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②图玄束華大學

教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	生產與作業管理	1		學年/學期 Academic Year/Semester		112/1	
課程名稱(英文) Course Name in English	Production and Operations Management						
科目代碼 Course Code	MSF_10430	系級 Department 學三 & Year		開課單位 Course-Offering Department	管理科學與財金國際學士 學位學程		
修別 Type	學程 Program	學分數/時 Credit(s)/Hou		3.0/3.0			
授課教師 Instructor	/黄郁文						
先修課程 Prerequisite							

課程描述 Course Description

The course provides an introduction to the concepts, scope, strategy, design and operations of manufacturing firms and service organizations. The course integrates various areas in quality assurance, product/service design, facility layout, operations processes, material and time allocation, and considers the strategic, tactic, and operations activities of transforming resources into value-added outputs. The issue of competitiveness is addressed with a global perspective. The course also covers analytical methods that are useful in enhancing the management of a firm's operations.

課程目標 Course Objectives

Any firm, no matter in the manufacturing or service sector, transforms resources to outputs by carrying out various operations. While the detailed operations are sector and even firm dependent, there are general principles depending neither on sector nor firm that lead to quality, timely, and value-added outputs. Production and operations management is the study of such general principles.

To do so, the course introduces the concepts, scope, strategy, design and operations of manufacturing firms and service organizations. Essential operations decisions in forecasting, product design, process design and control, quality assurance, location analysis, project management, and supply chain management are discussed topic by topic.

	系專業能力 Basic Learning Outcomes	課程目標與系專業能 力相關性 Correlation between Course Objectives and Dept.'s Education Objectives
A	能以數量方法分析與解決問題。 Using quantitative methods to analyze and solve problems.	•
В	具備財務金融領域之分析能力。 Equipped with the ability to analyze finance.	
С	能善用資訊科技進行資料分析、統整與呈現。 Using information technology to analyze, integrate, and present data.	0
D	具備國際視野與專業外語能力。 Equipped with a global vision and specialized foreign language proficiency.	0
Е	具備掌握財經時事議題及研判財經趨勢之能力。 Equipped with the ability to master topics of finance and economy, and other current news, and to diagnose financial and economic tendencies	
F	具備一般管理的基礎知識。 Equipped with basic knowledge of management in general.	•

圖示說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately correlated

授課進度表 Teaching Schedule & Content					
週次Week	內容 Subject/Topics	備註Remarks			
1	Operations and Productivity (Ch 1)/The Global Environment and Operations Strategy (Ch 2)				
2	Project Management (Ch 3)				
3	Forecasting Demand (Ch 4)				
4	Managing Quality (Ch 6); Statistical Process Control (Supplement 6)				
5	No class				
6	Process Design (Ch 7); Capacity and Constraint Management (Supplement 7)				
7	Location Strategies (Ch 8); Layout Strategies (Ch 9)				
8	Human Resources, Job Design and Work Measurement (Ch 10)				
9	Midterm Exam				
10	Supply Chain Management (Ch 11); Supply Chain Management Analytics (Supplement 11)				
11	Managing Inventory_1 (Ch 12)				
12	Managing Inventory_2 (Ch 12)				
13	Aggregate Scheduling and S&OP (Ch 13)				
14	Material Requirements Planning and ERP (Ch 14)				
15	Scheduling for the Short Term (Ch 15)				
16	Lean Operations (Ch 16)				
17	Final Exam				
18	alternative curriculum: self-learning of the course content through field observations				

教學策略 Teaching Strategies
✓ 課堂講授 Lecture ✓ 分組討論Group Discussion 參觀實習 Field Trip
其他Miscellaneous: <u>Case Studies</u>
教 學 創 新 自 評 Teaching Self-Evaluation
創新教學(Innovative Teaching)
✓ 問題導向學習(PBL)
翻轉教室 Flipped Classroom
社會責任(Social Responsibility)
□ 在地實踐Community Practice □ 產學合作 Industy-Academia Cooperation
跨域合作(Transdisciplinary Projects)
■ 跨界教學Transdisciplinary Teaching ■ 跨院系教學Inter-collegiate Teaching
──業師合授 Courses Co-taught with Industry Practitioners
其它 other:

學期成績計算及多元評量方式 Grading & Assessments									
配分項目	配分比例 Percentage	多元評量方式 Assessments							
Items		測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績 General Performance									
期中考成績 Midterm Exam	20%	>							
期末考成績 Final Exam	20%	>							
作業成績 Homework and/or Assignments	25%						~		
其他 Miscellaneous (Cases)	35%			~	~		~		

評量方式補充說明

Grading & Assessments Supplemental instructions

The course will be in a mixed lecture-discussion orientation led by the instructor. All the course materials including homework assignments, case arrangements and announcements will be released through NDHU students' email accounts.

Exams: Midterm and Final

Homework Assignments: Students should submit individual work (hard copy) toward the assignments unless otherwise specified. Assignment will be announced one week before the due date or earlier. Cases: The material of the cases will be based on, but not limited to, the text book. A group of 2 students (depending on class size) will be randomly designated as the presenters of an assigned case. Each assigned case is required to have a 10-15 minute in-class presentation by ALL the designated student(s); other students will be the discussants. As a discussant, each student should prepare your individual report within 2 pages. Students need to email your case/discussant's report to the instructor one day before the case is going to discuss in the class. Take Case 4 as an example: The due date for the case/discussants' report of Case#4 is 2022/10/23 (before 11pm). The file name of your discussant's report has to save as

"student ID_student name_Case#?" in a format of PDF.

Case preparation: Students are to extend the case to include relevant industry/company information for updated discussion. Quality of case report is assessed based on the analysis of the case itself (1/2) and the extended material (1/2).

教科書與參考書目(書名、作者、書局、代理商、說明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

Text: Operations Management, Heizer, Render and Munson, 13th ed., 2020, Pearson.

Operations Management, Stevenson, 14th ed., 2020, McGraw Hill.

Operations and Supply Chain Management, Jacobs and Chase, 15th ed., 2018, McGraw Hill.

課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website(Including online teaching information. Personal website can be listed here.)

其他補充說明(Supplemental instructions)

- 1. This course is dedicated for International MBA students/ MSF Junior and Senior students.
- 2. Office hours:

Tuesday and Friday 10:00-11:00 am or by appointment

Room: C318; Ext: 3021; Email: hjw