	Universitas Negeri Surabaya Faculty of Engineering , Electrical Engineering Education Undergraduate Study Program	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Electronic Circuits	8320102149		T=2	P=0	ECTS=3.18	4	July 18, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	.....	.....	Dr. Nur Kholis, S.T., M.T.

Learning model	**Case Studies**
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	Introduction (conventional and electron flow, voltage sources, current sources, Thevenin's theorem), semiconductor, diode theory, diode circuits, special-purpose diodes, bipolar transistors, transistor fundamentals, transistor biasing, ac models, voltage amplifiers, power amplifiers, emitter follower .
References	**Main :**

1. Clemons John, Evangelisti Fred, Kerr Fred, and Klingensmith Charles, 1994, *Introductory Electronic Devices and Circuits* , Third Edition, New Jersey: Prentice Hall Career & Technology.
   Floyd Thomas L, 2001, *Electronics Fundamentals* , Fifth Edition, New Jersey: Prentice-Hall International, Inc.
   Malvino Albbert Paul, 1993, *Electronic Principles* , Fifth Edition. New York: Mc. Graw-Hill.
   Robert Boylestad and Louis Nashelsky, 1992, *Electronic Devices and Circuit Theory* , Fifth Edition, New Jersey: Prentice-Hall International, Inc.

Supporters:	
Supporting lecturer	Dr. Agus Budi Santoso, M.Pd. YUDHA ANGGANA AGUNG Dr. Farid Baskoro, S.T., M.T.

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	Students can explain the function of energy sources for electronic components	Explain the function of energy sources for electronic components	**Criteria:** In accordance with rubric-01	Cooperative learning 2 X 50			0%
2	Students can explain the characteristics of diodes	Explain the characteristics of a diode	**Criteria:** In accordance with rubric-02	Cooperative Learning 2 X 50			0%
3	Students can analyze the work of diode circuits.	Analyze the work of diode circuits.	**Criteria:** In accordance with rubric-03	Cooperative learning 2 X 50			0%
4	Students can explain the characteristics of special use diodes	Explain the characteristics of special use diodes	**Criteria:** In accordance with rubric-04	Cooperative learning 2 X 50			0%
5	Students can analyze the work of special use diode circuits	Analyze the working of special use diode circuits	**Criteria:** In accordance with rubric-05	Cooperative learning 2 X 50			0%
6	Students can explain the characteristics of transistors	Explain the characteristics of transistors	**Criteria:** In accordance with rubric-06	Cooperative learning 2 X 50			0%
7	Students can differentiate how various types of biasing transistor circuits work	Distinguish how various types of biasing transistor circuits work	**Criteria:** In accordance with rubric-07	Cooperative Learning 2 X 50			0%
8	Students can work on midterm exam (UTS) questions	Doing midterm exam (UTS) questions	**Criteria:** In accordance with the UTS rubric	Student Center Learning 2 X 50			0%
9							0%
10							0%
11							0%
12							0%
13							0%
14							0%
15							0%
16							0%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
		0%

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.