# MIS 373/OM 337.4 – IT for Supply Chains

# Spring 2014

Unique Numbers: 04175 and 04390
Class room: UTC 4.104


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## Course Objectives

Supply Chain Management is an essential part of a firm's strategy to gain competitive advantage. Information is vital to create a coordinated supply chain, make supply chain decisions and execute these decisions effectively. This course will introduce students to the role of Information Technology in managing Supply Chains. Students will learn about the Information Architecture needed by firms to co-ordinate their operations and collaborate with business partners. The course will illustrate the role of related building-block technologies like ERP, XML, SOA and web services.

One component of this course is the use of an enterprise resource planning (ERP) platform to manage supply chain processes within an organization. There are three primary objectives to the use of the ERP simulation: (1) to understand how to use the transactional data in ERP systems to enable decision making for various supply chain processes; (2) to develop a hands-on understanding of the concepts underlying enterprise systems; and (3) to understand the information coordination within and across organizations to manage the supply chain

Students will be required to execute processes such as procurement, fulfillment, and production using an actual ERP system (SAP R/3) as part of individual exercises. Teams of five students will operate a firm and must interact with supplier and customer teams by sending and receiving orders, delivering products, plan materials and completing the whole cash-to-cash cycle as part of a group project.

I want to emphasize that while you will gain an understanding of the SAP R/3 system, this course is not about SAP R/3 or ERP software. The intent of the course is not to make you SAP R/3 experts – we may merely use the R/3 system to illustrate how technology can be used to coordinate supply chain processes.

## Material

1. Integrated Business Processes with ERP systems by Simha R. Magal and Jeffrey Word, ISBN 9780470478448; available online (Recommended)
2. Reading packet is available on Harvard Business School Press' website.
3. Additional material will be provided in class and posted on the Blackboard
4. Léger, P.-M., Robert, J., Babin, G, Pellerin, R., Wagner, B. « ERP Simulation Game Manufacturing Game: Participant's Guide», 2013-2014 Edition. This book will be purchased directly online from HEC Montreal. I will send you an email over the next month with additional details on how to purchase the book. The cost of the book is C$35.00. This is an online simulation and your ability to participate will depend upon a completed purchase of the book. (Students who do not purchase the book will not be able to log on.)

## Grading

Your course grade will be based on the following point distribution:

| | **Date** | **Weight** |
|---|---|---|
| Class Participation and Attendance | | 10% |
| Case write-ups (Group) (6) | | 10 % |
| Individual Assignments (4) | | 10% |
| Group project (1) | | 20% |
| ***Midterm 1*** | 02/20 in class | 25% |
| ***Midterm 2*** | 04/09 in class | 25% |

## Teams

The case reports and the simulation game will be done in the same team with maximum size of FIVE. You can freely compose your own team. By the end of the Tuesday, Jan 21, 2014 please inform me of the composition of your team. A fair contribution to each submission of every team member is the team's collective responsibility. All work for the case write-ups and simulation game will be done by the same team.

## Class Participation

It is important for you to come prepared for class and actively participate. Students' collective knowledge and experience add to the learning experience. It is everyone's job to keep the discussion productive and moving forward. **Students will be cold called!** Therefore, it is in your best interest to

come prepared for each class and to actively participate. In evaluating your class participation grade, I will take the following into consideration:

- useful arguments expressed coherently and succinctly
- good analysis supported by case facts or your own experience
- constructive disagreement
- readiness to contribute upon called

I expect that students to arrive on time to class. Coming in late and leaving during class time distract class proceedings.

### No LAPTOP Policy

Based on overwhelming feedback from previous students, the **use of laptops is not allowed** in this class unless specifically instructed. This is a simple rule; please respect it. We recognize some students prefer to take notes electronically on PPT slides. However, there is no way of controlling students from checking email/stocks, using IM, and surfing the web once a laptop is allowed. The quality of discussion and the flow will be affected severely. We will make PPT slides available on the Blackboard in time for you to bring copies to class, or will make PPT copies available in class.

Please make sure you keep Cellphones, Pagers, iPods, and other devices switched off during class time. However, **feel free to video-tape or audio record my lectures (and give us a copy so we know how we are doing ☺)**.

## Assignments, Case Write-ups, and Group Projects

Class work comprises of individual assignments, case write-ups and group project. Assignments will be ERP exercises to understand different business process. These assignments will test your understanding of the concepts and develop significant level of expertise in using tools. There will be a group project that is due at the end of the semester. The details will be discussed in class.

## Exams

There will be a mid-semester exam (**March 7**) and a take home final. On these exams**, you will be responsible for the material presented in class,** in the reading packet, and any required readings distributed in class/or on Blackboard. Questions on the exam may be multiple choice, true/false with justification, or short answer types. Any appeals about grades should be emailed to me or the TA for your cohort **within a week** after the exam or project has been returned to you.

## Students with Disabilities

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. Any student with a documented disability (physical or cognitive) who requires academic accommodations should contact the Services for Students with Disabilities area of the Office of the Dean of Students at 471-6259 (voice) or 471-4641 (TTY for users who are deaf or hard of hearing) as soon as possible to request an official letter outlining authorized accommodations.

## Scholastic Dishonesty

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Please refer to the Student Judicial Services Website at http://www.utexas.edu/depts/dos/ or the General Information Catalog to access the official University policies and procedures on scholastic dishonesty. In this class, all cases must be done individually. You are free to seek help from the professor or the TA.

## Tentative Schedule (MW → Magal and Word, CP → Couse Packet; CV → Canvas)

| Week | Date | Topic | Cases | Readings | Due |
|---|---|---|---|---|---|
| 1 | 14-Jan | Introduction | | | |
| | 16-Jan | Supply Chain Processes | | New Nike (CV), Investing in the IT that makes a Competitive Difference (CV), IT and Supply Chain Management (CV) | |
| 2 | 21-Jan | Introduction to ERP | Digital China Holdings Ltd. (CP) | | Case writeup (beginning of the class) |
| | 23-Jan | Introduction to ERP | | Chapter 2 (MW) | |
| 3 | 28-Jan | SAP Navigation (MOD lab) | | Chapter 2 (MW) | |
| | 30-Jan | Business Process Benefit | Pharmacy Service Improvement at CVS (A) (CP) | | Case writeup (beginning of the class) |
| 4 | 4-Feb | Procurement (MOD Lab) **Assignment 1 handed out** | | Chapter 4 (MW) | |
| | 6-Feb | Procurement / Fulfillment | | Chapters 4 & 5 (MW) | |
| 5 | 11-Feb | Fulfillment (MOD Lab) **Assignment 2 handed out** | | Chapter 5 (MW) | Assignment 1 |

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| | 13-Feb | Warehouse Management | | Arrow Electronics (CP) | Case writeup (beginning of the class) |
| 6 | 18-Feb | Warehouse Management | | Chapter 7 (MW) | Assignment 2 |
| | 20-Feb | Midterm 1 | | | |
| 7 | 25-Feb | Production (MOD Lab) **Assignment 3 handed out** | | Chapter 6 (MW) | |
| | 27-Feb | Material Planning | | Chapters 6- 8 (MW) | |
| 8 | 4-Mar | Procurement Collaboration | World Wide Technology and ClearOrbit (CP) | | Case writeup (beginning of the class) |
| | 6-Mar | Production/Material Planning (MOD Lab) **Assignment 4 handed out** | | Chapter 8 (MW) | Assignment 3 |
| 10 | 18-Mar | Demand Forecasting & Business Intelligence | Competing on Analytics (CP) | MGI Big Data Report (CV) | |
| | 20-Mar | Demand Collaboration | STMicroelectronics E-Chain Optimization Project (CP) | | Case writeup (beginning of the class) |
| 11 | 25-Mar | Implementation Issues and Organizational Change | Putting the Enterprise Into the Enterprise System (CP) | Nestle ERP Odyssey (CV) | Assignment 4 |
| | 27-Mar | Web Services and SOA | The Next Revolution in Productivity (CP) | The Strategic Value of Web Services (CV) | |
| 12 | 1-Apr | Collaborative Supply Chain | Polo Ralph Lauren & Luen Thai (CP) | | Case writeup (beginning of the class) |
| | 3-Apr | Guest Lecture | PWC | | Assignment 5 |
| 13 | 8-Apr | Midterm 2 | | | |

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| | 10-Apr | Manufacturing Simulation -Pricing (Round 1) (MOD Lab) | | Chapter 1 and Chapter 2 of Simulation Guide (Sections 2.1 through 2.4) | |
| 14 | 15-Apr | Manufacturing Simulation-Production (Round 2) (MOD Lab) | | Chapter 2 of Simulation Guide (Section 2.5) | |
| | 17-Apr | Manufacturing Simulation-Planning & Procurement (Round 3) (MOD Lab) | | Chapter 2 of Simulation Guide (Section 2.6 - 2.8) | |
| 15 | 22-Apr | Manufacturing Simulation (Rounds 4 & 5) (MOD Lab) | | | |
| | 24-Apr | Social Media and Supply Chain | | Refer to CV for articles | |
| 16 | 29-Apr | Team Presentations | | | |
| | 1-May | Team presentations and final submission | | | |