solve problems in the field of information acchnology. PLO-12 Able to implement science, technology, engineering, and mathematics (STEM) and informatics knowledge into research in education. PLO-12 Able to implement science, technology, engineering, and mathematics (STEM) and informatics knowledge into research in education. PLO-12 PLO-12 PLO-6 PLO-12 PLO-12 PLO-12 Short course Examining the principles and procedures of quantitative, qualitative research, and research and development methods as an orobitem in the science in chords as intra-teach, selection and oropact. At he elsection and selection and oropact. At he elsection and space is research propolation, variables and measurements, type of research modelet is are exported to prepare a thesis research propolation, variables and measurements, type of research modelet is research propolation. PW (2012).	Courses				CODE		Course	Eamily	Cro	dit Ma	aight	SEMESTER	Compilation	
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Document Code

1	Understand the meaning of research	- Explain the meaning of the word research Mention the research steps. Mention the types of research.	Lectures, discussions, presentations 3 X 50		0%
2	- Identifying problems, objectives and benefits of research. Review literature relevant to research	- Identifying the title and research problem - Identifying differences in research objectives and benefits. Making a literature review that is relevant to the research.	Lectures, discussions, presentations 3 X 50		0%
3	Understand the role of hypotheses in research	- Explain the meaning of the hypothesis Make a hypothesis	Lectures, discussions, presentations 3 X 50		0%
4	- Analyze the differences between samples and populations Understand experimental methods.	- Identify types of samples and populations - Explain the basic assumptions of experiments Explain the steps of the experimental method.	Lectures, discussions, presentations 3 X 50		0%
5	Develop research instruments	- Create a questionnaire instrument - Create a rating scale instrument	Lectures, discussions, presentations 3 X 50		0%
6	Analyze data descriptively	- Distinguish between categorical and quantitative data Calculate mean, median and mode Calculate standard deviation.	Lectures, discussions, presentations 3 X 50		0%
7	Understanding correlation research	- Explain correlation research Distinguish between predictor and criterion variables Explain the prediction equation	Lectures, discussions, practicum 3 X 50		0%
8	UTS		3 X 50		0%
9	Testing hypotheses	Describe: - Standard error - Hypothesis testing - One tailed and two tailed tests	Lectures, discussions, presentations 3 X 50		0%
10	Understand test requirements analysis	- Testing the homogeneity assumption Testing normality assumptions.	Lectures, discussions, practicum 3 X 50		0%
11	Testing t	 Independent sample t test. Test paired samples t 	Lectures, discussions, practicum 3 X 50		0%

12	Understanding Anova	Analyzing data using one-way and two-way anova	Lectures, discussions, practicum 3 X 50		0%
13	Understanding multivariate	Analyze data using simple and multiple regression	Lectures, discussions, practicum 3 X 50		0%
14	Understanding Chi- Square	- Test independence and homogeneity. - Testing single variance.	Lectures, discussions, practicum 3 X 50		0%
15	Understand non- parametric analysis	- Explain the advantages and disadvantages of non- parameteric analysis Analyze data using rank- sum test.	Lectures, discussions, practicum 3 X 50		0%
16	Develop independent research proposals	- Develop proposals according to the agreed problems - Present proposals	Lectures, discussions, presentations 3 X 50		0%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage	
		0%	

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.
- 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.