



**The Lee Kong Chian School of Business**  
**Academic Year 2010 /11**  
**Term 2**

**OPIM 201 BUSINESS PROCESSES**

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**COURSE DESCRIPTION**

When companies produce and deliver goods or services to meet customer demand, they do so by executing business processes. In this course, students discover how business processes can be designed, analyzed and improved to lift the performance of any organization, whether it is a bank, a hospital, a resort, or a fashion retailer. The course reveals how process management skills can be used to reduce costs, lower inventories, cut waiting times, improve quality, enhance service levels, and increase revenues and company profits. Specifically, students will gain practical knowledge of process design, demand forecasting, capacity planning, workflow planning and control, quality management, and lean operations. With a focus on the basic concepts that govern process management, the course also provides the necessary foundation to pursue further development in operations and supply chain management.

**LEARNING OBJECTIVES**

**Overall goal**

By the end of this course, students will be able to analyze a business and then recommend process improvements that significantly improve the value of this business.

**Specific goal**

By the end of this course, students will be able to:

- Design processes and plan resource capacities in order to serve customers in a timely fashion while maintaining high productivity
- Understand the role of demand forecasting and generate forecasts using simple techniques
- Determine production plans and inventory policies that increase business value by fulfilling demand while managing cost and limiting investment in working capital
- Describe the impact of process quality on business performance and understand how it can be measured and improved
- Describe and understand “lean operations”, a tightly integrated system of best practices for high-performance business processes

**PRE-REQUISITE/ CO-REQUISITE/ MUTUALLY EXCLUSIVE COURSE(S)**

Please refer to the Course Catalogue on OASIS for the most updated list of pre-requisites / co-requisites for this particular course.

Do note that if this course has a co-requisite, it means that the course has to be taken together with another course. Dropping one course during BOSS bidding would result in both courses being dropped at the same time.

## ASSESSMENT METHODS

Group Project 1:	15 %	
Mid-term Exam:	30 %	(Week 7)
Group Project 2:	15 %	
Final Exam:	30 %	(Week 15)
Class Participation:	10 %	(Throughout the term)
Total:	100%	

## RECOMMENDED TEXT AND READINGS

*Authors:* Cachon and Terwiesch

*Title:* Matching Supply and Demand, 2nd Edition

*Publisher:* McGraw-Hill

*Authors:* Heizer and Render

*Title:* Operations Management, 9th Edition

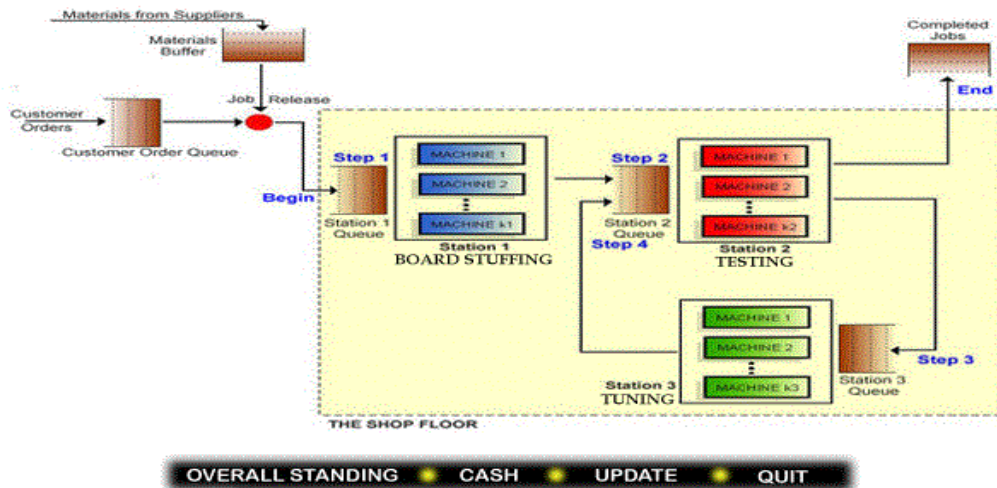
*Publisher:* Pearson Education

Copies of lecture notes and slides will be provided in class meetings.

## INSTRUCTIONAL METHODS AND EXPECTATIONS

In addition to lectures, we will discuss the topics through the following class activities and group projects:

- **Debate (American versus Japanese Manufacturing):** Students will be partitioned into two groups – one represents the American and the other the Japanese. They will debate about the strength and weaknesses of both countries' manufacturing culture and practice.
- **Bucket Brigade Exercise:** A few students will be invited to simulate the operations of a bucket brigade production team in class. Other students will observe and record the performance of the bucket brigade protocol, which will be compared with a traditional approach.
- **The Sugar Sugar Game:** All students will participate in the Sugar Sugar Game to simulate a production process. Students will compare the effects of work-in-process and variability on the production rate of the system.
- **Project 1 (Survey):** Students will form groups to do a survey on the supply chain strategy of a real company. They will identify the strength and weaknesses of the company's supply chain.
- **Project 2 (Simulation Game):** Students will form groups to play a computer simulation game in which each group is given some cash to run a company. Each group competes with other groups and the group that generates the highest profit will be the winner. Below is a snapshot of the simulation.



## CLASS SCHEDULE

Weeks	Topics	Remarks
1	Introduction & Supply Chain Management	
2	Forecasting	
3	Inventory Management (EOQ)	Brief Survey/ Project 1 Begins
4	Inventory Management (News Vendor)	
5	Inventory Management ((Q, r))	
6	MRP & JIT	Debate
7	Presentations for Project 1	Mid-Term Exam
<b>8</b>	<b>Mid-Term Break</b>	
9	Process Analysis	Project 2 Begins
10	Workforce Flexibility	Bucket Brigades Exercise
11	Impact of Variability	Sugar Sugar Game
12	Management of Waiting Lines	
13	Management of Quality	Project 2 Due
14	Final Review	