

## ISE583 - Enterprise Wide Information Systems

**Instructor:** Richard W. Vawter

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**Office Hours:** Mon. 2:00 - 4:30 p.m.

Tues. 11:10 - 12:00 p.m.

3:30 - 4:30 p.m.

Wed. 2:00 - 4:30 p.m.

Thurs. 11:00 - 12:00 p.m.

or by appointment

**ISE 583**, Spring 2009

**Location:** OHE 120

M/W 11:00-12:20 p.m.

**Class Web Page:**

<http://www-rcf.usc.edu/~vawter/classes.html>

or

<http://www.uscdcn.net/>

### **Course Description:**

This course is designed to provide the student with a thorough understanding of both the role that Enterprise Resource Planning Systems (ERPs) play in an organization and the challenging task of implementing and managing the Information System (IS) function. During the semester, projects and case studies will be assigned that afford the student the opportunity to work through many real-life business situations using the SAP ECC system and explore the interaction among the different business processes. SAP is the world's leading provider of client/server software designed to integrate every aspect of a company's operation. The hands-on exercise, coupled with the in-class discussions of ERPs, will prepare the student with the knowledge sought by businesses looking to use technology to maintain their competitive edge in the market place.

### **Objective:**

At the completion of the course, students will be able to...

- Describe the role of an ERP in carrying out business processes in a company
- Explain how 'best business practices' are incorporated in an ERP
- Execute an entire business process chain in the following areas
  - Customer Order Management
  - Procurement
  - Production
  - Accounting
- Strategize pricing, production and sales in a competitive commodity market
- Analyze sales data in an ERP to dynamically respond to changing market conditions to maximize profits
- Expedite production planning and control using tools provided in an ERP system
- Report on the reasons for the success (or failure) of production and sales strategy

### **Required Textbooks:**

1. SAP R/3, Business Blueprint, 2<sup>nd</sup> Edition, by Thomas A. Curran & Andrew Ladd, Prentice Hall PTR, ©2000, ISBN: 0-13-085340-2
2. ERP Simulation Game, A Participants Handbook, 1<sup>st</sup> Edition, by Pierre-Majorique Léger and Jacques Robert of HEC Montréal, Quebec, Canada ©2008

**Class Schedule:**

<b>Class</b>	<b>Topic</b>	<b>Reading Assignment</b>	<b>Assignment</b>
1. Jan. 12 Jan. 14	Course Overview ERP Overview: Systems and Basis Architecture	Curran: Introduction and Chapter 1	<b>Case #1</b> – “SAP America”, due Jan. 21
2. Jan. 19 Jan. 21	MLK Holiday Discuss SAP America	Curran: Chapters 2, and 14	<b>Project #1</b> – SAP ECC Introduction, due Jan. 26
3. Jan. 26 Jan. 28	Complete ERP Systems and Basis Architecture ERP Functionality and Best Business Practices	Curran: Chapters 3, 4 and 16.1-16.4	<b>Project #2</b> – Business Processes, due Feb. 2
4. Feb. 2 Feb. 4	The Customer Order Management Process	Curran: Chapter 5	<b>Project #3</b> – Customer Order Mgmt, due Feb. 18
5. Feb. 9 Feb. 11	COM Process (cont.) COM Process (cont.)	Continue with Ch. 5	Continue with Proj. #3, due Feb. 18
6. Feb. 16 Feb. 18	President’s Holiday Procurement Process	Curran: Chapter 7	Project #4 Procurement, due Feb. 23
7. Feb. 23 Feb. 25	Procurement (cont.) <b>Midterm Exam</b>	none	<b>Midterm Project</b> , Due, Mar. 2, 2:00 pm <b>Case #2</b> – “Information Flows in Manufacturing”, due Mar. 2
8. Mar. 2 Mar. 4	Discuss the Info Flows in the MFG Case Begin Manufacturing: Planning & Execution	Curran: Chapter 6	<b>Project #5</b> – Manufac- turing, due Mar. 23
9. Mar. 9 Mar. 11	Manufacturing (cont.) Manufacturing (cont.)	Continue with Ch. 6	Continue with Proj. #5, due Mar. 23
<b>Spring Recess</b>			
10. Mar. 23 Mar. 25	Accounting and the General Ledger Accounting (cont.)	Curran: Chapter 8	<b>Project #6</b> – Accounting, due Mar. 30
11. Mar. 30 Apr. 1	ERP Simulation Game: Overview, goal, how markets work.	Léger: Chapter 1 - 2 Léger: Chapter 3 - 4	<b>Task:</b> Create company master data, Ch 2, due Apr. 6

12. Apr. 6 Apr. 8 <b>Friday</b> , Apr. 10	Planning Decisions and Company Strategies Demo – Quarters 1 & 2 Quarter 3 – “Let the games begin!”	Léger: Chapter 5 - 7	<b>Task:</b> Carry out production for QTR 1, Ch. 3-4, due <u>Wednesday</u> , Apr. 8 before 10 am
13. Apr. 13 Apr. 15 <b>Friday</b> , Apr. 17	Quarter 3 Review No class meeting Quarter 4	none	<b>Task:</b> Review results from QTR 3. Prepare strategy for QTR 4 on <u>Friday</u> , Apr. 17
14. Apr. 20 Apr. 22 <b>Friday</b> , Apr. 24	Quarter 4 Review No class meeting Quarter 5	none	<b>Task:</b> Review results from QTR 4. Prepare strategy for QTR 5 on Apr. 24
15. Apr. 27 Apr. 29	Wrap-up Simulation Game & Course Review	none	<b>ERP Sim Final Analysis Write-up</b> due <u>Friday</u> , May 1, by 5:00 pm

### Lab Policies

- The SAP GUI is installed on the computers in the GER 309 lab and in the ITP computer labs. In the third week of class I will post the hours of these labs.
- Lab assistants are not familiar with SAP, nor with class assignments, so please don't expect them to be able to help answer questions regarding the projects.
- **Note:** Before logging off any lab computer, you must ensure that you have either emailed or saved your work created during your time in the lab. Any work saved to the computer **will be erased** each evening and after restarting the computer. The School of Engineering is not responsible for any work lost.

### Lab Projects:

- On the 3<sup>rd</sup> day of class, Jan. 21, each of you will be given an account on the R/3 system and assigned a number for working on the projects.
- Projects will be available via the “Assignments” section of the DEN class web site.
- It is **your** responsibility to turn in the lab projects by the beginning of lecture on the dates indicated above and verify that your assignment is in the class “assignment box”.
  - You are to only turn in the “Answer sheet” and “Summary” portion of the project write-up as one document.
  - You are to submit your “Answer sheet / Summary” document via the “Assignments” section of the DEN class web site (from where you originally obtained the project write-up).
  - Verify that your document is in the class “assignment box” and double-click on it to open it up. If you can't see or open your document, neither can the grader.
  - **Failure to correctly submit projects will result in a 5% penalty.**
- Answers to the projects will be posted on the Class Web page after the due date of the projects for your review.

## Late Projects

- The “Assignments” section of the DEN class web site “closes” after the due date and time.
  - You will no longer be able to submit your project and your project will be considered late.
  - Late projects must be e-mailed to me directly (vawter@usc.edu), not the grader.
  - I will then make a note of receiving your late project and then forward the project on to the class grader for grading.
- **Projects that are turned in after the deadlines will automatically have ½ of the possible points deducted prior to grading.** No excuses!! So, please turn in your projects at the beginning of lecture on the dates indicated above!
- **No projects will be accepted for credit after 2 weeks beyond the project’s original due date nor after the last day of the semester (May 1).**
- Please note: **No late Midterm Projects will be accepted for credit.**

## Handling Project Questions (in order of steps to be taken)

1. Re-read the instructions carefully and try referring to: <http://help.sap.com>
2. Review the “Discussion Board” section of the DEN class web site’s forum for other students’ questions and comments or post a question yourself to begin the forum.
3. E-mail the class TA your question, being sure to be clear in your question and detailed in your explanation of the situation. Replies may take some time, since e-mail is really not an efficient method for working a “help desk”.
4. And, of course, you’re always welcome to stop by my office during my office hours or contact me and arrange for an appointment.

Please note: **I do not address “project problems” via e-mail.** I am happy to discuss the problems with you in person, and guide you to solving them yourself during my office hours; but **my e-mail address is not to be used as a simple “help desk”.**

## Case Studies

- Two case studies will be assigned during the semester. These are simply studies of business experiences similar to the topics being discussed in class.
- You are to read over the cases and type up a **one page, double-spaced analysis**, explaining the business situation, concerns, and possible suggested actions to take.
- Case studies are to be submitted by the beginning of the lecture on the dates indicated on the syllabus via the “Assignments” section of the class web site (just as you do for submitting your project write-ups).
- Please note: **No late case studies will be accepted for credit.**

**Simulation Game:** The simulation game, a team event, will be graded based upon several factors. The factors, when added together, will total 100 points.

- Each team member will receive the same points for the team’s ability to meet deadlines. **20 points** total
- Each team member will receive the same points for the accuracy of the data entered by the team to begin the simulation **20 points** total
- Each team member will receive the same points for which their company finished with reference to its profitability (equity) after the quarters of play. **35 points** total
- Each team member will receive the same points for the team’s Final Analysis write-up at the conclusion of the game. **15 points** total

- Each team member will receive additional points based upon the results of the team self evaluation. **10 points** total

**Examinations:** Exams cover material from the reading assignments, lectures, lab projects, and the simulation game. The questions will be of the form: short answer, short essay, and short problem solving. The exams are all closed book and closed notes. The exams will include material presented up to the date of the exam. The “Final” exam will contain questions covering topics throughout the semester, but will be weighted more heavily toward the topics discussed after the midterm and results of the ERP simulation game.

Midterm: Wednesday, Feb. 25, 11:00-12:20 p.m. in room TBA

Final Exam: Wednesday, May 6, 11:00-1:00 p.m. in room TBA

**Note: No make-up exams will be offered nor will there be any changes made to the Final Exam schedule as established by the University.**

### **Grading:**

Grading will be on a straight scale (as opposed to a class curve/average).

The final grades will be based upon the University standard:

94% and above	A
90% - 94% (not including 94%)	A-
87% - 90% (not including 90%)	B+
83% - 87% (not including 87%)	B
etc.	

The grades are calculated by weighing the following work as described here:

Case Studies submitted	10%
Average of Lab Projects Scores	20%
Midterm grade	20%
Midterm Project score	10%
Simulation Game	15%
Final Exam grade	<u>25%</u>
	100%

### **Students with Disabilities:**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to your lab assistant) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. - 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

## **Student Conduct:**

The use of unauthorized material, communication with fellow students during an examination, attempting to benefit from the work of another student, and similar behavior that defeats the intent of an examination or other class work is unacceptable to the University. It is often difficult to distinguish between a culpable act and inadvertent behavior resulting from the nervous tension accompanying examinations. When the professor determines that a violation has occurred, appropriate action, as determined by the instructor, will be taken.

Although working together is encouraged, all work claimed as yours must in fact be your own effort. Students who plagiarize the work of other students will receive zero points and possibly be referred to Student Judicial Affairs and Community Standards (SJACS).

**All students must read, understand, and abide by the University Student Conduct Code listed in SCampus, and available at:**

<http://www.usc.edu/student-affairs/SJACS/nonacademicreview.html>

Excerpts taken from *SC Campus Student Guidebook, 04/05*:

- §11.00 Behavior Violating University Standards and Appropriate Sanctions  
“...individual work will be submitted [by the student], and [it’s the student’s] obligation both to protect one’s own academic work from misuse by others as well as to avoid using another’s work as one’s own.”
- §11.11 Plagiarism (Definition)  
“The submission of material authored by another person but represented as the student’s own work, whether that material is paraphrased or copied in verbatim or near verbatim form.”
- §11.14 Plagiarism (Definition continued)  
“Obtaining for oneself or providing for another person a solution to homework a project or other assignments, or a copy of an exam or exam key without the knowledge and expressed consent of the instructor.”

**Any violation will be immediately reported to the Office of Student Judicial Affairs and Community Standards. The alleged violation will then be reviewed by the board. If the student is determined to be responsible for the violation, appropriate disciplinary action will be determined and then implemented by the University.**