

BMGT 385
OPERATIONS MANAGEMENT
Fall 2005

COURSE OUTLINE

Course Instructor: Professor Cheryl Druehl
Office: 4318 Van Munching
Telephone: Office: 405 - 9677
Office Hours: MW 12:30 – 1:30 PM and **by appointment**
Email: cdruehl@rhsmith.umd.edu

Course Meeting Times: MW 11:00 - 12:15 – Van Munching Hall 1311

Course Text: Optional. It is recommended for reading and extra problems.
[Operations Management and Student CD-ROM, 7/E](#), by Jay Heizer and Barry Render, Prentice Hall, 2004. ISBN: 0-13-140638-8

Course Web Page: On Blackboard (BB). <http://bb.rhsmith.umd.edu>. Please update your email address in Testudo to ensure you receive course communications. (<http://www.testudo.umd.edu/apps/saddr/>)

Course Description:

This course is designed to provide the student with an understanding of the foundations of the operations function in both manufacturing and services. The course will analyze operations from both the strategic and operational perspectives and highlight the competitive advantages that operations can provide for the organization.

Course Objectives:

This course has several objectives. They are:

1. The student should understand the tradeoffs among different types of goods and services operations systems in terms of key characteristics, management tasks, organization and control, and impact on the strategy and direction of the firm.
2. The student should understand the strategic and tactical operations management issues and their relationship to the other functional areas of the firm.
3. The student will gain experience employing and should be able to demonstrate a basic competence with the tools and techniques used by real-life operations professionals in managing operations and setting operations policy.

Prerequisites:

It is assumed that each student is familiar with EXCEL.

Class Procedure:

It is expected that each student will have read the assigned material before he/she comes to class for the given day. Lectures will most likely be the predominant form of presentation but a full interchange between the professor and the student is expected. Meaningful class participation is an important part

of your grade.

Academic Integrity

The University's *Code of Academic Integrity* is designed to ensure that the principles of academic honesty and integrity are upheld. All students are expected to adhere to this Code. The Smith School does not tolerate academic dishonesty. All acts of academic dishonesty will be dealt with in accordance with the provisions of this code. Please visit the following website for more information on the University's Code of Academic Integrity: <http://www.studenthonorcouncil.umd.edu/code.html> On each assignment you will be asked to write out and sign the following pledge. "*I pledge on my honor that I have not given or received any unauthorized assistance on this exam/assignment.*"

For practical purposes, the meaning of the code for this class is:

- Cheating on exams is not allowed.
- Case and projects comprise original ideas from the team members.

Attendance:

It is expected that each student be prepared for class including having prepared assigned material. In addition, it is expected that each student be in attendance at each class session. Missing classes and tardiness will negatively affect your class participation grade.

Homework:

Homework sets are assigned at periodic intervals throughout the course. There will be 6 homework assignments total. These assignments are intended for the student to become more familiar with the concepts that are covered in lectures and in the text. Some of the homework exercises will require the use of Excel. Homework exercises may be discussed with other members of the class (but not previous semesters), however, each person must prepare and hand-in his/her own work. Homework is to be presented in a neat, orderly fashion in a manner that would be presentable to a supervisor on a job. Please staple any multiple sheets together. Please ensure your name is on the assignment. Homework is due at the beginning of the class period. The purpose of homework is to practice the concepts we cover and thus may be lengthy. Homework will be graded as follows: check plus indicates excellent, check indicates good, check minus means try harder, minus means no credit. Points for each homework will be assigned correspondingly. Late homework will be accepted according to the following policy. Homework may be turned in up to two (2) days late (by 5 PM), with a penalty of five points per day. For example, if homework is due on Monday in class, it may be turned in Monday after class or Tuesday for -5 points, or Wednesday for -10 points. No exceptions for any reason will be granted to this policy. If you will miss class for any reason, please email it to me by the due date.

Special Needs:

Any student with special needs should bring this to the attention of the instructor as soon as possible, but not later than the second week of class.

Examinations:

During the semester, there will be one midterm given during regular class periods and one final examination. The midterm will cover the material covered up to and including Class 12. The final examination is comprehensive for the entire course and is given only at the specified time as published by the University Registrar. **IF YOU CANNOT TAKE THE FINAL OR MIDTERM AT THE TIME SHOWN, DO NOT REGISTER FOR THIS CLASS. NO MAKEUPS WILL BE GIVEN** without a valid, per university policy, documented excuse. The midterm and final examination are both closed

book and closed note exams. Information presented with the course projects and by guest speakers may be included on the examinations.

Questions:

All students are encouraged to bring questions, concerns and comments to my attention as soon as they arise. *Please do not wait!* Once final grades are submitted, changes to grades will only be made to correct errors in tallying scores. In addition, there is a feedback section on BB under Discussion Board that allows anonymous (or not) comments to encourage your feedback.

Course Project:

The course project will allow students to see topics discussed in the course being used in real company settings. Each student in the class will be a member of a project group. During the semester, the project group will visit a manufacturing plant or service operation. As a team, the group will prepare both an oral presentation and a written presentation of what was learned on the tour *as specifically related to this class*. Although the entire group will be graded on both presentations, each team member will be allowed to provide a peer evaluation of other team members. An individual student's grade will be a composite of the team grade and his/her peer evaluations. Here is the procedure to be used:

1. Student groups of four people will be formed. (Constraints on the number of people on a team will be announced by the instructor). Groups should be formed no later than **September 21st**. Although the preferences of individual students will be honored where possible, the instructor reserves the right to alter the team membership by adding or deleting team members to assure that all teams have roughly the same number of people. Students who are unable to form a team of an appropriate size should contact the instructor who will assure that all students are members of a team.
2. The team will meet to determine group availability for meeting times and places. In addition, the team should assess interests and contacts in terms of an appropriate operation to visit.
3. Each team should provide the instructor with a list of the operations in preferential order that it would like to visit. Any personal contacts should be indicated. It is not necessary for the facility to be located close to College Park; facilities in home towns or where friends and relatives work are encouraged. Each team will provide its list to the instructor no later than **October 5th**. The instructor will approve the assignment of a facility to a team to assure that there is no duplication of two teams visiting the same facility. Priority will be given to teams with a personal contact at the desired facility. All students **must** attend the tour, so keep that in mind if choosing a far away location. If you do not attend the tour, you will receive a zero for the project. No changing of companies will be permitted.
4. Once all assignments are finalized, a facility tour information sheet will be distributed to assist the team in making its visit. You should contact the facility immediately to make arrangements. Due to heightened security, not all facilities are giving tours. If this is the case, please contact me, so you can choose another company. You are not to choose your own without contacting me.
5. Preliminary reports are due **November 16th**. These are a maximum of two pages, giving me a brief explanation of what you have done to date and what you saw on the tour.
6. Oral presentations will be scheduled during **December**. Each presentation should be no longer than 15 minutes in length. Obviously, in this short time you can't inform the class of everything you learned

so you should confine your presentation to a short description of the firm and a discussion of some major initiative ongoing at the facility. Each student in the team must present a part of the presentation. Your written presentation should contain more detailed information. The due date for the written presentations is **December 12th**.

7. Peer evaluation forms will be available on BB and should be turned into the instructor on the last day of class. If you do not turn one in, it will be assumed that you feel everyone on your team worked equally hard.

8. The report format is to be title page, executive summary, body, conclusions, and references (if any). It should be no more than 10 pages 1½ spaced (not including title page). Please also include a copy of the thank you letter you sent to the facility toured. *This is part of your grade.* Again, the written report is due **December 12th**.

A note on thank you letters: I expect this to be a typed, formal note on business quality paper, as if you were sending a resume. An e-mail is **NOT** acceptable. Please proofread it before sending it.

Point breakdown for the written report:

- Executive Summary (approximately 1 page) (15)
- Introduction to the company and products/services (15)
- Process flow description (20)
- Identification of strengths and weaknesses and recommended improvements (24)
- Organization of report (layout, subheadings, neatness, etc.) (8)
- Writing style (grammar, readability, etc.) (8)
- Thank you letter (10)

9. Once groups have been formed, there will be additional handouts providing greater detail of this procedure.

Grading:

The course grade will be out of 1000 points. The breakdown is as follows. Your total point score out of 1000 determines your final letter grade. There will be no extra credit.

	Points	Percentage
Homework (25 points each)	150	15%
Exercises (10 points each))	50	5%
Class Participation	50	5%
Course Project	200	20%
Midterm	250	25%
Final Exam	300	30%
Total:	1000	100%

Course Schedule (Subject to Change)

CLASS	DAY	DATE	TOPIC	Prepare for class	HW ISSUED	DUE	READING	
1	W	8/31	Introduction What is Operations?				Chapter 1	
2	M	9/5	Labor Day Holiday					
3	W	9/7	Operations Strategy				Chapter 2	
4	M	9/12	Process Management and the Product/Process Spectrum	Exercise 1	1	Homepage (BB)	Chapter 7	
5	W	9/14	Process Management and Capacity Planning				Supplement 7	
6	M	9/19	Total Quality Management / Six Sigma		2	1	Chapter 6, Supplement 6	
7	W	9/21	SPC			Team Lists	Supplement 6	
8	M	9/26	Guest Speaker					
9	W	9/28	Forecasting Demand		3	2	Chapter 4	
10	M	10/3	Forecasting Demand	Exercise 2			Chapter 4	
11	W	10/5	Decision Trees			Facility Lists	Module A	
12	M	10/10	Guest Speaker			3		
13	W	10/12	MIDTERM: Covers Classes 1-12.					
14	M	10/17	Review Midterm and Inventory Management		4		Chapter 12	
15	W	10/19	Inventory Management				Chapter 12	
16	M	10/24	Inventory Management	Exercise 3			Chapter 12	
17	W	10/26	Facility Layout / Assembly Line Balancing				Chapter 9	
18	M	10/31	Supply Chain Management		5	4	Chapter 11	
19	W	11/2	Supply Chain Management / Procurement				Chapter 11	
29	M	11/7	Location Strategies, Linear Programming				Chapter 8, Module B	
21	W	11/9	Linear Programming	Exercise 4			Module B	
22	M	11/14	No class					
23	W	11/16	Aggregate Planning / MRP		6	5 & Prelim. Report	Chapter 13	
24	M	11/21	MRP				Chapter 14	
25	W	11/23	Just-in-Time and Lean Systems				Chapter 16	
26	M	11/28	Just-in-Time and Lean Systems	Exercise 5			Chapter 16	
27	W	11/30	Guest Speaker			6		
28	M	12/5	Team Presentations					
29	W	12/7	Team Presentations					
30	M	12/12	Team Presentations / Review			Project Reports		
	Saturday	12/17	FINAL EXAM, 8:00-10:00 AM. Cumulative.					