



Course OPRE 6302.MBP – Operations Management
Professor Sonia E. Leach, Ph.D.
Term Summer 2017
Meetings Mon: 6:00 – 10:00 PM; JSOM 2.117

Professor's Contact Information

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Other Information Preferred communication is through email. As I teach several different courses, and multiple sections of some courses, please be sure to include "OPRE 6302.MBP" in the subject line of all email messages.

General Course Information

Pre-requisite OPRE 6301, knowledge of calculus and probability, or consent of the instructor.

Course Description Operations Management (OM): Management of the efficient transformation of inputs into outputs to suitably satisfy customers. Inputs are materials, labor, capital and management. Outputs are products or services that customers want and pay for. The course provides an introduction to the operations and the related management concepts. The level of discussion varies from strategic to daily control of business processes.

Course Learning Objectives Upon completion of the course, 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 include:

1. Describe and explain services, manufacturing, just in time, and total quality management strategies.
2. Derive and compute optimal decisions and performance measures, such as costs and profits.
3. Develop analytical thinking for operations practices.

Required Text and Materials ***Matching Supply with Demand: An Introduction to Operations Management (3rd Edition)***, by Gerard Cachon and Christian Terwiesch, ISBN: 978-0-07-352520-4.
The Goal: A Process of Ongoing Improvement (3rd Edition), by Eliyahu M. Goldratt and Jeff Cox, ISBN: 978-0884271956.

Course Grading Information

Exams and Quizzes Two (2) exams will be given in this course. These exams will require you to demonstrate your understanding of the concepts presented in the required Cachon/Terweisch textbook and discussed during classroom lectures. These exams will be closed book and administered through eLearning. You must take these exams at the Testing Center in the basement of McDermott Library during the designated timeframe identified for each exam. A formula sheet relevant to the material being tested will be provided to you for each exam. Each of the exams will be worth 30% of your course grade (60% total).

No MakeUp Exams Makeup examinations will not be offered for this course. Students who miss an exam will receive a score of zero. Please be certain that you can take each exam on the designated dates which are listed on the Course Academic Calendar in this syllabus. Exceptions to the schedule may be approved by the instructor on a case-by-case basis **at least one week prior** to the scheduled exam time.

Quiz There will be one (1) quiz in this course on the book "The Goal" worth 10% of your course grade. Details regarding this quiz will be posted on eLearning near the middle of the course.

Group Assignments There will be two (2) group assignments in this course. Details for each group assignment will be provided at a later date through eLearning. Each assignment will be worth 15% of your course grade (30% total).

Additional Information Course grades will be determined based upon your performance relative to the class as a whole.

Grades received on each graded component will be linearly scaled to a class average grade of 87. If the class average grade of a graded component is 87 or above, no grade scaling will apply. The weighted average of each of your graded components (scaled appropriately according to class performance) will determine your earned course letter grade. The conversion of weighted average grade to earned course letter grade is given in the table below.

Extra credit will **NOT** be offered to improve or replace any graded portions of this course.

Graded Component	% Contribution
Exam 1	30%
Exam 2	30%
"The Goal" Quiz	10%
Group Assignment 1	15%
Group Assignment 2	15%
Course Total:	100%

Course Grading Information

Weighted Average Grade	Earned Course Letter Grade
93 +	A
90 – 93	A-
87 – 90	B+
83 – 87	B
80 – 83	B-
77 – 80	C+
70 – 77	C
Under 70	F

There will be No Extra Credit opportunities for this course.

Late Work will not be accepted.

Emails to the professor, after each exam and/or after the semester is completed, requesting extra credit work and/or a grade higher than actually earned, will not be answered. There is no extra credit. The semester grade received is the grade earned.

Course Academic Calendar

The following is a ***tentative schedule*** which will be followed as closely as possible. However, should changes become necessary, they will be announced in class. It is your responsibility to keep track of announcements regarding changes to this schedule.

WEEK #	DATE	LECTURE TOPIC/ASSIGNMENTS/EXAMS
Week 1	May 29	NO CLASS – Memorial Day
Week 2	Jun 5	Course and Syllabus Overview Chapter 1: Introduction Chapter 2: The Process View of the Organization
Week 3	Jun 12	Chapter 2: The Process View of the Organization (continued) Chapter 3: Understanding the Supply Process: Evaluating Process Capacity
Week 4	Jun 19	Chapter 4: Estimating and Reducing Labor Costs Chapter 6: The Link Between Operations and Finance
Week 5	Jun 26	Chapter 7: Batching and Other Flow Operations: Setup Times and the Economic Order Quantity Model Linear Programming
Week 6	Jul 3	EXAM 1: Chapters 1-4, 6-7
Week 7	Jul 10	Chapter 8: Variability and Its Impact on Process Performance: Waiting Time Problems Chapter 9: The Impact of Variability on Process Performance: Throughput Losses
Week 8	Jul 17	Chapter 10: Quality Management, Statistical Process Control, and Six-Sigma Capability Chapter 11: Lean Operations and the Toyota Production System
Week 9	Jul 24	Chapter 12: Betting on the Uncertain Demand: The Newsvendor Model
Week 10	Jul 31	Chapter 13: Assemble-to-Order, Make-to-Order, and Quick Response with Reactive Capacity Chapter 14: Service Levels and Lead Times in Supply Chains: The Order-up-to Inventory Model
Week 11	Aug 7	EXAM 2: Chapters 8-11, 12 – 14, Linear Programming

COURSE CONTENT AND HIGHLY SUGGESTED TEXTBOOK PROBLEMS

The following is a list of the chapter sections from the Cachon/Terwiesch textbook this course will cover, along with a list of suggested problems. These problems are for your benefit and are not to be turned in for grading. Answers/solutions to these problems are provided either in the back of the textbook (problems with a * next to them), through an online video at www.cachon-terwiesch.net under the link "Solved Practice Problems (problems with a ** next them), or will be posted in eLearning. Should you need assistance in solving these problems, please utilize the eLearning Discussion Board to help each other, and/or visit your TA or Professor with written/laptop evidence that you have attempted to solve the problem(s).

CHAPTER	SUGGESTED PROBLEMS
CH 1: Introduction	N/A
CH 2: The Process View of the Organization	2.1 – 2.4, 2.6, 2.8, 2.10
CH 3: Understanding the Supply Process: Evaluating Process Capacity	3.1 – 3.3, 3.5, 3.6, 3.8
CH 4: Estimating and Reducing Labor Costs	4.1 – 4.5, 4.8
CH 6: The Link between Operations and Finance	6.1, 6.2, 6.4
CH 7: Batching and Other Flow Operations: Setup Times and the Economic Order Quantity Model	7.1 – 7.3, 7.6, 7.9 – 7.12
CH 8: Variability and Its Impact on Process Performance: Waiting Time Problems	8.1 – 8.5, 8.9
CH 9: The Impact of Variability on Process Performance: Throughput Losses	9.1 – 9.3, 9.6
CH 10: Quality Management, Statistical Process Control, and Six-Sigma Capability s	10.1, 10.2
CH 11: Lean Operations and the Toyota Production System	11.1, 11.2
CH 12: Betting on the Uncertain Demand: The Newsvendor Model	12.1 – 12.10
CH 13: Assemble-to-Order, Make-to-Order, and Quick Response with Reactive Capacity	13.1 – 13.4, 13.6, 13.9
CH 14: Service Levels and Lead Times in Supply Chains: The Order-up-to Inventory Model	14.1 – 14.7

Accessibility Accommodations

It is the policy and practice of The University of Texas at Dallas to make reasonable accommodations for students with properly documented disabilities. However, written notification from the Office of Student AccessAbility (OSA) is required. If you are eligible to receive an accommodation and would like to request it for this course, please discuss it with me and allow one week advance notice. Students who have questions about receiving accommodations, or those who have, or think they may have, a disability (mobility, sensory, health, psychological, learning, etc.) are invited to contact the Office of Student AccessAbility for a confidential discussion. OSA is located in the Student Services Building, suite 3.200. They can be reached by phone at (972) 883-2098, or by email at studentaccess@utdallas.edu.

Academic Integrity

The faculty and administration of the School of Management expect from our students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work. We want to establish a reputation for the honorable behavior of our graduates, which extends throughout their careers. Both your individual reputation and the school's reputation matter to your success.

The Judicial Affairs website lists examples of academic dishonesty. Dishonesty includes, but is not limited to cheating, plagiarism, collusion, facilitating academic dishonesty, fabrication, failure to contribute to a collaborative project and sabotage. Some of the ways students may engage in academic dishonesty are:

- Coughing and/or using visual or auditory signals in a test;
- Concealing notes on hands, caps, shoes, in pockets or the back of beverage bottle labels;
- Writing in blue books prior to an examination;
- Writing information on blackboards, desks, or keeping notes on the floor;
- Obtaining copies of an exam in advance;
- Passing information from an earlier class to a later class;
- Leaving information in the bathroom;
- Exchanging exams so that neighbors have identical test forms;
- Having a substitute take a test and providing falsified identification for the substitute;
- Fabricating data for lab assignments;
- Changing a graded paper and requesting that it be regraded;
- Failing to turn in a test or assignment and later suggesting the faculty member lost the item;
- Stealing another student's graded test and affixing one's own name on it;
- Recording two answers, one on the test form, one on the answer sheet;
- Marking an answer sheet to enable another to see the answer;
- Encircling two adjacent answers and claiming to have had the correct answer;
- Stealing an exam for someone in another section or for placement in a test file;
- Using an electronic device to store test information, or to send or receive answers for a test;
- Destroying or removing library materials to gain an academic advantage;
- Consulting assignment solutions posted on websites of previous course offerings;
- Transferring a computer file from one person's account to another;
- Transmitting posted answers for an exam to a student in a testing area via electronic device;
- Downloading text from the Internet or other sources without proper attribution;
- Citing to false references or findings in research or other academic exercises;
- Unauthorized collaborating with another person in preparing academic exercises.
- Submitting a substantial portion of the same academic work more than once without written authorization from the instructor.

<http://www.utdallas.edu/judicialaffairs/UTDJudicialAffairs-Basicexamples.html>

Plagiarism

Plagiarism on written assignments, especially from the web, from portions of papers for other classes, and from any other source is unacceptable. On written assignments, this course will use the resources of turnitin.com, which searches the web for plagiarized content and is over 90% effective.

Conduct During Course Evaluations

During tests and quizzes, students in this section are not allowed to have with them any food or drinks, scratch paper, course materials, textbooks, notes, invisible ink pens, or electronic devices, including iPads, iPhones, iPods, MP3 players, earphones, radios, smart phones, cameras, calculators, multi-function timepieces, or computers. When possible, students should sit in alternating seats, face forward at all times, and remove any clothing which might conceal eye movements, reflect images of another's work, or hide course material for copying. Exam proctors will monitor any communication or signaling between students by talking, whispering, or making sounds, or by using your hands, feet, other body movements, the test paper itself or your writing implement.

Academic Dishonesty

Students in this course suspected of academic dishonesty are subject to disciplinary proceedings, and if found responsible, the following minimum sanctions will be applied:

- **Homework – Zero for the Assignment**
- **Case Write-ups – Zero for the Assignment**
- **Quizzes – Zero for the Quiz**
- **Presentations – Zero for the Assignment**
- **Group Work – Zero for the Assignment for all group members**
- **Exams – A final course grade of "F"**

These sanctions will be administered only after a student has been found officially responsible for academic dishonesty, either through waiving their right for a disciplinary hearing, or being declared responsible after a hearing administered by Judicial Affairs and the Dean of Student's Office.

In the event that the student receives a failing grade for the course for academic dishonesty, the student is not allowed to withdraw as a way of preventing the grade from being entered on their record. Where a student receives an F in a course and chooses to take the course over to improve their grade, the original grade of F remains on their transcript, but does not count towards calculation of their GPA.

The School of Management also reserves the right to review a student's disciplinary record, on file with the Dean of Students, as one of the criteria for determining a student's eligibility for a scholarship.

Judicial Affairs Procedures

Under authority delegated by the Dean of Students, a faculty member who has reason to suspect that a student has engaged in academic dishonesty may conduct a conference with the student in compliance with the following procedures:

- (i) the student will be informed that he/she is believed to have committed an act or acts of academic dishonesty in violation of University rules;
- (ii) the student will be presented with any information in the knowledge or possession of the instructor which tends to support the allegation(s) of academic dishonesty;
- (iii) the student will be given an opportunity to present information on his/her behalf;
- (iv) after meeting with the student, the faculty member may choose not to refer the allegation if he/she determines that the allegations are not supported by the evidence; or
- (v) after meeting with the student, the faculty member may refer the allegations to the dean of students along with a referral form and all supporting documentation of the alleged violation. Under separate cover, the faculty member should forward the appropriate grade to be assessed if a student is found to be responsible for academic dishonesty;
- (vi) the faculty member may consult with the dean of students in determining the recommended grade;
- (vii) the faculty member must not impose any independent sanctions upon the student in lieu of a referral to Judicial Affairs;
- (viii) the faculty member may not impose a sanction of suspension or expulsion, but may make this recommendation in the referral documentation

If the faculty member chooses not to meet with the student and instead forwards the appropriate documentation directly to the dean of students, they should attempt to inform the student of the allegation

and notify the student that the information has been forwarded to the Office of Dean of Students for investigation.

The student, pending a hearing, remains responsible for all academic exercises and syllabus requirements. The student may remain in class if the student's presence in the class does not interfere with the professor's ability to teach the class or the ability of other class members to learn. (See Section 49.07, page V-49-4 for information regarding the removal of a student from class).

Upon receipt of the referral form, class syllabus, and the supporting material/documentation from the faculty member, the dean shall proceed under the guidelines in the Handbook of Operating Procedures, Chapter 49, Subchapter C. If the respondent disputes the facts upon which the allegations are based, a fair and impartial disciplinary committee comprised of UTD faculty and students, shall hold a hearing and determine the responsibility of the student. If they find the student in violation of the code of conduct, the dean will then affirm the minimum sanction as provided in the syllabus, and share this information with the student. The dean will review the student's prior disciplinary record and assess additional sanctions where appropriate to the circumstances. The dean will inform the student and the faculty member of their decision.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.