OPRE 6302: Operations Management

Professor Ganesh Janakiraman

Tentative Syllabus [Fall 2016] – Wednesday Section

Course Information

Course Number/Section	OPRE6302.003
Course Title	Operations Management
Term	Fall 2016
Days & Times	Wednesday: 4:00 p.m. - 6:45 p.m. August 24 – December 7 except November 23 (Fall Break)
Exam Dates	October 5 and December 7
Location	JSOM 2.802

Professor Contact Information

Professor	Ganesh Janakiraman
Office Phone	972-883-5846
Email Address	Please use e-learning to contact me - Course Messages
Office Location	SOM 3.403
Office Hours	Tuesday 9 a.m. - 10 a.m., Thursday 10 a.m. - 11 a.m. and by appointment

Teaching Assistant Contact Information

Teaching Assistant	Goutam Ravi
Office Hours	Tuesday and Thursday: 3:30 p.m. to 5:00 p.m.
Location	JSOM 2.604.
Email Address	Use e-learning – Course Messages

Course Pre-requisites, Co-requisites, and/or Other Restrictions

OPRE 6301

Course Description

This course provides a general introduction to Operations Management. Operations Management is the management of business processes, that is, the management of the recurring activities of a firm. Along with finance and marketing, Operations is one of the three primary functions of a firm. At the risk of being simplistic, one may say that marketing induces the demand for products (goods and services), finance provides the capital, and operations produces the product. More generally, Operations spans the entire organization.

This course aims to (1) familiarize you with the problems and issues confronting operations managers, and (2) to provide you with the language, concepts, insights and tools to deal with these issues in order to gain a competitive

advantage through operations. This course should be of particular interest to people aspiring for a career in designing and managing business processes, either directly (e.g., V.P. of Operations) or indirectly (e.g., management consulting).

The course should also be of interest to people who manage interfaces between operations and other business functions such as finance, marketing, managerial accounting and human resources. Finally, a working knowledge of operations, which typically employs the greatest number of employees and requires the largest investment in assets, is indispensable for general managers and entrepreneurs.

In this course, we will see how different business strategies require different business processes, and vice versa, how different operational capabilities allow and support different strategies to gain competitive advantage. A process view of operations will be used to analyze different key operational dimensions such as capacity management, flow (cycle) time management, supply chain and logistics management, quality management and project management.

Student Learning Objectives/Outcomes

The student should be able to determine performance measures of manufacturing/service processes/systems in key operational dimensions. The student should also know what factors affect these measures, how these measures can be calculated and how these measures can be improved. More specific objectives follow: 1. Describe and explain services, manufacturing, just in time, and total quality management strategies. 2a. Derive and compute optimal decisions, and performance measures such as costs and profits. 2b. Develop analytical thinking in operations practices.

Required Textbooks and Materials

A case-packet containing the following Harvard cases/articles is required and it is available for purchase at http://cb.hbsp.harvard.edu/cbmp/access/51478174 (You will have to first register as a student at that site before you can order the packet.)

- Benihana of Tokyo
- Kristen's Cookie Company
- Donner Company
- L.L.Bean, Inc.
- Toyota Motor Manufacturing, U.S.A., Inc.

Suggested Course Materials

During the course of the semester, additional materials will be posted on the elearning site for this course.

Assignments & Academic Calendar

There are two kinds of assignments in this course, qualitative/preparatory and quantitative. The quantitative assignments are meant to enable you to apply the concepts and tools learnt in the course. The qualitative assignments are intended only to encourage you to think analytically about a case or topic before you come to class.

Assignments can be done individually or in groups of two. A group should list both group members' names on the first page of every assignment. Only one submission should be made by a group for every assignment – that is, if students X and Y are a group working on Assignment 1, either X or Y but not both should submit the assignment with both the names listed on it. The composition of these groups is entirely up to the students and students are allowed to change this composition any time.

Assignments will be posted on the elearning site for this course. Assignment submissions are to be made by the students through this same site.

The following gives a **tentative** outline and sequence of the topics to be covered or the activities to take place (exams or assignments) in this course. *Assignments are due at the beginning of class; for example, an assignment due in Class 2 should be submitted through elearning before the start of Class 2.*

- Introduction
- Process Analysis: Benihana case;
- *Assignment 1: Qualitative assignment on this case is due.*
- Process Analysis: Kristen's Cookies case;
- *Assignment 2: Qualitative assignment on this case is due.*
- Operations and Strategy: Donner Case;
- *Assignment 3: Qualitative assignment on this case is due.*
- *Assignment 4: Quantitative assignment on the Kristen's cookies case is due.*
- Decision Making under Uncertainty: Queuing Models/Responsive Service
- Continuation of 5 – Buffers in service systems, Simulation as a tool for studying systems with uncertainty;
- *Assignment 5: Quantitative assignment on Queuing Models is due.*
- Exam 1 (in-class, open-notes)
- Project Management: Critical Path Method, Expediting, PERT Method
- Toyota Production System
- *Assignment 6: Quantitative assignment on Project Management is due.*
- Quality and Six Sigma
- Inventory Management – 1: Economies of Scale, Economic Order Quantity Model
- *Assignment 7: Quantitative assignment on Statistical Quality Control is due.*
- Inventory Management – 2: Demand Uncertainty, L.L.Bean Case;
- *Assignment 8: Quantitative assignment on economies of scale is due.*
- Supply Chain Management, Linear Programming
- *Assignment 9: Quantitative assignment on the L.L.Bean case is due.*
- More on Linear Programming, Comments on Exam 2
- *Assignment 10: Quantitative assignment on Linear Programming is due.*
- Exam 2 (in-class, open-notes)

Note: Please note that the above outline is only tentative. Updated information on what material will be covered in a session and what assignment is due in a session will be provided on the eLearning site. You will also receive important information about the course through your eLearning e-mail. (Course Messages) It is your responsibility to stay up-to-date on the information provided on the site and through your email (Course Messages), in addition to information provided in class.

Grading Policy

Each student's final grade will be based on the following items and weights:

Homework assignments	15%
Class Participation	5%
Exam 1	40%
Exam 2	40%

All assignments will receive light grading. Specifically, the grading scheme for assignments follows:

Qualitative: Unsatisfactory – 0 points, Satisfactory – 2 points, Good – 4 points
Quantitative: Unsatisfactory – 0 points, Satisfactory – 2 points, Good – 4 points, [Assignment scores will finally be scaled appropriately so that the total of the maximum obtainable points on all assignments is equal to 20.]

Class Participation: Positive contributions to the class in terms of insightful comments or discussion (not just any relevant comment) in class at the appropriate times will be rewarded. Disruptive activities (using mobile phones in class, unnecessary talking with each other while the class is in progress, walking out of class abruptly while the class is in progress, walking into class late multiple times etc.) will be penalized. Barring these clearly positive and negative contributions to the class, one can expect to obtain 8 out of the 10 points meant for class participation. Attendance, by itself, is not directly given credit.

The following grading scheme will be followed for assigning letter grades.

A	>= 95
A-	>= 90 and < 95
B+	>= 80 and < 90
B	>= 70 and < 80
B-	>= 60 and < 70
C+	>= 55 and < 60
F	< 55

Course Policies

Make-up exams: I do not give make-up exams unless a student presents convincing proof of conditions that prevent him/her from taking the exam at the scheduled time.
Lap-tops: The use of lap-tops will not be permitted during the class.
Late Work: *Not accepted.*

UT Dallas Syllabus Policies and Procedures

For information on UT Dallas Policies and Procedures, please visit http://go.utdallas.edu/syllabus-policies .
This includes information on the following topics: Technical Support, Field Trip Policies, Off-Campus Instruction and Course Activities, Student Conduct and Discipline, Academic Integrity, Copyright Notice, Email Use, Class Attendance, Withdrawal from Class, Student Grievance Procedures, Incomplete Grade Policy, AccessAbility Services, Religious Holy Days, Resources to Help You Succeed.