

# National Changhua University of Education 106-2

## Syllabus & Course Schedule

Course : Quantitative Methods

Course Number : 63029 (1MABA2007130)

Instructor : 卓武雄

Credit : 3 Hour(s); 3 Credit(s)

Course Type : Requirement Optional

Full English : YES NO

Teaching evaluation questionnaire : (8)

- 1.Lectures 2.Discussion 3.Practicum (Education or Management)
- 4.Practicum (Science or Engineering) 5.Laboratory course 6.Physical activity course 8.General course 9.Practicum/Laboratory course 10.Physical activity course

Teaching mode : (0)

- 0.Classroom instruction 1.Practice workshop 2.Distance learning (Synchronous) 3.Distance learning (Asynchronous) 4.Classroom & group discussion 8.Classroom & Assisted distance learning (Synchronous or Asynchronous) 9.Other (Such as sports, education, internship or experimental course)

<PS. Classroom & group discussion. Definition: The total hours of discussions exceeds one third of total class hours.>

Immersing the following issues or contents :

Gender Equity

Objective :

The teaching goal of this class not only to cover high-level supply chain strategy & concepts, but also to give students a solid understanding of the analytical tools necessary to solve supply chain problem. With this class goal in mind, our objective was to teach students to understand the strategic role of a supply chain, the key strategic drivers of supply chain performance, and analytical methodologies for supply chain analysis.

Our first goal is for the students to learn the strategic importance of good supply chain design, planning, and operation for every firm.

Our second goal is to convey how these drivers may be used on conceptual and practical levels during supply chain design, planning, and operations to improve performance.

Our third goal is to give the reader an understanding of these methodologies.

Outline :

1. Understanding the supply chain.
2. Supply chain performance.
3. Supply chain drivers and metrics.
4. Designing distribution networks & applications to online sales.
5. Network design in the supply chain.
6. Designing Global supply chain networks.
7. Aggregating planning in a supply chain.
8. Sales and operations planning.
9. Coordination in a supply chain.
10. Managing economies of scale.

Required reading of Masterpiece :

Harvey Wagner : Principles of Operations Research.

☆ Main materials :

Taha : Operations Research : 10th ed.. (2017) .

☆ Reference materials :

Winston : Operations Research, 4th ed.,

<PS. Do not make copies illegally. >

☆ Course pre-requisites :

☆ Recommended reading : Operations Research

Online materials :

Teaching methods :

Method
Lecture
Demonstration
Exercise
Case study
Dialogue learning
※ Teaching methods Memo : Most of the teaching hours is to conduct the Point Point presentation of lectures notes and case demonstration and comment.

Scoring methods :

Method	%
Mid-term exam	40%
Final exam	40%
Class participations	20%
※ Scoring methods Memo : Mid-term exam (40%). Final exam (40%). Class participation (20%).	

The development of core ability :

Core Ability	Correlation
(M) 語文與資訊能力	7
(M) 企業管理專業能力	6
(M) 實務應用能力	5
(M) 創新與研究能力	8
(M) 自我成長能力	5
(M) 溝通協調能力	3
(M) 具備國際視野	8
(M) 企業社會責任認知與實踐能力	5
<B: Bachelor's degree; M: Master's degree; D: doctor's degree>	

# Course Schedule

Instructor : 卓武雄

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Office TEL : 7415 Department TEL : 7405

Course Number : 63029 (1MABA2007130)

Course : Quantitative Methods

Class Time & Classroom : (一) 02-04 32405

Weekly Calendar :

Week	Date	Teaching Chapter	Before Class Preparation	Homework / Exam / Notes
1	02/26	Introduction to SCM	Ch 1	no
2	03/05	Understanding the SC	Ch 1	discussion questions
3	03/12	Understanding the SC	Ch 2	Discussion questions
4	03/19	SC performance	Ch 2	Discussion Questions
5	03/26	SC performance	Ch 3	Case study
6	04/02	SC drivers & metrics	Ch 4	Discussion Questions
7	04/09	SC Drivers & Metrics	Ch 4	Case Study
8	04/16	Review	Ch 4	Case study
9	04/23	Mid-term Exam	empty	empty
10	04/30	Designing Distribution Network	Ch 5	Discussion Questions
11	05/07	Designing Distribution Network	Ch 5	Case study
12	05/14	Designing Global SC Network	Ch 6	Discussion Questions
13	05/21	Designing Global SC Network	Ch 6	Case study
14	05/28	Demand Forecasting in SC	Ch 7	Discussion Questions
15	06/04	Demand Forecasting in SC	Ch 8	Case study
16	06/11	Aggregate Planning	empty	Discussion Questions
17	06/18	Aggregate Planning	empty	Case study
18	06/25	Final Exam	empty	empty

※ Course Content Memo :

The homework assignments will be issued on the class.

