	Universitas Negeri Surabaya Faculty of Mathematics and Natural Sciences Undergraduate Physics Study Program	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Industrial Management	4520102116	Compulsory Study Program Subjects	T=2	P=0	ECTS=3.18	6	April 30, 2023

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	Students are expected to understand aspects of management, the concept of planning and controlling operations, strategic aspects of production/operations management, and be able to analyze operational problems by paying attention to the relationship between operational decisions and decisions of other functions.
PO - 2	Students are expected to understand the ISO standard management system
PO - 3	Students are expected to understand and be able to apply the Occupational Safety and Health management system

PLO-PO Matrix

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

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																

Short Course Description: Students are expected to understand aspects of management, the concept of planning and controlling operations, strategic aspects of production/operations management, and be able to analyze operational problems by paying attention to the relationship between operational decisions and decisions of other functions. Students are also introduced to standardized management systems (ISO) and Occupational Safety and Health (K3).

References

Main :

1. Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook . Mc Graw Hill.
2. Anizar. 2013. Teknik Kesehatan dan Keselamatan Kerja di Industri . Graha Ilmu
3. Amin Syukron. 2011. Pengantar Manajemen Industri . Graha Ilmu
4. Muhammad Ali. 2011. Modul Kuliah Manajemen Industri . FT-UNY

Supporters:

Supporting lecturer: Diah Hari Kusumawati, S.Si., M.Si.
Dr. Fitriana, S.Si.

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 understand company management	Students explain: Management functions Management elements Responsibilities of a manager	**Criteria:** Quantitative non-test **Form of Assessment** : Participatory Activities	Lectures and discussions 2x50 minutes	Independent assignments 2x50 minutes	**Material:** Introduction to Industrial Management: Basics of Management, Planning, Organizing, Staffing, Leading, Controlling **Reader:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	2%
2	Students understand company leadership and can plan and organize	Students understand: • The spirit of company leadership • How to plan company management steps • How to organize in company management	**Criteria:** Independent task **Form of Assessment** : Participatory Activities	2 x 50 minute discussions	Independent assignments 2x50 minutes	**Material:** Company management process **Reference:** *Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook. McGraw Hill.* **Material:** Company management process **Reader:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	2%
3	Students understand the forms or types of company management	Students explain professionally the mechanisms for handling business in company management settings	**Criteria:** Quantitative non-test **Form of Assessment** : Portfolio Assessment	2 x 50 minute discussions	Independent assignments 2x50 minutes	**Material:** • Production Management • Marketing Management **Reader:** *Amin Syukron. 2011. Introduction to Industrial Management. Science House* **Material:** • Production Management • Marketing Management **Reader:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	2%

4	Students understand the forms or types of company management	Students explain professionally the mechanisms for handling business in company management settings	**Criteria:** Quantitative non-test **Form of Assessment** : Participatory Activities, Portfolio Assessment	2 x 50 minute discussions	Independent assignments 2x50 minutes	**Materials:** • Financial Management • Human Resources Management **Reader:** *Amin Syukron. 2011. Introduction to Industrial Management. Science House* **Materials:** • Financial Management • Human Resources Management **Reader:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	3%
5	Students understand the principles of decision making	Students explain: • The meaning of decision making • Principles of decision making • Steps in making decisions • Looking for possible solutions	**Criteria:** Quantitative non-test **Form of Assessment** : Participatory Activities	2 x 50 minute discussions	Discussion, independent assignment 2x50 minutes	**Material:** Decision makers: • Principles of decision making • Types of decisions **Reader:** *Amin Syukron. 2011. Introduction to Industrial Management. Science House* **Material:** Decision makers: • Principles of decision making • Types of decisions **Reader:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	2%

6	Students understand production planning and production control	students explain: ■ Production planning ■ Production targets	**Criteria:** Quantitative non-test **Form of Assessment** : Participatory Activities	2 x 50 minute discussions		**Material:** Production planning and control Production planning ■ Production targets **Reference:** *Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook. McGraw Hill.* **Material:** Production planning and control Production planning ■ Production targets **Reference:** *Amin Syukron. 2011. Introduction to Industrial Management. Science House*	3%
7	Students understand production planning and production control	Students are able to explain ■ Production scheduling ■ Production control	**Criteria:** Quantitative non-test **Form of Assessment** : Portfolio Assessment	2 x 50 minute discussions		**Material:** Production planning and control Production planning ■ Production targets **Reference:** *Amin Syukron. 2011. Introduction to Industrial Management. Science House* **Material:** Production planning and control ■ Production scheduling ■ Production control **Reference:** *Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook. McGraw Hill.*	3%

8	UTS	Students are able to do all the test questions provided correctly	**Criteria:** Quantitative tests **Form of Assessment** : Test	Written test 2x50 minutes		**Material:** Meetings 1-7 **Reference:** *Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook. McGraw Hill.* **Material:** Meetings 1-7 **Reader:** *Amin Syukron. 2011. Introduction to Industrial Management. Science House* **Material:** Meetings 1-7 **Reader:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	15%
9	Students understand quality control and its standards in company management	Students can explain: 1. Organization for quality control 2. Quality standards 3. Responsibility for quality 4. Inspection	**Criteria:** Independent assignment **Form of Assessment** : Project Results Assessment / Product Assessment	2 x 50 minute discussions	Independent assignments 2x50 minutes	**Material:** Quality control and standardization (ISO): • Organization for quality control • Quality standards • Responsibility for quality • Bibliography **:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	5%
10	Students understand: a. The role of humans in the company b. Workforce placement	Students can explain 1. the role of humans in a company 2. Can place workers according to their fields	**Criteria:** Quantitative non-test **Form of Assessment** : Project Results Assessment / Product Assessment, Portfolio Assessment	Class discussion 2 x 50 minutes	Independent assignment 2x50 minutes	**Material:** Personnel management: The role of humans. Workforce placement. **Reference:** *Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook. McGraw Hill.*	5%

11	Students understand Occupational Safety and Health management	Students can explain: 1. Policies in K3 2. Various activities that can endanger the health and safety of workers in carrying out their professional activities, and know the things that must be prepared to overcome them	**Criteria:** Quantitative non-test **Form of Assessment** : Project Results Assessment / Product Assessment	2 x 50 minute discussions	Independent assignments 2x50 minutes	**Material:** Occupational Safety and Health Management (K3) **Reference:** *Anizar. 2013. Occupational Health and Safety Engineering in Industry. Science House* **Material:** Occupational Safety and Health Management (K3) **Reference:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	5%
12	Students are able to plan a form of company management and convey it in a report and poster product	Progress on creating a form of company and/or MSME management in the environment where students live	**Criteria:** Poster product progress **Form of Assessment** : Project Results Assessment / Product Assessment		Independent assignment 2x50 minutes	**Material:** Meetings 1-11 **Reader:** *Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook. McGraw Hill.*	5%
13	Students are able to plan a form of company management and convey it in a report and poster product	Progress on creating a form of company and/or MSME management in the environment where students live	**Criteria:** Poster product progress **Form of Assessment** : Project Results Assessment / Product Assessment		Independent assignment 2x50 minutes	**Material:** Meetings 1-11 **Reader:** *Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook. McGraw Hill.* **Material:** Meetings 1-11 **Reader:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	5%
14	Students are able to plan a form of company management and convey it in a report and poster product	Progress on creating a form of company and/or MSME management in the environment where students live	**Criteria:** Poster product progress **Form of Assessment** : Project Results Assessment / Product Assessment		Independent assignment 2x50 minutes	**Material:** Meetings 1-11 **Reader:** *Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook. McGraw Hill.* **Material:** Meetings 1-11 **Reader:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	5%

15	Students are able to plan a form of company management and convey it in a report and poster product	Progress on creating a form of company and/or MSME management in the environment where students live	**Criteria:** Poster product progress **Form of Assessment** : Project Results Assessment / Product Assessment		Independent assignment 2x50 minutes	**Material:** Meetings 1-11 **Reader:** *Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook. McGraw Hill.* **Material:** Meetings 1-11 **Reader:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	8%
16	UAS	Product presentation in the form of a poster	**Criteria:** Presentation of each group's products as UAS scores **Form of Assessment** : Project Results Assessment / Product Assessment, Test	2x50 minute presentations	2x50 minute presentations	**Material:** Meetings 12-15 **Reader:** *Doc Palmer. 1999. Maintenance Planning and Scheduling Handbook. McGraw Hill.* **Material:** Meetings 12-15 **Reader:** *Anizar. 2013. Occupational Health and Safety Engineering in Industry. Science House* **Material:** Meetings 12-15 **Reader:** *Amin Syukron. 2011. Introduction to Industrial Management. Science House* **Material:** Meetings 12-15 **Reader:** *Muhammad Ali. 2011. Industrial Management Lecture Module. FT-UNY*	30%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	10.5%
2.	Project Results Assessment / Product Assessment	50.5%
3.	Portfolio Assessment	9%
4.	Test	30%
		100%

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.