

OPER 340-FLORENCE: OPERATIONS MANAGEMENT

Syllabus – Spring 2011 (Tentative)

INSTRUCTOR: Ta-Tao Chuang, Ph.D.

EMAIL: chuang@jepson.gonzaga.edu

DAYS, TIMES & ROOM:

M,T, R 9:35 - 10:35 am

M,T, R 2:15 - 03:35 pm

OFFICE and OFFICE HOURS: tba and by appointment

BLACKBOARD: <http://learn.gonzaga.edu>

TEXT: Russell and Taylor (2008). Operations Management: Creating Value along the Supply Chain, 6th Edition Binder Ready (Loose Leaf). Wiley, (ISBN-13: 978-0470308080)

COURSE OVERVIEW and OBJECTIVES:

This course provides a broad overview of issues in operations and supply chain management emphasizing a strategic orientation toward design and improvement issues. Specific topics include competitiveness, operations strategy, quality management, statistical process control, product design, process design, facility design, project management, supply chain management, inventory management, lean production and scheduling.

Upon completion the course students should be able:

- To understand the basic concepts of operations management as they pertain to products and processes.
- To understand the role of the operations function in creating a competitive advantage.
- To recognize the interrelationships between operations and other business functions e.g., MIS, Marketing, Finance, Accounting, and Human Resources.
- To obtain an understanding of the problems faced by operations managers and the techniques currently available to help solve these problems.
- To develop problem solving skills for operational management decision making.
- To improve written and oral communication skills.

PEDAGOGY

The course will use a combination of lectures, class discussions, problem solving, videos, and student presentations. Participations to class discussions and presentations are required. Furthermore, class attendance is expected and is mandatory as it will aid you in the exams.

CLASS POLICY:

Students are expected to study the assigned topics **before** attending the class and to participate actively in class activities and to be ready for pop quizzes. Students will be organized as teams working on group projects. All papers and assignments must be prepared with word process software. It is students' responsibility to keep all the returned materials. In the event of a disputed entry on the instructor's grade sheet, the student **MUST** show the material(s) to have the grade(s) changed.

- *Student can be penalized for up to 5% of the total points on the grade for distracting behavior in class (i.e. talking, reading news paper, internet surfing, passing notes, etc.)*
- **Attendance:** If you miss a class session without what I consider a legitimate excuse (be sure that you have my permission in advance or present a university approved evidence), I reserve the right to lower your FINAL course grade to the next lower grade (e.g., from A to A- and so on) for each class you missed. Therefore, the more classes you missed the more grade levels will be lowered down. You must contact me about every absence.
- **E-mail Communication:** All e-mail communications with me should bear the course and section number (viz: **OPER 340-FLO**) in the subject line, without which the e-mail is likely to be unread.

OPER 340-FLORENCE: OPERATIONS MANAGEMENT

Syllabus – Spring 2011 (Tentative)

Furthermore, you should include “Dr. Chuang” and “your full name” at the beginning and end of the content of each email respectively.

- **Academic Honesty Policy:** The academic honesty policy in the Gonzaga University’s student handbook (p. 145) states that dishonest activities such as cheating, fabrication and plagiarism carry penalties that could lead to severe penalties. Should you have any doubt regarding a course of conduct, don’t hesitate to inquire of me for guidance on addressing the situation.

INTERNET RESROUCES:

Class announcements / materials such as syllabus, lecture slides, instructions, solutions to assignments, and review questions will be available on Blackboard (<http://blackboard.gonzaga.edu>). It is the students’ responsibility to check the Blackboard everyday to update your information. For any course-related emails, addresses listed with the Blackboard will be used. The student is responsible for ensuring that the email address with the Blackboard is current, in order to receive any emails that may be sent.

PERIODIC ASSIGNMENTS AND (POP) QUIZZES: From time to time, a short assignment or (pop) quiz will be given both in the class or Blackboard. These quizzes will contain true-false and/or multiple choice questions. Each quiz normally has 11 questions (with 1 bonus point) and you should complete it within the time limit (usually 10 minutes) on/before midnight Sunday. There will be 11 online quizzes this semester. Quizzes are available under ‘Tests & Quizzes’ button on the Bb. About three to five in-class and/or pop quizzes will be given. Assignments done in an incomplete/sloppy manner will be redone and downgraded.

EXAMS: Midterm exams will include only that material covered since the previous exam. However, the final exam is comprehensive. This includes material from the textbook, class/Blackboard discussions, and Internet research -- all can appear on the exams. The type of exam will be left up to the instructor. It may be objective, essay, or a case problem. Your instructor will specify the format before the exam. No credit will be received if you miss an exam unless you have permission from the instructor or obtain a University-approved absence. Final exam is comprehensive and it may also include an oral part.

PENALTY: NO late work will be accepted unless receive a permission from the instructor in advance or present a university-approved excuse.

FINAL: The final will consist of questions on topics from the tests given during the term, plus questions on any untested chapters, lectures, etc.

FINAL EXAM SCHEDULE: April 20-24, 2011

GRADING:

Participation & attendance in class	60 points
Periodic assignments, quizzes and pop quizzes	100-150 points
Chapter case presentation	40 points
Term (Group) projects and presentation (content and report – 70points; presentation 30 points)	100 points
Mid-Term Exams (2 @ 100 points)	200 points
Final Exam (Comprehensive)	150 points

OPER 340-FLORENCE: OPERATIONS MANAGEMENT
Syllabus – Spring 2011 (Tentative)

Total

650 - 700 points

Grading Scale

A	93% and above	A-	90%	B+	87%	B	83%
B-	80%	C+	77%	C	73%	C-	70%
D+	67%	D	65%				

OPER340-FLO Spring 2011 Schedule

(I have checked all URLs on assigned Internet exercises; however, URLs may change over time; please check the assigned Internet Exercises listed above immediately after the group is assigned. If the site no longer exists, you should notify the instructor at least TWO weeks in advance. Otherwise, you have major points lost.)

Week	Date	Topics	Homework and Activities
[1]	Jan. 8	Warm-up and Course Introduction Video: What is OM?	
[2]	Jan. 12,13,15	Ch1: Intro. To OM CASE: Case 1.1 (p.28)	Problem 1-9 ALL GROUPS
[3]	Jan. 19,20	Ch2: Quality Management	Problem (I) 2-5; (II) 2-11
22	22	CASE: Case 2.3 (p. 100)	G1
[4]	Jan. 26,27	Ch3: Statistical Process Control (SPC)	Problem (I) 3-3; (II) 3-18;3-39 & 3-40
29	29	CASE: Case 3.2	G2
[5]	Feb. 2, 3	Ch4: Product Design <i>Students: Bring to class a product, a picture of a product, or a story of a service that you think is particularly <u>well-designed</u> or particularly <u>poorly designed</u></i>	Problem (I) 4-5/4-6; (II) 4-13
5	5	CASE: Case 4.1 (provide GFD template available on Excel Worksheet)	ALL GROUPS
[6]	Feb 9,10	2/9 Exam I (Part I) 2/10 Exam I (Part II)	
12	12	<i>Videos & Slack time</i>	ALL GROUPS
[7]	Feb. 16,17	Ch6: Processes and Technology	Problem (I) 6.5; 6-6 (II) 6-12
19	19	CASE: Case 6.2 (need Template of Process Map – ch6 processmap_worksheet.xls)	G3
[8]	Feb 23,24	<i>(students should complete their survey before the class)</i> Ch7: Capacity and Facilities	Problem (I) 7-5/7-7;7-12; (II) 7-14
26	26	CASE: Case 7.2 (p.286)	G4

OPER 340-FLORENCE: OPERATIONS MANAGEMENT
Syllabus – Spring 2011 (Tentative)

			TERM PROJECT DUE (PHASE I)
[9]	Mar. 2, 3	Ch9: Project Management <i>Exhibit 9.1.ProjectManagement.xls</i>	Problem (I) 9.8; (II) 9-13; 9-18;
5	5	Ch9: Project Management (Cont.)	
[10]	Mar. 9,10	3/9: CASE: Case 9.1 3/10: Ch10: Supply Chain Management Strategy and Design Ch11 <i>Global Supply Chain Procurement and Distribution</i>	(III) 9-23; G5 Problem 10-4, 10-5
12	12	Ch10 &11: Supply Chain Management Strategy and Design (cont.)	Problem 10-4, 10-5
[11]	Mar. 16,17	3/16, 3/17 – trip to Ireland	
18	18	3/18, CASE: Case 10. 1; Case 11-1 (in-class)	ALL GROUPS
[12]	Mar. 23,24	3/23 Exam II Ch13: <i>Inventory Management</i>	Problem: (I) 13-3/13-7; (II) 13-23
26	26	Ch13: <i>Inventory Management (cont.)</i> CASE: Case 13.2	G6
[13]	Mar. 30, 31	Ch17: Scheduling (Skip pp. 738-742)	Problem: (I) 17-3, 17-8; (II) 17-16, 17-23
Apr. 2	Apr. 2	CASE: Case 17.1	G7
[14]	Apr. 6,7,9	Ch16: Lean Systems (lecture - up to p.697) Students: read all chapter Group Presentations (Report and powerpoint Due along with both Hard and Soft copies) 4/10-13 (F-M) - Easter Monday (No Class)	Problem: 16-5, 16-10 4/6: TERM PROJECT DUE (hard and soft copies) – ALL GROUPS
[15]	Apr. 14,16	4/10-13 (F-M) - Easter Monday (No Class) Group Presentation (cont.) <i>FINAL EXAM REVIEW/Final Exam</i>	
[15]	Apr. 20-24	Final Exam (Comprehensive)	

OPER 340-FLORENCE: OPERATIONS MANAGEMENT
Syllabus – Spring 2011 (Tentative)

OPER 340: GROUP TERM PROJECT TOPICS

Group #	Topic
Group 1 (Total Quality Management)	<p>Find the most recent top car ranking in the US market (provide the sources). Select any two of these companies. Compare and evaluate the effectiveness of Total Quality Management implementation between them.</p> <p><u>Specific requirements:</u></p> <ul style="list-style-type: none"> - Provide a brief profile of each company - How do they define quality? - Compare the quality of products and services provided by them - Compare and evaluate any specific tools and methods they use to implement TQM (be very specific and provide data to support your analysis) - Discuss any software or IT they use to facilitate the TQM implementation process - Which company will be more successful than the other? Why?
Group 2 (Supply Chain Management)	<p>Compare the supply chain management between Dell and Hewlett-Packard management.</p> <p><u>Specific requirements:</u></p> <ul style="list-style-type: none"> - Provide a brief profile of Dell and Hewlett-Packard. - Draw and describe the supply chain of those companies - Discuss the structural differences between their supply chains (be specific) - Evaluate the effectiveness of their supply chain managements with emphasis on: customer relationship, supplier relationship, purchasing process, order fulfillment process, and distribution process (provide data to support your analysis) - Discuss any software or IT they use to facilitate supply chain management. - Which company will be more successful than the other? Why?
Group 3 (Capacity Planning)	<p>Find the most recent top hotel ranking in the US market (provide the sources). Select any two of these hotels, compare and evaluate their capacity planning and utilization.</p> <p><u>Specific requirements:</u></p> <ul style="list-style-type: none"> - Provide a brief profile of each hotel - Compare the current capacity of two hotels, with emphasis on the types of rooms, number of rooms, facilities, and spaces - Compare the utilization with emphasis on the number of customers using those hotels in various years, and various seasons - Discuss how those hotels plan their capacity (provide data to support your analysis) - Should they expand their capacity? Why?
Group 4 (Inventory Management)	<p>Select any two retailers in the US market (one successful and one unsuccessful). Compare and evaluate the effectiveness of their inventory management</p> <p><u>Specific requirements:</u></p> <ul style="list-style-type: none"> - Provide a brief profile for each retailer. - Evaluate the quality of services provided by each retailer, their ability to meet the customer demand, and stock-out situation. - Compare and evaluate the effectiveness of their inventory management, with emphasis on how and when to place an order, how to determine the order quantity, when to receive the shipment, lead-time, and how to deal with stock-out situations (provide data to support your analysis).

OPER 340-FLORENCE: OPERATIONS MANAGEMENT
Syllabus – Spring 2011 (Tentative)

	<ul style="list-style-type: none"> - Discuss any tools, software, IT applications used by those retailers in order to facilitate the ordering, distribution, and inventory control processes.
Group 5 (Quality Control)	<p>Select any two restaurants (one successful, one unsuccessful). Compare and evaluate the effectiveness of quality control in these restaurants.</p> <p><u>Specific requirements:</u></p> <ul style="list-style-type: none"> - Provide a brief profile of each restaurant. - How do they define quality? - Evaluate the quality of foods and services provided by them. - Compare and evaluate the effectiveness of quality control in those restaurants, with emphasis on specific tools, methods, software, or information systems used to ensure the process is in control (provide data to support your analysis). - Discuss any software or IT they use to facilitate the quality control process.
Group 6 (Product Design)	<p>Evaluate and analyze a product design process for any product of your choice</p> <p><u>Specific requirements:</u></p> <ul style="list-style-type: none"> - Provide a brief profile of the producer company - Their motivation to develop the product - Discuss any software/s or IT they use to facilitate product development - Discuss any processes that were global in nature during the new product development process (ex: design or collaboration of global nature) - Challenges faced by the manufacturer of that product during product development process - Your opinion / recommendations to cope with the above challenges faced by the company
Group 7 (Lean Systems)	<p>Research Toyota company and present the Toyota Production System (TPS)</p> <p><u>Specific requirements:</u></p> <ul style="list-style-type: none"> - Provide a brief profile of Toyota with mention of number and locations of its worldwide facilities - Where are the different U.S.-market Toyota vehicles assembled? - Summarize the TPS - List and briefly explain the key terms used in TPS <p><u>Few useful Resources</u> (do not limit to just these):</p> <p>http://www.toyota.com, http://www.toyota.co.jp/en, http://www.toyotageorgetown.com/terms.asp, http://www.toyotageorgetown.com/tps.asp, http://www.toyota.co.jp/worldwide/toyota/index.html</p>

TIPS on how to search for articles

1. Go to <http://www.gonzaga.edu/Academics/Libraries/Foley-Library/> → Under Find Articles pull-down menu, select “Academic Search Premier” → In the EBSCO Host webpage click “Choose Databases” → Check “Business Source Premier” in addition to “Academic Search Premier” → click OK → Perform keyword or Title or subject or other desired advanced search here.

Note: To limit your search results to *journal articles* (excluding Harvard Business Review) only, please check “Scholarly (Peer Reviewed) Journals” checkbox, on the EBSCO host webpage, under “Limit your results” section.

OPER 340-FLORENCE: OPERATIONS MANAGEMENT

Syllabus – Spring 2011 (Tentative)

If the “Scholarly (Peer Reviewed) Journals” checkbox is left un-checked, the search will return articles from both journals as well as from other sources such as business magazines, news papers, etc.

2. Go to <http://www.gonzaga.edu/Academics/Libraries/Foley-Library/> → Under Find Articles pull-down menu, select “ProQuest” → Perform keyword or Title or subject or other desired advanced search here.
3. Perform some research on the Internet using Google. For big companies, you will find lots of valuable information.
4. Business articles can be found in sources (print or online) such as Forbes, Fortune, Business week, and Wall Street Journal all available in print media in Foley library.

OPER 340-FLORENCE: OPERATIONS MANAGEMENT

Syllabus – Spring 2011 (Tentative)

INSTRUCTIONS – TERM PROJECT REPORT

FORMAT

The report (use MS Word) should be 8-12 pages or more, double spaced (and can include tables, pictures, graphs, etc.). Please use the following format:

- Font: Times New Roman
- Font size: 12 pt
- Page size: Letter
- Margin: top: 1"; bottom: 1"; left: 1"; right: 1"
- Header: Term Project Report - Group number and member names
- Footer: page number
- Title of Project
- Followed by actual Report (write-up)

INSTRUCTIONS – TERM PROJECT PRESENTATION

- Each group shall present their term project **using PowerPoint** slides and/or other presentation aids. The Presentation shall be well organized and detailed, with use of pictures, graphs, sound, animation, etc. as desired, to make the presentation interesting and professional.
- All group members should participate in the presentation (either presenting or answering questions). Each group shall have 20-25 minutes for presenting, followed by 5-10 minutes for questions.
- **Also upload the power-point presentation on blackboard**

DUE DATE

- An Interim report outlining the progress to date and work remaining to be done, due on **Thurs. February 26th, 2011.**
- **Final Term Project Report** (*printed copy*) and **Power-point slides** (*printed as "Handouts" two per page*) to be turned-in on **April 6th, 2011.** Soft copies of project report should be also emailed to your instructor (the record of your project).

Peer Evaluation: If a group or any of its members is not pleased with the contribution of a group member, this may be brought to my notice in a confidential manner. This feedback shall be taken into consideration when assigning a grade.