NATIONAL UNIVERSITY OF SINGAPORE NUS Business School Department of Decision Sciences

## **DSC3218 Physical Distribution Management**

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Session: Semester I, 2016/2017

#### **Objectives**

This course helps students to appreciate the strategic importance of good distribution operations planning in the context of supply chain management in Asia. A strategic framework of physical distribution system design is presented to help build critical analytical skills for decision making in the management of physical distribution and transportation of goods and services.

The course emphasizes the application of quantitative and analytical techniques to physical distribution system design (facility location, vehicle routing and fleet planning) and transportation management in Asia. Where available, Asian cases will be used to highlight and educate students on the unique business operations in this region.

The **objective** of this course is to INTRODUCE and INTEGRATE knowledge in this area with applications in logistics, transport, and supply chain management. It exposes students to the work environment and the diverse challenges faced by logistics analysts, downstream distribution planners, and supply chain managers. The teaching method will be a combination of lectures, problem-based learning, and class discussion on assigned reading topics and case analysis. Active class participation by students is expected.

### **Prerequisite**

Though there is no formal prerequisite, students should preferably have read DSC3201 Supply Chain Management as some knowledge from that course is assumed. Students may get a waiver subject to approval by the lecturer.

#### **Assessment**

Term Paper (Team)	20%
Research Poster (Team)	10%
Case Analyses/Assignments (Individual)	40%
Class Participation (Individual)	15%
Quizzes	15%

# Term Paper

Each project team is required to prepare a term paper based on their research on a current topic relevant to the subjects covered in this module. Any paper used for fulfilling the requirements of other courses MUST NOT be recycled in this class.

The purpose of the term paper is for the team to demonstrate that they are able to apply the techniques learned in this class to a physical distribution problem of their choosing. The paper must include a statement of the problem, processes analyzed (and data), solution method used, results, and the principles/lessons learned.

The paper should be typewritten, paginated, double-spaced, in Times New Roman font, size 12, 1 inch margin (top, bottom, left, and right), and must follow the outline shown below. There is no word limit, but a good term paper will typically include 10 to 14 pages of narrative to provide an indepth analysis of a selected topic.

The outline of the term paper should include, but not limited to, the following:

- 1. Project Title
- 2. Names of Authors
- 3. Executive Summary (1-page)
- 4. Introduction
- 5. Purpose (or Objectives)
- 6. Literature Review (Theoretical background)
- 7. Research Method
- 8. Results (or Findings)
- 9. Discussion and Implications
- 10. Conclusion
- 11. Appendices (need not form part of the 10-14 page stated above).

# **Research Poster**

Each project team is required to prepare a research poster presentation based on the research conducted for the term paper.

### **Required Text**

None. Materials will be supplied in class.

### **Software**

Excel Open Solver/Solver Studio

### Lesson Plan

The lecture notes and reading materials will be augmented with a series of cases and assignments to be discussed in class. Students are expected to do these assignments and participate actively in classroom discussion.