

Universitas Negeri Surabaya Faculty of Mathematics and Natural Sciences Bachelor of Science Education Study Program

Document Code

SEMESTER LEARNING PLAN Courses CODE Course **Credit Weight SEMESTER** Compilation Family **Basics of Electronics** 8420103170 T=2 | P=1 | ECTS=4.77 6 July 18, 2024 Course Cluster Coordinator **AUTHORIZATION** SP Developer Study Program Coordinator Prof. Dr. Erman, M.Pd. Learning **Case Studies** model PLO study program that is charged to the course **Program** Learning **Program Objectives (PO)** Outcomes (PLO) **PLO-PO Matrix** P.O PO Matrix at the end of each learning stage (Sub-PO) P.O Week 2 3 4 5 6 7 9 10 11 12 16 Short This course discusses the theory of intrinsic semiconductors, extrinsic p and n types and p and n connections, diodes, transistors as resistance and switches, power amplifiers, op-amps, oscillators, digital electronics, and logic circuits. Lectures are carried out with modeling, presentations, discussions Course Description and practicums. Main: References Agung Nugroho, 2010. Mekatronika. Yogyakarta: Graha Ilmu Brophy. 1992. Basic Elektronic for Scientist and Engineers . Jhon Wiley Dwi Sunar, 2008. Belajar Sistem Cepat Elektronika . Yogyakarta: Absolut Thomas Sri W, 2002. Elektronika Dasar . Salemba Teknik Supporters: Prof.Dr. Wahono Widodo, M.Si. Supporting Laily Rosdiana, S.Pd., M.Pd. An Nuril Maulida Fauziah, S.Pd., M.Pd. lecturer Help Learning, Learning methods, Student Assignments, [Estimated time] Final **Evaluation** Learning abilities of materials each Assessment Weeklearning Weight (%) Indicator Criteria & Form Offline Online (online) References stage (Sub-PO) offline (1) (2) (3) (4)(5) (6)(7) (8) 0%

2				0%
3				0%
4				0%
5				0%
6				0%
7				0%
8				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

- 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.
- $7. \quad \textbf{Forms of assessment:} \ \text{test and non-test}.$
- 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.
- 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.