
SYLLABUS

Date/ Revision	February 15, 2017
Faculty	Business & Social Sciences
Approval	Dr. Samuel Prasetya

SUBJECT : OPERATION MANAGEMENT

1. Identification of Subject:

Name of Subject	: Operation Management
Code of Subject	: MGNT-3500
SKS/ECTS	: 3
Semester	: 5
Study Program	: B-MGT/B-IBA
Lecturer(s)	Ficky Alkarim, MSc, Ir. Invanos Tertiana, MBA & Dr. Samuel Prasetya

2. Competency

After having the course, students are expected to:

- Have the ability to perform quantitatively analysis and interpret operations information
- Solve typical operations management problems
- Document and report operations performance
- Recognize and address ethical issues that arise when managing operations

3. Description of Subject:

This course teaches concepts useful in efficiently managing the transformation of materials, labor, and capital into products or services. Topic covered include: the role of operations management in overall competitive strategy, key performance measures, and tools for improving operations performance. The level of discussion varies from long-term strategic planning to daily control of business processes.

4. Learning Approach

Approach	: Lectures
Method	: Discussion, question answer, sample problem/Case studies, group work
Student Task	: Class work, homework and presentation
Media	: Laptop, material book, and Calculator, LCD Projector, Film

5. Evaluation

a) Absence maximum	: 25%
b) Participation and discussion	: 5 points
c) Homework, Class work	: 5 points
d) Presentation, Simulation	: 10 points
e) Daily Quiz	: 20 points
f) Final Examination	: 60 points
Total	: 100 points

6. Contents/ Topics of Lecturing:

Week	Topics	Content	Remark
1	Operations and Productivity The Global Environment and Operations Strategy	<ul style="list-style-type: none"> • Definition of Operation Management • The Productivity Challenge • Case Study: Hard Rock Café • Issues in Operations Strategy • Strategic Planning, Core Competencies, and Outsourcing • Case study: Boeing 	Chapter 1 & 2
2	Managing Projects	<ul style="list-style-type: none"> • The Importance of Project Management • Project Planning • Project Scheduling • Project Controlling • Project Management Technique: PERT & CPM • Project Schedule • Case study: Bechtel Group 	Chapter 3
3	Forecasting Demand	<ul style="list-style-type: none"> • Chapter 4 • What is Forecasting • Seven steps in the Forecasting system • Forecasting Approaches • Associative Forecasting • Methods: Regression and Correlation Analysis • Case studies: Walt Disney Parks & Resort 	Chapter 4 Homework
4	Product Design	<ul style="list-style-type: none"> • Chapter 5 • Product Design • Product Development • Issues for Product Design • Service Design • Application of Decision Trees to Product Design • Case Studies: Regal Marine 	Chapter 5
5	Quality Management and International Standards	<ul style="list-style-type: none"> • Defining Quality • Total Quality Management • Tools of TQM • The Role of Inspection • TQM in Services • Case study: Arnold Palmer Hospital 	Chapter 6 Quiz chapter 1-5

Week	Topics	Content	Remark
6	Process Design	<ul style="list-style-type: none"> • Four Process Strategies • Selection of Equipment • Process Analysis and Design • Special Consideration for Service Process Design • Technology in Services • Process Redesign • Case study: Harley-Davidson 	Chapter 7
7	Location Decisions & Layout Decision	<ul style="list-style-type: none"> • Factors that affect location decision • Method of evaluating location alternatives • Geographic information systems • The strategic importance of layout decisions • Type of layout • Warehousing and storage layouts • Case study: McDonald's 	Chapter 8 & 9
8	Semester break – make-up classes only		
9	Supply Chain Management	<ul style="list-style-type: none"> • Six sourcing strategies • Supply chain risk • Logistic management • Distribution management • Measuring supply chain performance • Case study: Darden restaurants 	Chapter 11
10	Managing Inventory	<ul style="list-style-type: none"> • The importance of inventory • Inventory models • Probabilistic models and safety stock • Single-period model • Fixed-period systems • Case studies: Amazon.com 	Chapter 12 Homework
11	Aggregate Scheduling	<ul style="list-style-type: none"> • The planning process • Methods for aggregate planning • Revenue management • Aggregate planning strategies • Case study: Frito-Lay 	Chapter 13 Quiz chapter 6, 7, 8, 9, 11, 12
12	Material Requirements Planning (MRP) and ERP	<ul style="list-style-type: none"> • Dependent demand • Dependent inventory model 	Chapter 14

Week	Topics	Content	Remark
		requirements <ul style="list-style-type: none"> • MRP structure • MRP Management • Lot-Sizing Techniques • Case studies: Wheeled Coach 	
13	Scheduling for the short-term	<ul style="list-style-type: none"> • The importance of short-term scheduling • Scheduling issues • Scheduling process-focused facilities • Loading jobs • Scheduling jobs • Case studies: Delta Air Lines 	Chapter 15 Homework
14-15	JIT, Lean Operations, and the Toyota Production System	<ul style="list-style-type: none"> • JIT • TPS • Lean Operations • Kanban 	Chapter 16 Quiz chapter 13, 14, 15, 16
16	Semester break – make-up classes only		
17-18	Final Exam		

16. Book Reference:

- a) Textbook: Operation Management: Flexible Manufacturing, Heizer & Render, Pearson, ISBN # 978-0-13-293-1250