

Course Outline

OM 201 Principles of Operations Management /

OM 201 Operations Management

Semester 2/2020 (January 20 – May 19, 2021)

Number of Credits: 3 credits (3-0-9)

Lecture Time: Fridays; 2.00-5.00 p.m.

Lecture Venue: Online (Students can get weekly teaching materials and Zoom Meeting ID and password on BE Moodle.)

Enrollment key for BE Moodle: 0179

Instructors:

Instructor's Name: Assistant Professor Dr.Panuwong Kumpirarusk

Course Coordinator Assistant Professor Dr.Panuwong Kumpirarusk

Office: Room F310 (Office of MBA Program), Anek Prasong II Building

Office Hours: As appointments

Contact Information: om201be@tbs.tu.ac.th

Course Description:

Study of concepts, techniques and tools to design, analyze, and improve core operational capabilities, and their application to a broad range of industries. Topics include operations strategy, productivity, product/service design, process design, quality management, inventory management, project management, supply chain management, operational performance measurement, and operations for sustainability.

Course Objectives:

The objective of this course is to provide students with basic concepts and techniques in managing the operations of a production unit and/or a service organization, which leads to achieve excellent and sustainable operation and supply chain.

Teaching Materials and Resources:

Main Texts:

“*Operations Management: Sustainability and Supply Chain Management*” Global edition, 12th Edition, By Jay Heizer, Barry Render, Chuck Munson, Pearson, ISBN: 9781292148632, Published: 2017.

Required Readings/ Course Materials:

Teaching notes and coursework from lecturer (BE Moodle).

Evaluation Methods:

Methods/Activities	Week	Weighted score
Individual and group in-class assignments (8 x 5%)	2, 9-15	40%
Group report and presentation (2 x 15%)	4, 6	30%
Final exam		30%
Total		100%

Grading Criteria:

Grades	Percentage
A	85-100
B+	75-84
B	70-74
C+	65-69
C	60-64
D+	50-59
D	40-49
F	0-39

Teaching-Learning Methods:

- Lecture on theoretical concepts
- Case discussion and assignments
- Group reports

Class Policy:

- Students shall read suggested textbooks or teaching notes before classes.
- Students shall contribute reasonable effort to classes and group assignments.
- Students shall check plagiarism and grammar in their reports or assignments before submission.
- Students shall prepare and submit their reports and assignments according to given instructions. Late submission may be rejected or lead to point deduction.
- Students shall not eat or use telephone during the class.

Expected Learning Outcomes:

	1. Morality and Ethics:	Expected Learning Outcomes:
●	1.1 Possess honesty, sacrifice, self-, social-, and environmental responsibility.	- Attend classes with good manners and punctuality. - Plagiarism and wrong grammar in reports or assignments shall be not apparent. - Submit assignments and reports on time. - Corporate social responsibility, social enterprise and other sustainability concepts shall be integrated in reports or assignments.
N/A	1.2 Value "sufficiency" theory and adapt it in life path by adhering to adequacy, rationale, and immunity development.	
N/A	1.3 Value disciplines, respect, and comply with the rules and regulations of the institution and society at large.	
N/A	1.4 Acquire knowledge related to business morality and ethics, and be able to handle ethical dilemma with integrity.	
	2. Knowledge:	Expected Learning Outcomes:
N/A	2.1 Acquire knowledge on and understand the important concepts in business management.	
●	2.2 Acquire knowledge on and understand the important social and science concepts related to business management.	- Major social and science concepts related to business management shall be applied in reports or assignments.
●	2.3 Acquire knowledge on and understand the important concepts related to business processes, planning,	- Major operations management concepts shall be tested in midterm and final

	corporate structures, operations, control, performance evaluation and contingency plan to suit the circumstances.	examinations.
●	2.4 Acquire the knowledge on academic advancement and professional development in business management including the understanding of the situational adaptability and its impacts on business.	- Analysis of real cases with poor operations shall be done in reports or assignments.
	3. Intellectual Development:	Expected Learning Outcomes:
N/A	3.1 Be able to search and process information and utilize various concepts appropriately in a given circumstance in order to obtain relevant information to benefit in the rapidly changing business environment.	
●	3.2 Be able to think systematically, rationally and creatively and to integrate knowledge from other disciplines to solve the problems in business and other settings.	- Analysis of real cases with poor operations shall be done in reports or assignments.
N/A	3.3 Be able to collectively propose solutions to problems at hand and analyze the impacts of the proposed solutions and be able to choose the solution that is appropriate to a given situation to ensure business competitive advantages.	
	4. Interpersonal Skills and Responsibilities:	Expected Learning Outcomes:
●	4.1 Be able to work in team, possess interpersonal skills and leadership skills, and be professionally adaptive to a given situation.	- Accomplish group assignments and group presentations with reasonable effort. - Human relations and other social skills shall be gradually improved.
N/A	4.2 Be creative and constructively criticize to solve problem of the team.	
N/A	4.3 Be responsible in lifelong learning to develop self and professional career.	
	5. Quantitative Analysis, Communication and Information Technology:	Expected Learning Outcomes:
○	5.1 Be able to apply mathematics, statistics, quantitative analysis in analyzing and making decisions in business and daily life.	- Statistical and quantitative analysis shall take part in midterm and final examinations.
N/A	5.2 Be able to efficiently communicate in Thai and foreign languages that are relevant in doing business.	
●	5.3 Be able to explain the issues and make the issues clear in verbal or writing, and be able to choose the appropriate pattern of communication for different groups of audience both in business context and in other contexts.	- Well-organized structure of written reports or assignments shall be apparent. - Professional presentation shall be proven and competitive in reports or assignments.

○	5.4 Be able to utilize the information technologies or others to support the business operations.	- Solutions and recommendations based on recent technologies shall be proposed in reports or assignments.
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Teaching Plans:

Week	Date	Topic	Business Plan Competition
1	22 January 2021	Course Introduction - Course syllabus - Learning Expectation Introduction to Operations Management (1/2) - Concepts of Operations Management	Lecture & Discussion Chapter 1
2	29 January 2021	Introduction to Operations Management (2/2) - Importance of productivity - Types of productivity & calculation	Lecture & Practice Chapter 1 Class Exercise #1 (5%)
3	5 February 2021	Operations Strategies for Sustainability (1/2) - Mission, Vision & Core Competencies - Generic Operations Strategies - Instruction on Group Report #1: Strategy Formulation	Lecture & Discussion Chapter 2
4	12 February 2021	Operations Strategies for Sustainability (2/2) - Global Issues in Sustainability - Corporate Social Responsibility (CSR) Presentation on Group Report #1	Lecture & Presentation Chapter 2 Group Report #1 (15%)
5	19 February 2021	Product and Service Design - Design of Product - Design of Service - Instruction on Group Report #2: Product & Service Design	Lecture & Discussion Chapter 5
6	26 February 2021	Presentation on Group Report #2 Process Design (1/2) - Process Strategies - Facility Layout - Process Analysis and Design	Lecture & Presentation Chapter 7 Group Report #2 (15%)
7	5 March 2021	Process Design (2/2) Process Tools and Improvement	Lecture & Discussion Chapter 7
8	19 March 2021	Quality Management (1/2) - Total Quality Management (TQM) - Cost of Quality	Lecture & Discussion Chapter 6
9	26 March 2021	Quality Management (2/2) Quality Improvement (QC Tools)	Lecture & Discussion Chapter 6 Class Exercise #2 (5%)
10	2 April 2021	Inventory Management (1/2) - Importance of Inventory - Models of inventory management - ABC Model - Economic Order Quantity Model (EOQ)	Lecture & Discussion Chapter 12 Class Exercise #3 (5%)

Week	Date	Topic	Business Plan Competition
11	9 April 2021	Inventory Management (2/2) • Production Order Quantity Model (POQ) • Quantity Discount Model	Lecture & Discussion Chapter 12 Class Exercise #4 (5%)
12	23 April 2021	Supply Chain Management • Sourcing Strategy • Supply Chain Risk • Measuring Supply Chain Management	Lecture & Discussion Chapter 11 Class Exercise #5 (5%)
13	30 April 2021	Project Management (1/2) • Importance of Project Management • Project Management Techniques: CPM	Lecture & Discussion Chapter 3 Class Exercise #6 (5%)
14	7 May 2021	Project Management (2/2) • Cost-Time Trade-Offs and Project Crashing	Lecture & Discussion Chapter 3 Class Exercise #7 (5%)
15	14 May 2021	Lean Operations (2/2) • Lean Concept • Toyota Production System • Small Lot Production and Reduction of Setup Time	Lecture & Discussion Chapter 16 Class Exercise #8 (5%)
	TBA	Final Examination	It may be on campus exam, take-home exam and/or interview exam upon the covid-19 situation (30%)

ACADEMIC CALENDAR & HOLIDAY

Semester 2/2020

(January 20 – May 19, 2021)

Activities	Time Period
Classes Begin	January 20, 2021
Add-drop period	January 25 – 29, 2021
Tuition payment period	January 30 – February 2, 2021
<i>Makha Bucha Day*</i>	<i>February 26, 2021</i>
Mid-term Examination Period	March 10 – 16, 2021
Withdrawal period with “W” on record	March 24 – May 6, 2021
<i>Chakri Memorial Day*</i>	<i>April 6, 2021</i>
<i>Songkran Day Festival*</i>	<i>April 12 – 18, 2021</i>
<i>Substitution for Visakha Bucha Day*</i>	<i>April 26, 2021</i>
<i>Coronation Day*</i>	<i>May 4, 2021</i>
<i>Royal Ploughing Ceremony Day*</i>	<i>May 11, 2021</i>
Last day of class	Wed, May 19, 2021
Final exam period	May 20 – June 5, 2021
<i>Visakha Bucha Day*</i>	<i>May 26, 2021</i>
<i>Queen Suthida's Birthday*</i>	<i>June 3, 2021</i>

** Public Holiday, No classes during this period*