Managing Global Supply Chains

Course Details
Course Designator & Number: SDNY 3025
Number of Credits: 3
Language of Instruction: English

Course Description
Supply chain management (SCM) is becoming more and more important for businesses as the scope to outsource globally increases. Companies now have to deal with emerging countries just beginning to compete in global markets. A supply chain is the network of entities from the raw material supplier at one end, going through the plants, warehouses and distribution centres, to retailers, and sometimes the final customer, at the other end. Supply chain management is the integrated management of the flow and storage of materials, information and funds between the entities comprising the supply chain. The main objective of the supply chain is to create and enhance value as the product, in its intermediate or final form, progresses through the network. Supply chain management is by its very nature an international (global) discipline.

The focus of this course will be on key issues within operations, which are of relevance in a firm’s ability to remain competitive in a global economy. Examples of companies collaborating across the globe will be used in the teaching and learning of SCM. We focus mainly on the operational and tactical aspects of managing the network of multiple facilities, but we will also investigate their strategic implications. Factors such as legal, ethical, operational, venture risk and reliability will be considered in addition to specialized topics in supply chain management within a global environment such as: outsourcing and offshoring; role of information technology in operations; designing and managing global supply chains; managing inventory and global logistics; sustainability in supply chains and supply chain management.

Students undertaking this course in Sydney will be encouraged to take a regional perspective on topics. Asia Pacific countries play a leading role in global supply chains due to low cost and increasing specialization and capability expansion. The course will draw on case studies from the Asia Pacific region and look at emerging trends at a regional and individual country level in
relation to the key drivers of successful supply chain management. In addition, we will examine the structure of the Australian economy in particular the dependence on mining and services (for GDP, employment, and trade), and the decline and offshoring of manufacturing capability. Australia’s current and future position, not only in regional and global supply chains but also global value chains will be assessed in the light of these trends.

Course Objectives

The aim of this course is to equip students with an understanding and foundational knowledge of the analytical frameworks, tools, and methodologies for developing, implementing, and evaluating effective strategies and tactics for managing operations as a key driver of an organization’s success in the global economy. In addition, students will develop an understanding of the dynamics and opportunities in the Asia Pacific region for global companies.

Learning Outcomes

Following completion of this course, students should be able to:

- Explain how analytical methods and tools are used to design supply chain networks, create global supply chain business processes to manage the networks, embed continuous improvement in global supply chain operations;
- Demonstrate an understanding and appreciation of the drivers and metrics for supply chains;
- Discuss and evaluate key decision criteria for sourcing and outsourcing in the supply chain;
- Demonstrate an understanding of the use of technology in managing the supply chain;
- Develop a strategy for sustainability in the supply chain.

Methodology

Classes will be conducted in blended learning mode, that is a mix of classroom, online and experiential learning. Class time will be dedicated to developing an understanding of the core content drawing on the textbook and supplementary readings, and application through group presentation and discussion to case studies. Online learning will focus on development of the final research paper and weekly online quizzes (non-cumulative). Experiential learning will comprise field classes and individual self-directed learning (under the guidance of your Faculty) exploring live examples of key supply chain issues and their solutions through visits to global businesses in Sydney and/or guest speakers.

My Education Requirement

Students are encouraged to participate in events/activities from the CAPA Sydney MyEDUCATION calendar to broaden understanding of this subject in the context of Sydney and Australia. Students will be asked to draw on these experiences in one or more learning
activities within this course. In addition the course includes field classes, which also count towards MyED.

**Course Prerequisites**

There are no prerequisites. Students from a variety of backgrounds and interests are encouraged to take this class.

Supply Chain Management (SCM) deals with a broad spectrum of fields including procurement, inventory, and logistics. It is a part of Management, Scientific and Technical (MST) consulting industry that has been ranked among the fastest growing industries by the US Bureau of Labor Statistics through 2012. The "Management Analyst" category is wider than MST consultants and it includes SCM jobs. The bureau forecasts the need for management analysts to grow about 21-35% from 2002 to 2012. In 2002, there were 577,000 management analysts specializing in management, scientific and consulting services earning an average salary of $71,790. Moreover, it expects about 400,000 new jobs in the field of "General and Operations Managers" until 2012 and this is the 8th largest numerical increase among all the employment categories.

**Required Reading / Materials**

The following text is required for the course:


It is essential that all students have access to the above textbook.

**Other Useful Sources**

- Supply Chain Asia Magazine [http://www.supplychainasia.org](http://www.supplychainasia.org)
- Supply Chain Management Forum [http://www.supplychain-forum.com](http://www.supplychain-forum.com)
- Supply Chain Council [http://www.supply-chain.org](http://www.supply-chain.org)
- Related academic journal titles:
  - Californian Management Review
  - European journal of purchasing and supply management
  - Harvard Business Review
  - International Journal of Operations and Production Management
  - International Journal Of Physical Distribution And Logistics Management
  - International Journal of Quality and Reliability Management
  - International Journal of Service Industry Management
Grading

CAPA Program and Instructor Policy

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic course depends upon the absolute integrity of the work done by the student, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work and class behavior. This means to gain full attendance you must attend all classes, you must not be late (unless with a valid reason) and you must be respectful of the professor and of other students by not talking/whispering in class when others are talking or presenting. Persistent lateness or lack of attention in class, i.e., reading materials other than the work assigned, may result in a low or zero grade for participation, and possible referral to the CAO. **No electronic equipment will be used in class**, including laptops, phones, ipods, cell phones, etc, unless you have written permission from the Chief Academic Officer prior to the course. If you are caught using any electronic equipment, you may receive a zero grade for participation.

Plagiarism will be dealt with very seriously, and will be referred to the Chief Academic Officer in London. You may receive an F for the course. If all work is not submitted by the end of the program, you will receive an F for the course.

Class Participation and Attendance

Attendance at all classes is mandated by CAPA; students who miss a class without permission from CAPA’s Chief Academic Officer will have their grade for the course lowered. Informed participation is expected in every class, so students must have read the full assignment carefully before coming and be ready to discuss it if called upon. At any meeting there may be a brief, pass-fail two-minute quiz on some utterly obvious fact in the assigned reading. Students will also be asked to complete informal in-class writing assignments on a regular basis, which will require them to demonstrate their familiarity with the assigned materials. Students who repeatedly demonstrate unsatisfactory performance on these quizzes and exercises will be penalized in the participation grade.
<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Score or Percentage</th>
<th>Description</th>
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<tbody>
<tr>
<td>A</td>
<td>93–100</td>
<td>Achievement that is outstanding relative to the level necessary to meet course requirements.</td>
</tr>
<tr>
<td>A-</td>
<td>90–92</td>
<td>Achievement that is significantly above the level necessary to meet course requirements.</td>
</tr>
<tr>
<td>B+</td>
<td>87–89</td>
<td>Achievement that meets the course requirements in every respect.</td>
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<tr>
<td>B</td>
<td>83–86</td>
<td>Achievement that is worthy of credit even though it fails to fully meet the course requirements.</td>
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<tr>
<td>B-</td>
<td>80–82</td>
<td>Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.</td>
</tr>
<tr>
<td>C+</td>
<td>77–79</td>
<td>Achievement that meets the course requirements in every respect.</td>
</tr>
<tr>
<td>C</td>
<td>73–76</td>
<td>Achievement that is worthy of credit even though it fails to fully meet the course requirements.</td>
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<tr>
<td>C-</td>
<td>70–72</td>
<td>Achievement that is worthy of credit even though it fails to fully meet the course requirements.</td>
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<tr>
<td>D+</td>
<td>67–69</td>
<td>Achievement that is worthy of credit even though it fails to fully meet the course requirements.</td>
</tr>
<tr>
<td>D</td>
<td>60–66</td>
<td>Achievement that is worthy of credit even though it fails to fully meet the course requirements.</td>
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<tr>
<td>F</td>
<td>0–59</td>
<td>Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.</td>
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### Summary of How Grades Are Weighted

<table>
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<tr>
<th>Assignments</th>
<th>Percentage of Grade</th>
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<tbody>
<tr>
<td>In class case study presentations (2 per group)</td>
<td>30%</td>
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<tr>
<td>Online quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Research Paper</td>
<td>40%</td>
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<tr>
<td>Class Participation (classroom and online)</td>
<td>10%</td>
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<tr>
<td>Overall grade</td>
<td>100%</td>
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### Assessment Details

**Assessment 1: In Class Case Study Presentations (2 Per Group) 15% X 2 = 30%, Sessions 2-11**

The case study presentations will be done in small groups and each group will present twice per semester. Your Faculty at the start of the semester will identify the case studies. The group presentation, 20 mins, will analyse the case, make specific recommendations on the course of action that you would recommend to the firm(s). As you write the brief you are writing an argument to be evaluated by your superiors – your career, your standing in the company as well as the outcome of the case’s impact to the company is at STAKE. The presentation should be accompanied by a 500 word briefing paper submitted to your Faculty at the end of the presentation. The grading of the briefs will be based upon the quality of the analysis and argument made. In preparing your presentation, and writing the brief, assume you are a consulting company that has been called in by the management to analyse a business situation and make appropriate recommendations.

**Assessment 2: Online Quizzes 20%, Sessions 1-10**

The weekly quizzes will consist of multiple-choice questions and will be completed and automatically graded online. The final overall grade will be the average of all quiz grades.

**Assessment 3: Research Paper 40% - due Session 12**
Assessment 3: Research Paper, 40%, Due Session 12

The research paper is a 3000 (+/- 10%) word essay due in Session 12. Select any one of the topics that we will be covering in this course. Bear in mind that these topics/chapters are rather broad and you will need to narrow down your research topic significantly. You should identify a small aspect of the theoretical or methodological discussion that interests you and focus sharply on it. In other words, you should not be providing a general overview of the chapter(s).

Localized Context: The students are required to identify relevant research paper topics within the localized context of the Australia and the Asia Pacific region to benefit from their presence in Australia and the region. These research paper topics should be discussed with the lecturer in advance.

The next step is to identify a case study or identify an accessible data set that fits your selected topic. You may choose current or recent global supply chain issues or events or alternatively examine an event/s from the perspective of recent history and forecasted trends.

The final step will be to provide a thorough analysis. How does the case study or evidence fit into the theoretical or methodological discussion? Are the facts consistent with the theory? Explain why (or why not). What lessons did you learn from this project? This analysis will carry the highest weight for this assignment.

To obtain an ‘A’ grade, the submission will have to meet three requirements: (1) theoretical / methodological discussion; (2) good presentation of case study / data set; and (3) thorough analysis. Any submissions that do not meet all the criteria will be downgraded.

You will provide 2 status updates (online) through the term on the progress you have made to date on your projects. This will enable the lecturer to provide you with the necessary guidance and feedback. It is important that you are well prepared for these status updates and demonstrate appropriate progress.

Assessment 4: Class Participation 10%

Each week, your Lecturer will look for lively discussion and debate in class. You are expected to read the appropriate material listed in the class schedule before each class. This is a mark for participation, NOT attendance (which is compulsory). The online component of your weekly session will comprise a weekly mandatory quiz, which must be completed prior to the next class, and a set progress deliverable for your final research paper.

Course Content

Unit 1

Introduction to Supply Chain Management

- Introductions, student interests, relevant prior coursework & experience
- Course map, format, required work and assessments
- Definition, importance, processes, and examples of supply chains
- Careers in SCM

Unit 2

Strategy and product/service alignment
- Competitive and supply chain strategies align with product/service objectives
- Drivers and metrics including financial, facilities, inventory, transportation, information, sourcing, and pricing
- Reading: Chapter 2: Supply Chain Performance – Achieving Strategic Fit and Scope

Unit 3

Network design
- The role of network design in the supply chain
- Making design decisions – theory and practice
- Facility location and capacity allocation

Unit 4

Off-shoring, on-shoring , re-shoring
- Globalization impacts
- Making the decision: cost, risk
- Onshoring vs. off-shoring and uncertainty – theory and practice


Unit 5

Sales and operations planning
- Managing supply and demand
- Predictable variability
- Planning in practice
- End-to-end supply chain co-ordination
- Reading: Chapter 9 : Sales and Operations Planning – Planning Supply and Demand in a Supply Chain, Chapter 10 : Co-ordination in a Supply Chain

Unit 6

Inventory management and economies of scale
- Cycle inventory and related costs
- Promotion and discounting effects and strategies
- Managerial levers to balance costs
- Pricing and revenue management under conditions of limited capacity and inventory
- Reading: Chapter 11 : Managing Economies of Scale in a Supply Chain: Cycle Inventory, Chapter 16 : Pricing and Revenue Management in a Supply Chain
- Case study: Coles Supermarket, small suppliers, and the Australian Competition and Consumer Commission (ACCC).

Unit 7

Inventory management and uncertainty
- Safety inventory and appropriate level
- Dealing with supply uncertainty
- Aggregation vs. distribution
- Replenishment policies
- Reading: Chapter 12 : Managing Uncertainty in a Supply Chain : Safety Inventory
Unit 8

Product availability
- Determining the optimal level of product availability
- Improving supply chain profitability through optimal services levels
- Allocation of limited supply capacity
- Reading: Chapter 13 : Determining the Optimal Level of Product Availability

Unit 9

Transportation
- Modes of transportation and performance characteristics
- Infrastructure and Government policies
- Designing the transport network
- Role of IT
- Risk management
- Decisions in practice

Unit 10

Sourcing
- Role of sourcing (procurement) in the supply chain
- Outsourcing decisions and factors affecting
- Managing supplier performance and total cost
- Managing risk The sourcing process – auctions and negotiations
- Reading: Chapter 15 : Sourcing Decisions in a Supply Chain

Unit 11

Information technology in the supply chain
- Role of IT
Functions: customer relationship management, internal supply chain management, supplier relationship management, transaction management, risk management

Looking to the future


Unit 12

Sustainability and Corporate Social Responsibility (CSR) in the supply chain

- Role of sustainability and key metrics
- Closed loop supply chains
- CSR in the supply chain
- Reading: Chapter 18: Sustainability and the Supply Chain
- Case study: Apple in China. “When the jobs inspector calls – working conditions in factories.”
Policies

Attendance Policy

Students are expected to be on time and attend all classes while abroad. Many instructors assess both attendance and participation when assigning a final course grade. Attendance alone does not guarantee a positive participation grade; the student should be prepared for class and engage in class discussion. See the on-site syllabus for specific class requirements.

University of Minnesota Policies & Procedures

Academic integrity is essential to a positive teaching and learning environment. All students enrolled in University courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own can result in disciplinary action. The University Student Conduct Code defines scholastic dishonesty as follows:

Scholastic Dishonesty

Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis.

Within this course, a student responsible for scholastic dishonesty can be assigned a penalty up to and including an “F” or “N” for the course. If you have any questions regarding the expectations for a specific assignment or exam, ask.

Student Conduct

The University of Minnesota has specific policies concerning student conduct. This information can be found on the Learning Abroad Center website.