COURSE OUTLINE
and
SET OF COURSE

Course : ADVANCE OPERATIONS MANAGEMENT

Code/credits : ED 552 / 3 SKS

MANAGEMENT DEPARTMENT
FACULTY OF ECONOMICS
DIPONEGORO UNIVERSITY
SEMARANG

AN OUTLINE TEACHING PROGRAM

Course	:	**ADVANCE OPERATIONS MANAGEMENT**
Code/Credit	:	EM 552 / 3
Brief Description	:	The course discusses various aspect of advance concept of operations management.
General Instructional Objectives	:	After completing the course student able to describe or explain various advance concept of operations management relevant with competitive advantage, managing quality and continuity of companies.

No	Special Instructional Objectives	Main Subject	Sub-Subject	Duration	References
1.	When you complete this session, you should be able to : *Identify or Define*: ♦ Mission ♦ Strategy ♦ Ten Decisions of OM ♦ Multinational Corporations	Operations Strategy in a Global Environment	a. Developing Missions and Strategies b. Achieving Competitive Advantage Through Operations c. Ten Strategic OM Decisions d. Issues In Operations Strategy e. Strategy Development and Implementation f. Global Operations Strategy Options	150 minutes	A. Heizer Jay & Render Barry, Operations Management, Prentice Hall, p. 1 - 24
2	**When you complete this subject, you should be able to :** *Identify or Define*: ♦ **Capacity** ♦ **Design Capacity** ♦ **Effective Capacity** ♦ **Utilization** *Explain*: ♦ **Capacity Considerations** ♦ **Net Present Value Analysis** ♦ **Breakeven Analysis** ♦ **Financial Considerations** ♦ **Strategy-Driven Investments**	Capacity Planning	a. **Capacity** b. **Capacity Planning** c. **Breakeven Analysis** d. **Appying Decisions Trees To Capacity Decisions** e. **Strategy Driven Investments**	150 minutes	A. p 275 – 289 B. p 386 – 401

3	When you complete this session, you should be able to : *Identify or Define*: ♦ Aggregate planning ♦ Tactical scheduling ♦ Graphic technique for aggregate planning ♦ Mathematical techniques for aggregate planning *Describe or Explain:* ♦ How to do aggregate planning ♦ How service firms develop aggregate plans	Aggregate Planning	**a. The Planning Process** **b. The Nature of Aggregate Planning** **c. Aggregate Planning Strategies** **d. Methods for Aggregate Planning** **e. Aggregate Planning In Services** **f. Yield Management**	150 minutes	A. p 488 – 510 B. p. 512 - 533
4	**When you complete this session, you should be able to :** ***Identify or Define*:** **♦ Planning bills and kits** **♦ Phantom bills** **♦ Low-level coding** **♦ Lot sizing** ***Describe or Explain:*** **♦ Material requirements planning** **♦ Distribution requirements planning**	**Material Requirements Planning (MRP)**	**a. Dependent Inventory Model** **b. Lot-Sizing Techniques** **c. Extensions in MRP** d. **MRP IN Services**	150 minutes	A. p 519 - 540. B. p 582 - 607

5	When you complete this session, you should be able to: *Identify or Define*: ♦ Quality ♦ Implications of Quality ♦ Cost of Quality (COQ) ♦ International Quality Standards ♦ Demings, Juran, and Crosby	Quality Management	a. Quality and Strategy b. Defining Quality c. Cost of Quality d. International Quality Standards e. Basic concepts of Demings, Juran, and Crosby on quality	150 minutes	A. Heizer Jay & Render Barry, Operations Management, Prentice Hall, p. 187 – 192 B. Chase, Aquilano & Jacobs, Operations Management For Competitive Advantage, The McGraw – Hill Companies Inc, 2001, p
6	When you complete this session, you should be able to: *Explain*: ▪ Total Quality Management (TQM) ▪ Concepts of TQM	Total Quality Management	a. **Achieving Total Quality Management** b. **Concepts of TQM**	150 minutes	A. p. 193 – 197 B. p 186 - 200
7	When you complete this session, you should be able to : *Explain*: ♦ Quality Function Deployment ♦ Taguchi technique ♦ Quality loss function ♦ Pareto charts ♦ Process charts ♦ Cause-and-effect diagrams	Tools of TQM	a. Quality Function Deployment b. House of Quality c. Taguchi technique d. Quality loss function e. Pareto charts f. Process charts g. Cause-and-effect diagrams	150 minutes	A. p 197 – 207. B. p 106 - 108

8	When you complete this session, you should be able to *Identify or Define*: ♦ Natural and assignable causes of variation ♦ Process control ♦ Acceptance sampling ♦ OC curve ♦ Producer's and consumer's risk ♦ The role of statistical quality control	Statistical Process Control	a. Statistical Process Control (SPC) b. Process Capability c. Acceptance Sampling d. The role of statistical quality control	150 minutes	A. p 214 – 231 B. p 300 - 314
9	When you complete this session, you should be able to : *Identify or Define*: ♦ Supply-chain management ♦ Purchasing ♦ Outsourcing ♦ E-procurement ♦ Materials management ♦ Keiretsu ♦ Virtual companies *Describe or Explain*: ♦ Supply-Chain Strategies ♦ Purchasing strategies ♦ Approaches to negotiations	Supply-Chain Management	a. The Strategic Importance of Supply-Chain b. Supply-Chain Strategies c. Managing the Supply Chain d. Materials/Logistics Management e. Benchmarking Supply-Chain Management	150 minutes	A. p 411 - 427. B. p 362 - 379

10	When you complete this session, you should be able to : *Describe or Explain:* ▪ How to improve maintenance ▪ TPM principles ▪ Eight major pillars of TPM ▪ TPM implementation	**Total Productive Maintenance**	a. **Origins of TPM** b. **TPM principles** c. **Eight major pillars of TPM** d. **TPM Implementation** e. **TPM Benefits**	150 minutes	A. p 630 - 631. D. ©Imants http://www.managmentsuport.com
11	**When you complete this session, you should be able to :** *Identify or Define:* ◆ **Types of waste** ◆ **Variability** ◆ **Kanban** *Describe or Explain*: ◆ **Just-in-Time (JIT) philosophy** ◆ **Pull systems** ◆ **Push systems** ◆ **The goals of JIT partnerships** ◆ **Lean Production**	**Just-in-Time and Lean Production Systems**	a. **Just-In-Time and Lean Production** b. **Suppliers** c. **JIT Layout** d. **Inventory** e. **Scheduling** f. **Quality** g. **Employee Empowerment** h. **Lean Production**	150 minutes	A. p 593 – 613 B. p 256 - 302

12	**When you complete this session, you should be able to :** ***Identify or Define:*** **Balanced and Unbalanced Capacity** **Bottleneck and Nonbottleneck** **Capacity-constrained resource (CCR)** ***Describe or Explain*:** **Theory of Constraint** **Drum, Buffer, Rope System** **Comparing Synchronous Manufacturing to MRP**	**Synchronous Manufacturing and the Theory of Constraints**	a. **Goldratt's Rules** *b.* **Goldratt's *Goal of the Firm*** c. **Performance Measurement** d. **Capacity and Flow issues** *e.* **Synchronous Manufacturing**	150 minutes	B. P 670 - 695. C. Joseph S Martinich, Production and Operations Management, John Wiley & Sons, Inc., 1997 p 781 - 784
13	When you complete this session, you should be able to : *Describe or Explain:* ▪ Principles of Reengineering ▪ The Reegineering Process ▪ Process Redesign ▪ Integrating Reengineering and Process Improvement	**Business Process Reengineering (BPR)**	a. Principles of Reengineering b. The Reegineering Process c. Process Redesign d. Integrating Reengineering and Process Improvement	150 minutes	B. p. 338 – 341

14.	When you complete this session, you should be able to ***Identify or Define*:** ▪ The Characteristic and levels of research and development projects ▪ The incentives and impediments to technological change ▪ List the Decision variables in technology management *Describe or Explain:* ▪ Several techniques of managing technology transfer ▪ Differentiate methods of project management in terms of when they should be used.	The Management of Technology	a. Function of Technology b. Contribution of Research and Development c. The Motivation to Change Technology d. Decision Variables in Technology Management e. Managing Technology Transfer f. Managing Project Implementation g. Designing Innovative Systems	150 minutes	Peter W Stonebraker & G. Keong Leong, Operations Strategy, Allyn & Bacon, 1994, p 479 – 513

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 1

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this session, they able to describe the purpose or rationale for organization's existence and the action plan to echieve the mission. They also able to explain the main decisions of operations management in a global environment.

2. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to :

   Identify or Define:

   - Mission
   - Strategy
   - Ten Decisions of OM
   - Multinational Corporations

B. Main Subject : Operations Strategy in a Global Environment

C. Sub Subject :

a. Developing Missions and Strategies
b. Achieving Competitive Advantage Through Operations
c. Ten Strategic OM Decisions
d. Issues In Operations Strategy
e. Strategy Development and Implementation
f. Global Operations Strategy Options

D. **Course Activities**

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain scope of course 2. Explain benefit of course 3. Explain the competence of GIO and SIO	1. Listening 2. Taking a note	LCD, Computer, and whiteboard
Lecturing	1. Developing Missions and Strategies 2. Achieving Competitive Advantage Through Operations 3. Ten Strategic OM Decisions 4. Issues In Operations Strategy 5. Strategy Development and Implementation 6. Global Operations Strategy Options	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

A. Prepare next subject

G. References :

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 1 – 24

B. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 22 – 41

C. Peter W. Stonebraker & G. Keong Leong, Opetrations Strategy Focusing Competitive Excellence, Allyn And Bacon, 1994, p. 28 - 54

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 2

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe how companies decides the "throughput" a facility can hold, receive, store or produce in a periode of time.

2. Specific Instructional Objective (SIO)

   When you complete this subject, you should be able to :

   Identify or Define:

   - Capacity
   - Design Capacity
   - Effective Capacity
   - Utilization

   Explain:

   - Capacity Considerations
   - Net Present Value Analysis
   - Breakeven Analysis
   - Financial Considerations
   - Strategy-Driven Investments

B. Main Subject : Capacity Planning

C. SubSubject :

a. Capacity
b. Capacity Planning
c. Breakeven Analysis

d. Appying Decisions Trees To Capacity Decisions
e. Strategy Driven Investments

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of learning Capacity Planning. 3. Explain General Instructional Objective and Spesific Instructional Objective.	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard
Lecturing	1. Capacity 2. Capacity Planning 3. Breakeven Analysis 4. Appying Decisions Trees To Capacity Decisions 5. Strategy Driven Investments	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Reading next material

G. References:

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 275 – 289

B. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, **Operations Management For** Competitive Adavantage, McGraw – Hill, 2004, p. 386 – 401

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 3

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe on determining the quantity and timing of production for the intermediate future, often from 3 to 18 months ahead.

2. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to :

   Identify or Define:

   - Aggregate planning
   - Tactical scheduling
   - Graphic technique for aggregate planning
   - Mathematical techniques for aggregate planning

   Describe or Explain:

   - How to do aggregate planning
   - How service firms develop aggregate plans

B. Main Subject : Aggregate Planning

C. SubSubject :

a. The Planning Process
b. The Nature of Aggregate Planning
c. Aggregate Planning Strategies
d. Methods for Aggregate Planning
e. Aggregate Planning In Services
f. Yield Management

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of learning Aggregate Planning. 3. Explain General Instructional Objective and Spesific Instructional Objective.	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard
Lecturing	1. The Planning Process 2. The Nature of Aggregate Planning 3. Aggregate Planning Strategies 4. Methods for Aggregate Planning 5. Aggregate Planning In Services 6. Yield Management	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

2. Reading next material

G. References:

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 488 – 510

B. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 512 – 533

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 4

A. Objective

3. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe material requirement planning needed by companies.

4. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to :

   Identify or Define:

   - Planning bills and kits
   - Phantom bills
   - Low-level coding
   - Lot sizing

   Describe or Explain:

   - Material requirements planning
   - Distribution requirements planning

B. Main Subject : Material Requirements Planning (MRP)

C. Sub-Subject :

a. Dependent Inventory Model
b. Lot-Sizing Techniques
c. Extensions in MRP
d. MRP IN Services

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of learning Material Requirement Planning. 3. Explain General Instructional Objective and Spesific Instructional Objective.	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard
Lecturing	1. Dependent Inventory Model 2. Lot-Sizing Techniques 3. Extensions in MRP 4. MRP IN Services	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Assignment to be discussed in laboratory class
2. Reading next material

G. References:

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 519 – 540

B. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 582 – 607

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 5

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe the effect of quality to firms and basic concept of quality.

2. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to:

   Identify or Define:

   - Quality
   - Implications of Quality
   - Cost of Quality (COQ)
   - International Quality Standards
   - Demings, Juran, and Crosby

B. Main Subject : Quality Management

C. Sub-Subject :

a. Quality and Strategy
b. Defining Quality
c. Cost of Quality
d. International Quality Standards
e. Basic concepts of Demings, Juran, and Crosby on quality

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of learning Quality Management. 3. Explain General Instructional Objective and Spesific Instructional Objective.	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard
Lecturing	1. Quality and Strategy 2. Defining Quality 3. Cost of Quality 4. International Quality Standards 5. Basic concepts of Demings, Juran, and Crosby on quality	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Reading next material

G. References:

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 187 – 192

B. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 276 – 290

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 6

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe the effect of quality to firms and basic concept of quality.

2. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to:

   Explain:

   - Total Quality Management (TQM)
   - Concepts of TQM

B. Main Subject : Total Quality Management

C. Sub-Subject :

a. Achieving Total Quality Management
b. Concepts of TQM

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of learning Total Quality	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard

	Management. 3. Explain General Instructional Objective and Spesific Instructional Objective.		
Lecturing	1. Achieving Total Quality Management 2. Concepts of TQM	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Reading next material

G. References:

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 193 – 197

B. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 274 – 275

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 7

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe tools of Total Quality Management.

2. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to :

   Explain:

   - Quality Function Deployment
   - Taguchi technique
   - Quality loss function
   - Pareto charts
   - Process charts
   - Cause-and-effect diagrams

B. Main Subject : Tools of Total Quality Management

C. Sub-Subject :

a. Quality Function Deployment
b. House of Quality
c. Taguchi technique
d. Quality loss function
e. Pareto charts
f. Process charts
g. Cause-and-effect diagrams

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of learning Tools of Total Quality Management. 3. Explain General Instructional Objective and Spesific Instructional Objective.	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard
Lecturing	1. Quality Function Deployment 2. House of Quality 3. Taguchi technique 4. Quality loss function 5. Pareto charts 6. Process charts 7. Cause-and-effect diagrams	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Assignment to be discussed in laboratory class
2. Reading next material

G. References:

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 197 – 207

B. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 281 – 284

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 8

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe managing quality by statistical method.

2. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to *Identify or Define*:

   - Natural and assignable causes of variation
   - Process control
   - Acceptance sampling
   - OC curve
   - Producer's and consumer's risk
   - The role of statistical quality control

B. Main Subject : Statistical Process Control

C. Sub-Subject :

a. Statistical Process Control (SPC)
b. Process Capability
c. Acceptance Sampling
d. The role of statistical quality control

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of learning Statistical Process Control. 3. Explain General Instructional Objective and Spesific Instructional Objective.	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard
Lecturing	1. Statistical Process Control (SPC) 2. Process Capability 3. Acceptance Sampling 4. The role of statistical quality control	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Assignment to be discussed in laboratory class

2. Reading next material

G. References:

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 214 – 234

B. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 300 – 314

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 9

A. Objective

3. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe flows of material from supplier to customer.

4. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to :

   Identify or Define:

   - Supply-chain management
   - Purchasing
   - Outsourcing
   - E-procurement
   - Materials management
   - Keiretsu
   - Virtual companies

   Describe or Explain:

   - Supply-Chain Strategies
   - Purchasing strategies
   - Approaches to negotiations

B. Main Subject : Supply-Chain Management

C. Sub-Subject :

a. The Strategic Importance of Supply-Chain
b. Supply-Chain Strategies
c. Managing the Supply Chain
d. Materials/Logistics Management
e. Benchmarking Supply-Chain Management

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of learning Supply Chain Management. 3. Explain General Instructional Objective and Spesific Instructional Objective.	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard
Lecturing	1. The Strategic Importance of Supply-Chain 2. Supply-Chain Strategies 3. Managing the Supply Chain 4. Materials/Logistics Management 5. Benchmarking Supply-Chain Management	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question	1. Listening	Computer, LCD dan

	3. Explain the next topic		whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Reading next material

G. References:

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 411 - 427

B. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 362 – 279

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 10

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe maintenance concept using total involvement.

2. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to :

   Describe or Explain:

   - How to improve maintenance
   - TPM principles
   - Eight major pillars of TPM
   - TPM implementation

B. Main Subject : **Total Productive Maintenance**

C. Sub-Subject :

a. Origins of TPM
b. TPM principles
c. Eight major pillars of TPM
d. TPM Implementation
e. TPM Benefits

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session.	1. Listening 2. Taking a note	LCD, Computer,

	2. Explain benefit of learning Total Productive Maintenance. 3. Explain General Instructional Objective and Spesific Instructional Objective.		dan whiteboard
Lecturing	1. Origins of TPM 2. TPM principles 3. Eight major pillars of TPM 4. TPM Implementation 5. TPM Benefits	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Reading next material

G. References:

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 630 - 631

B. ©Imants http://www.managementsupport.com

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 11

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe eliminate waste to achieve competitive advantage.

2. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to :
   Identify or Define:
   - Types of waste
   - Variability
   - Kanban

   Describe or Explain:
   - Just-in-Time (JIT) philosophy
   - Pull systems
   - Push systems
   - The goals of JIT partnerships
   - Lean Production

B. Main Subject : Just-in-Time and Lean Production Systems

C. Sub-Subject :

a. Just-In-Time and Lean Production
b. Suppliers
c. JIT Layout
d. Inventory
e. Scheduling
f. Quality
g. Employee Empowerment
h. Lean Production

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of learning Just in Time and Lean Production. 3. Explain General Instructional Objective and Spesific Instructional Objective.	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard
Lecturing	1. Just-In-Time and Lean Production 2. Suppliers 3. JIT Layout 4. Inventory 5. Scheduling 6. Quality 7. Employee Empowerment 8. Lean Production	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Reading next material

G. References:

A. Jay Heizer & Barry Render, Operations Management, Prentice Hall, p. 593 – 613

B. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 256 - 302

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 12

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe Synchronousing process flow of the firms.

2. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to :

   Identify or Define:

   Balanced and Unbalanced Capacity

   Bottleneck and Nonbottleneck

   Capacity-constrained resource (CCR)

   Describe or Explain:

   Theory of Constraint

   Drum, Buffer, Rope System

   Comparing Synchronous Manufacturing to MRP

B. Main Subject : Synchronous Manufacturing and the Theory of Constraints

C. Sub-Subject :

a. Goldratt's Rules
b. Goldratt's *Goal of the Firm*
c. Performance Measurement
d. Capacity and Flow issues
e. Synchronous Manufacturing

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of learning Synchronous Manufacturing and the Theory of Constraints. 3. Explain General Instructional Objective and Spesific Instructional Objective.	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard
Lecturing	1. Goldratt's Rules 2. Goldratt's *Goal of the Firm* 3. Performance Measurement 4. Capacity and Flow issues 5. Synchronous Manufacturing	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Reading next material

G. References:

A. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 256 – 302

B. Joseph S Martinich, Production and Operations Management, John Wiley & Sons, Inc., 1997 p 781 - 784

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 13

A. Objective

General Instructional Objective (GIO)

When the student complete this topic, they able to describe the firms effort to be competitive.

Specific Instructional Objective (SIO)

When you complete this session, you should be able to :

Describe or Explain:

- Principles of Reengineering
- The Reegineering Process
- Process Redesign
- Integrating Reengineering and Process Improvement

B. Main Subject : **Business Process Reengineering (BPR)**

C. Sub-Subject :

a. Principles of Reengineering
b. The Reegineering Process
c. Process Redesign
d. Integrating Reengineering and Process Improvement

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session.	1. Listening 2. Taking a note	LCD, Computer,

	2. Explain benefit of Business Process Reengineering. 3. Explain General Instructional Objective and Spesific Instructional Objective.		dan whiteboard
Lecturing	1. Principles of Reengineering 2. The Reegineering Process 3. Process Redesign 4. Integrating Reengineering and Process Improvement	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

Reading next material

G. References:

A. Richard B Chase, F. Robert Jacobs & Nicholas J. Aquilano, Operations Management For Competitive Adavantage, McGraw – Hill, 2004, p. 338 – 341

SET OF COURSE

COURSE TITLE : **ADVANCE OPERATIONS MANAGEMENT**
COURSE CODE/CREDIT: EM 552 / 3
CREDIT HOURS : 3 x 50 minutes
NUMBER OF MEETING : 14

A. Objective

1. General Instructional Objective (GIO)

   When the student complete this topic, they able to describe the firms on managing technology.

2. Specific Instructional Objective (SIO)

   When you complete this session, you should be able to

   ***Identify or Define*:**

   - The Characteristic and levels of research and development projects
   - The incentives and impediments to technological change
   - List the Decision variables in technology management

   Describe or Explain:

   Several techniques of managing technology transfer

   Differentiate methods of project management in terms of when they should be used.

B. Main Subject : **The Management of Technology**

C. Sub-Subject :

Function of Technology
Contribution of Research and Development
The Motivation to Change Technology
Decision Variables in Technology Management
Managing Technology Transfer
Managing Project Implementation
Designing Innovative Systems

D. Course Activities

Steps	Lecture Activities	Student Activities	Media
Introduction	1. Explain subject of the session. 2. Explain benefit of The Management of Technology . 3. Explain General Instructional Objective and Spesific Instructional Objective.	1. Listening 2. Taking a note	LCD, Computer, dan whiteboard
Lecturing	1. Function of Technology 2. Contribution of Research and Development 3. The Motivation to Change Technology 4. Decision Variables in Technology Management 5. Managing Technology Transfer 6. Managing Project Implementation 7. Designing Innovative Systems	1. Listening 2. Taking a note 3. Give a question 4. Discussion	LCD, Computer dan whiteboard
Summary	1. Summarizing the material 2. Give a question 3. Explain the next topic	1. Listening	Computer, LCD dan whiteboard

E. Evaluation:

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. Assignment:

1. Reading next material

G. References:

A. Peter W Stonebraker & G. Keong Leong, Operations Strategy, Allyn & Bacon, 1994, p 479 – 513