

Universitas Negeri Surabaya Faculty of Mathematics and Natural Sciences Doctoral Study Program in Mathematics Education

Document Code

SEMESTER LEARNING PLAN Courses CODE Course **Credit Weight SEMESTER** Compilation Family Date **Mathematical Thinking** 8400203068 T=3 P=0 ECTS=7.56 2 July 19, 2024 Course Cluster Coordinator Study Program Coordinator **AUTHORIZATION** SP Developer Prof. Dr. Tatag Yuli Eko Siswono, S.Pd., M.Pd. Learning **Case Studies** model **Program** PLO study program that is charged to the course Learning Develop logical, critical, systematic and creative thinking in carrying out specific work in their PLO-3 Outcomes field of expertise and in accordance with work competency standards in the field concerned (PLO) PLO-4 Develop yourself continuously and collaborate. PLO-5 Able to master thinking paradigms in mathematics education philosophy, cognitive psychology concepts, and educational concepts from a socio-cultural perspective developed to solve mathematics education problems. **Program Objectives (PO) PLO-PO Matrix** P.O PLO-3 PLO-4 PLO-5 PO Matrix at the end of each learning stage (Sub-PO) P.O Week 1 2 3 5 6 8 9 10 11 12 13 15 16 14 Short Course Description Main: References Supporters: Supporting lecturer Help Learning, Learning methods, Final **Evaluation** Student Assignments, [Estimated time] Learning materials abilities of each Assessment Weeklearning Weight (%) Indicator Criteria & Form Offline Online (online) References stage (Sub-PO) offline (1) (2) (3) (4)(5) (6) (7) (8)

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Evaluation Percentage Recap: Case Study

| No | Evaluation | Percentage |
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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** 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.