



**Course** OPRE 6366.502 – Supply Chain Management  
**Professor** Sonia E. Leach  
**Term** Fall 2012  
**Meetings** Fri: 7:00 PM – 9:45 PM; JSOM 1.217

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### **Professor's Contact Information**

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**Office Hours** Anytime 10AM–5PM (M-R) & 12–5PM (F), except 11:30AM–12:45PM (M, W)  
**Other Information** Please ensure e-mail messages include "OPRE 6366" in the subject line.

### **General Course Information**

- Pre-requisites** OPRE 6302 and exposure to probability, or consent of the instructor.  
Knowledge of equation solving, derivatives and integrals of polynomials, expectation, variance, covariance, probability distributions. Familiarity with linear and integer programming formulations. Read MBA math review 1-2 under the "Supplements" section of the course web site.
- Math Refresher** UTD has a math refresher course that can help you remember what you learnt in a calculus course. The math refresher should always be available online; to test whether you need this course, see <http://som.utdallas.edu/somResources/eLearning/eLearningCurrent/math.php>.
- Course Description** This course explores the key issues associated with the design and management of industrial Supply Chains (SC). SC are concerned with the efficient integration of suppliers, factories, warehouses and stores so that products are distributed to customers in the right quantity and at the right time. One of the primary objectives of SC management is to minimize the total supply chain cost subject to various service requirements.  
Students will be able to describe and explain fundamentals of SC and to derive and compute optimal policies/variables, performance measures such as costs/profits, and be aware of SC practices.
- Required Text and Materials** ***Supply Chain Management: Strategy, Planning and Operation (4<sup>th</sup> Edition)*** by Sunil Chopra and Peter Meindl. ISBN: 0-13-608040-5  
Case Study: "Aviation Spare Parts Supply Chain Management Optimisation at Cathay Pacific Airways Limited", HBS case #HKU820-PDF-ENG, Benjamin Yen, Karen Lee, Jonathan Pelosi, publication date Feb 24, 2009.  
Case Study: "Sport Obermeyer Ltd.", HBS case #695022, Janice H. Hammond, Ananth Raman, publication date Aug 15, 2006.  
Case Study: "Cisco Systems, Inc.: Collaborating on New Product Introduction", HBS distributed Stanford case #GS66, Hau Lee, Maria Shao, publication date Jun 05, 2009. Cathay Pacific and Obermeyer cases will be used as a class discussion tool and parts of it may be assigned as homework. A case report will be written for the Cisco case.  
Linear/Integer Programming Notes: Students are expected to know how to formulate a linear/integer program. This subject is discussed in OPRE 6302. To refresh that discussion and see more formulation examples, students are advised to study the "Formulation," "Transportation" (pp. 1-4) and "Location" course notes under the "Supplements" section of the course web site.
- Suggested Course Material** Textbooks for other Supply Chain Management cores:  
• For some sections of the OPRE 6302 Operations Management: Matching supply with demand. By Gerard Cachon and Christian Terwiesch. 1. edition published by McGraw-Hill, 2006. ISBN 0-07-291899-3.

- For OPRE 6370 Logistics and Distribution: Business Logistics Management. By Ronald H. Ballou. Published by Prentice-Hall, Inc., 1998. HD38.5.B45 at the Library.
- For OPRE 6363 Inventory Management: Inventory Management and Production Planning and Scheduling. By Edward Silver, David Pyke & Rein Peterson. 3. edition published by John Wiley & Sons, 1998.

#### Supplementary books:

- Very similar to our textbook but more qualitative: Designing and managing the supply chain: concepts, strategies, and case studies. By David Simchi-Levi, Philip Kaminsky and Edith Simchi-Levi. 1. edition published by McGraw-Hill, 2000. HF5415.7.S425 at the Library.
- For linear programming type modeling and finance focus: Modeling the supply chain. By Jeremy F. Shapiro. 1. edition published by Pacific Grove, 2001. TS161.S485 at the Library.
- E-business focus: eDistribution. By Barry Lawrence, Daniel Jennings and Brian Reynolds. 1. edition published by Thomson, 2003. ISBN 0-324-12171-7.
- Conceptual logistics focus: The Management of Business Logistics. By John Coyle, Edward Bardi and John Langley. 1. edition published by Thomson, 2003. ISBN 0-324-00751-5.
- Service focus: Service Operations Management. By Richard Metters, Kathryn King-Metters and Madeline Pullman. 1. edition published by Thomson, 2003. ISBN 0-324-13556-4.
- Supply chain design and management: Strategic and tactical perspectives. By Manish Govil and Jean-Marie Proth. 1. edition published by Academic Press, 2002. ISBN 0-12-294151-9. HD38.5.G68 at the library.
- For purchasing and contracting focus: Purchasing and supply chain management. By Robert Monczka, Robert Trent and Robert Handfield. 2. edition published by South-Western, 2002. ISBN 0-324-02315-4. Also see Purchasing and Supply Management by Michiel Leenders, Fraser Johnson, Anna Flynn and Harold Fearon. 13. Edition published by McGraw-Hill, 2006. ISBN 0-07-287379-5.

#### **Related Courses**

- OPRE 6363: Inventory Management in Springs.
- OPRE 6368: Supply Chain Software by Gene Deluke in Summers.
- OPRE 6370: Logistics and Distribution by Prof. Ehad Sabri in Falls.
- OPRE 6371: Purchasing and Sourcing Management by James Hogan in Springs.
- OPRE 6371: Information Enabled Supply Chains by Prof. Özalp Özer in Springs.
- OPRE 6364: QC: Lean Six Sigma by Prof. Divakar Rajamani in Springs.
- OPRE 6377: Demand and Revenue Management by Prof. Metin Çakanyıldırım in Falls.
- OPRE 6366 Online: Supply Chain Management by Prof. Metin Çakanyıldırım in Springs.

### **Course Policies**

#### **Graded Components**

- [5%] Class attendance and contribution to discussion.
- [25%] Assignments: There will be five (5) to six (6) assignments in this course. Your lowest assignment grade will be dropped when determining your final grade. You may discuss problems with others, but the solutions you submit for grading must be written up individually and with full understanding of what you have written. Students handing in identical solutions will be violating university regulations and will not receive credit. See "Academic Integrity" and "Academic Dishonesty" sections below. Late assignments will only be permitted if you coordinate with the TA at least one day in advance of the assignment due date.
- [50%] Exams: There will be two (2) exams in this course, each contributing 25% to your final course grade. See "Course Schedule" below for the dates of each exam.
- [20%] Case Report. See "Course Schedule" below for the due date of this report.

#### **Grading Guidelines**

- Final course grades will be curved by considering the current class average and previous class averages. Class averages from 2001-2005 are available on the course web page.
- Students who score less than 50% on the first exam must schedule an appointment with the Professor to discuss ways in which they can improve their performance.
- Both + and – final course grades will be given in this course, i.e. A- or B+.

### Course Schedule

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 TOPICS/ASSIGNMENTS/EXAMS
<b>Week 1</b>	Fri, Aug 31	<u>INTRODUCTION</u> Chapter 1: Introduction Chapter 2: Achieving a Strategic Fit
<b>Week 2</b>	Fri, Sep 7	Chapter 3: SCM Metrics/Drivers and Obstacles <i>Case Study: 7-Eleven Japan</i> (Read in the textbook – follows Chapter 3.)
<b>Week 3</b>	Fri, Sep 14	<u>SC NETWORKS</u> Chapter 4: Distribution Network in a SC Chapter 5: Network Design
<b>Week 4</b>	Fri, Sep 21	Chapter 6: Network Design in an Uncertain Environment Chapter 13: Briefly Transportation (For more, take OPRE 6377.)
<b>Week 5</b>	Fri, Sep 28	<u>AGGREGATE PLANNING</u> Chapter 7: Briefly Forecasting (For more, take OPRE 6363 or 6377.) Chapter 8: Aggregate Planning
<b>Week 6</b>	Fri, Oct 5	<i>Case Study: Consumer Electronics (CE) Supply Chain</i> (Read CE slides on the course web site.) Chapter 9: Planning Supply and Demand
<b>Week 7</b>	Fri, Oct 12	<u>SC INVENTORIES</u> <i>Case Study: Restructuring GM</i> (Read GM's Restructuring Plan on the course web site.) Chapter 10: Inventory Planning with Known Demand
<b>Week 8</b>	Fri, Oct 19	<b>EXAM #1</b>
<b>Week 9</b>	Fri, Oct 26	Chapter 11: Inventory Planning with Uncertain Demand (For more, take OPRE 6363.)
<b>Week 10</b>	Fri, Nov 2	Chapter 12: Product Availability with Uncertain Demand <i>Case Study: Cathay Pacific Spare Parts</i> (Prepare the case.)
<b>Week 11</b>	Fri, Nov 9	Chapter 14: Sourcing and Contracts in SC (For more, take OPRE 6371.)
<b>Week 12</b>	Fri, Nov 16	<u>OTHER ISSUES</u> New product/model introduction <i>Case Study: Sport Obermeyer Ltd</i> (Prepare the case.)
<b>Week 13</b>	Fri, Nov 23	**UNIVERSITY CLOSED FOR FALL BREAK – HAPPY THANKSGIVING**
<b>Week 14</b>	Fri, Nov 30	Chapter 17: Coordination in a SC. Value of and distortion of information. Bullwhip effect.
<b>Week 15</b>	Fri, Dec 7	<b>CASE REPORT DUE</b> Green Supply Chains Global Supply Chains <i>Case Study: Turkish Supply Chains</i> (Read the associated document on the course web site.)
<b>Week 16</b>	Fri, Dec 14	<b>EXAM #2</b> (See Course Lookup for time and location.)

### **UTD Resources**

- Practice Lecture Series: We expect to host 1-2 lectures in class. They will be on Supply Chain Management Practice and be given by practitioners from Dallas area companies. The lectures are sponsored by C4ISN (Center for Intelligent Supply Networks) of SOM. For more info: <http://mgmt.utdallas.edu/c4isn>. Lecture dates will be announced later on the course web site.
- International Center for Decision and Risk Analysis (ICDRiA) performs interdisciplinary research and develops cooperation in risk management and decision-making by exchanging knowledge and experience among academia, industry, and public agencies. For more info: <http://som.utdallas.edu/icdria>.
- E-Access to Journals via UTD Library: Library electronically subscribes to many journals such as Harvard Business Review, Management Science, which are of interest. To access such a journal, go to the UTD Library web page. Click on "E-Journals". You will see an alphabetical list of journals. Click on "H" for "H"arvard Business Review. You will see that HBR is listed 15-20 from the top among the journals starting with letter "H." Click on HBR link, you will be transferred to EBSCO web site which keeps the journal. To access from a non-UTD computer, you need UTD ID and password. Please respect the copyright laws.
- Career Center: The SOM Career Center (<http://som.utdallas.edu/somResources/somCareerCenter>) provides the following services: Career Counseling, Resume Assistance, Interview Assistance, Job Search Assistance, Career Resource Library, Web Resume Database, On Campus Recruiting, Active Internship Program.

### **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](mailto: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 Exams**

During tests and quizzes, students in this section are not allowed to have with them any food, 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**
- **Tests – F for the course**

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.***