	Universitas Negeri Surabaya Faculty of Economics and Business Digital Business Undergraduate Study Program	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
operation management	6120906019		T=0	P=0	ECTS=0	3	July 17, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	Hujjatullah Fazlurrahman S.E., M.B.A	Renny Sari Dewi S.Kom., M.Kom	Hujjatullah Fazlurrahman, S.E., MBA.

Learning model	**Case Studies**

Program Learning Outcomes (PLO)

PLO study program which is charged to the course

Program Objectives (PO)

PO - 1	C4. Students are able to analyze company operational activities for appropriate operational decisions. C4. Students are able to analyze the company's operating activities for precise operating decisions
PO - 2	. Students are able to show thorough, broad-minded, and intelligent character in Operational Management learning activities. Students are able to show meticulous, broad-minded, and smart character in Operational Management learning activities.

PLO-PO Matrix

P.O
PO-1
PO-2

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																

Short Course Description	This course discusses the concept and scope of operations management, both related to tools and people, with various optimization methods starting from establishing and exploring production locations, production forecasting, planning raw material and inventory needs, layout, work design , quality control, and maintenance. The learning application is through analysis of case examples in class. Lectures are carried out using a system of case study analysis, lectures, discussions, assignments and reflections.

References

Main :

1. Jay Heizer dan Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.
2. S. Anil Kumar dan N. Suresh, 2009. Operations Management. New Delhi: New Age International.
3. Adam Jr, Everette E. and Ebert, Ronald J., 1996. Production and operation management, Concepts, Models and Behavior. Singapore: Prentice Hall, Simon & Schuster (Asia).
4. M. Nur Nasution, 2005. Manajemen Mutu Terpadu (Total Quality Management) Edisi Kedua. Bogor, Indonesia: Penerbit Ghalia Indonesia.
5. Montgomery, Douglas C., 1996. Pengantar Pengendalian Kualitas Statistik. Terjemahan Edisi Keempat. Gadjah Mada University Press Yogyakarta.

Supporters:

Supporting lecturer	Dr. Purwohandoko, M.M. Dr. Andre Dwijanto Witjaksono, S.T., M.Si. Tias Andarini Indarwati, S.E., M.M. Hujjatullah Fazlurrahman, S.E., MBA. Hafid Kholidi Hadi, S.E., M.SM. Renny Sari Dewi, S. Kom., M. Kom., MCE., MOS. Fresha Kharisma, S.E., M.SM. Muhammad Fajar Wahyudi Rahman, S.E., M.M.

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	Able to explain the meaning, development and importance of operations management in various types of organizations, especially manufacturing companies	1. Able to discuss the meaning and role of operations management in various organizations 2. Able to understand the development of operations management 3. Able to explain the benefits of implementing operations management in various types of organizations	**Criteria:** Perfect score if answered correctly **Form of Assessment** : Participatory Activities	Lecture and discussion method 3 X 50		**Material:** basic theories of operations management. **Reference:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	10%
2	Able to explain and analyze, as well as determine factory/branch locations	1. Able to explain the factors considered in determining factory location 2. Able to explain factory determination using the ranking procedure method (qualitative method) 3. Able to explain factory determination using the center of gravity method (quantitative method) 4. Able to explain factory determination using the Brown-Gibson method	**Criteria:** Perfect score if answered correctly **Form of Assessment** : Participatory Activities	Lecture and discussion method Lecture and assignment method 3 X 50		**Material:** determining the location of the factory/branch **Reference:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	10%

3	Able to make production planning based on production forecasting	1. Able to apply time series forecasting methods in planning production 2. Able to apply regression and correlation forecasting methods in planning production	**Criteria:** Perfect score if answered correctly	Lecture Method and Assignment 3 X 50		**Material:** production planning based on production forecasting **Reference:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	0%
4	Able to plan raw material requirements (Material Requirement Planning)	1. Able to prepare a Master Production Schedule for a single product 2. Able to prepare Master Production Schedules for multiple products	**Criteria:** Perfect score if answered correctly	Lecture Method and Assignment 3 X 50		**Material:** Material Requirement Planning **Bibliography:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	0%
5	Able to plan raw material requirements (Material Requirement Planning)	1. Able to prepare a Master Production Schedule for a single product 2. Able to prepare Master Production Schedules for multiple products	**Criteria:** Perfect score if answered correctly	Lecture Method and Assignment 3 X 50		**Material:** Material Requirement Planning **Bibliography:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	0%
6	Able to analyze raw material inventory planning	1. Able to explain the costs that arise as a result of inventory 2. Able to explain deterministic inventory control	**Criteria:** Perfect score if answered correctly **Form of Assessment** : Participatory Activities	Lecture and discussion method Lecture and Assignment Method 3 X 50		**Material:** raw material inventory planning **Reference:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	5%
7	Able to analyze raw material inventory planning	Able to explain inventory control in relation to discounts	**Criteria:** Perfect score if answered correctly	Lecture Method and Assignment 3 X 50		**Material:** raw material inventory planning **Reference:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	0%
8	Midterm exam	-	**Criteria:** - **Form of Assessment** : Test	- 3 X 50			15%

9	Able to analyze the layout of production facilities	1. Able to explain the basic concepts and strategic role of determining layout in the production process 2. Be able to explain layout types: layout based on fixed positions and process-oriented layout	**Criteria:** Perfect score if answered correctly **Form of Assessment** : Participatory Activities	Lecture and discussion method 3 X 50		**Material:** production facility layout **Bibliography:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	5%
10	Able to analyze the layout of production facilities	1. Able to explain the basic concepts and strategic role of determining layout in the production process 2. Be able to explain layout types: layout based on fixed positions and process-oriented layout	**Criteria:** Perfect score if answered correctly **Form of Assessment** : Participatory Activities	Lecture and discussion method 3 X 50		**Material:** production facility layout **Bibliography:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	5%
11	Able to analyze work design	Able to explain Job Design Elements: Job Analysis, Required Employee Qualifications, and Required Work Environment	**Criteria:** Perfect score if answered correctly **Form of Assessment** : Test	Lecture Method and Assignment 3 X 50		**Material:** work design **Bibliography:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	0%
12	Able to analyze work design	Able to explain Job Design Elements: Job Analysis, Required Employee Qualifications, and Required Work Environment	**Criteria:** Perfect score if answered correctly **Form of Assessment** : Participatory Activities	Lecture Method and Assignment 3 X 50		**Material:** work design **Bibliography:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	5%
13	Able to analyze problems responsibly, honestly and ethically by implementing statistical quality control	Able to explain the types of data and diagrams that cause problems using Pareto diagrams, cause and effect diagrams, histograms	**Criteria:** Perfect score if answered correctly **Form of Assessment** : Participatory Activities	Lecture Method and Assignment 3 X 50		**Material:** control **Bibliography:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	10%

14	Able to analyze problems responsibly, honestly and ethically by implementing statistical quality control	Able to carry out analysis in quality control with control charts (X-Bar, R, U, P Chart)	**Criteria:** Perfect score if answered correctly **Form of Assessment** : Participatory Activities	Lecture Method and Assignment 3 X 50		**Material:** statistical quality control **References:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	5%
15	Able to explain equipment maintenance and reliability	1. Able to explain the importance of maintenance in supporting the production process 2. Able to explain the importance of equipment reliability in supporting the production process	**Criteria:** Perfect score if answered correctly **Form of Assessment** : Participatory Activities	Lecture and Discussion Method 3 X 50		**Material:** equipment maintenance and reliability **Reference:** *Jay Heizer and Barry Render, 2011. Operations Management, Tenth Edition. New Jersey: Pearson Education.*	10%
16	Final exams		**Form of Assessment** : Test				20%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	65%
2.	Test	35%
		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** 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.