



## **LEE KONG CHIAN SCHOOL OF BUSINESS**

Year 2008/09 Term 1

### **OPIM605 ADVANCED BUSINESS PROCESSES**

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### **COURSE DESCRIPTION**

This course offers concepts and techniques to structure, manage, and improve a firm's recurring business processes. We will cover both theoretical models as well as practical examples. The content of the course is applicable to banks, grocery stores, and hospitals, for example, as to traditional manufacturing.

This course is essential to students aspiring to become consultants, entrepreneurs, general managers, or academic researchers. They will learn how to manage the business processes of a firm, and how these processes affect and are affected by their business decisions. This is also a foundation course that prepares students to do rigorous academic research in Operations Management.

## PREREQUISITES

None

## REQUIRED TEXT

W.J. HOPP and M.L. SPEARMAN  
*Factory Physics*, 2nd Edition  
Irwin McGraw-Hill, 2001

Harvard case: L.L. Bean (details will be provided in class)

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

## REFERENCES

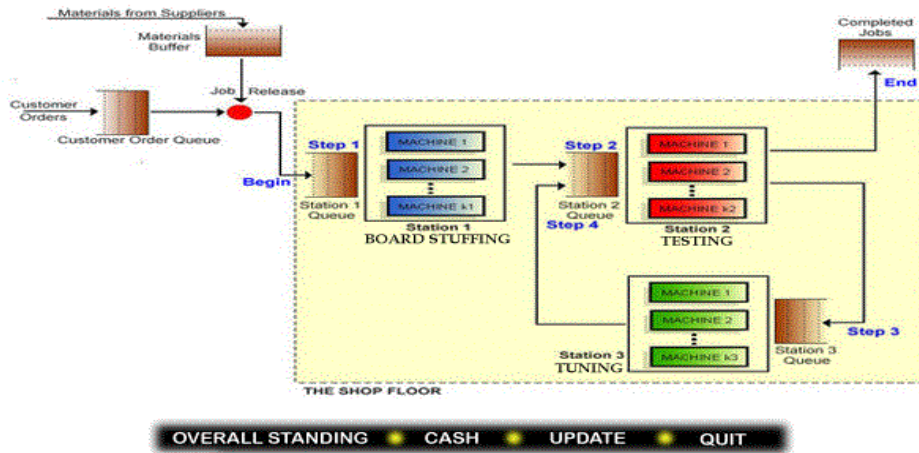
J. HEIZER and B. RENDER  
*Operations Management*, 8th Edition  
Pearson Education, 2006

## ASSESSMENT METHOD

Project 1: 15%  
Mid-Term Exam: 30%  
Project 2: 15%  
Final Exam: 30%  
Class Participation: 10%

## COURSE ACTIVITIES AND PROJECTS

- **Bucket Brigade Exercise:** A few students will be invited to simulate the operations of a bucket brigade assembly line in class. Other students will observe and record the performance of the bucket brigade protocol, which will be compared with a traditional approach.
- **Project 1 (first half of the term):** 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.



- **Project 2 (second half of the term):** The project consists of the L.L. Bean case study and a modeling exercise. Details will be announced in class.

## CLASS SCHEDULE

Week No.	Topics	Remarks
1	Introduction & EOQ	
2	MRP & JIT	Brief survey
3	Factory Dynamics I	
4	Factory Dynamics II	Project 1 begins
5	Workforce Flexibility	Bucket brigade exercise
6	Variability & Queuing Theory	
7	Mid-Term Exam & Project Presentations	

8	<b>Mid-Term Break</b>	
9	TQM (Total Quality Management)	
10	Forecasting	
11	Inventory Management I: EOQ	
12	Inventory Management II: Newsvendor	
13	Inventory Management III: Advanced models	
14	Project Presentations and Discussions	