

## ISE583 - Enterprise Wide Information Systems

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**Office Hours:** Tues. 11:00 - 12:00 p.m.

Wed. 10:00 - 12:00 p.m.

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

or by appointment

**ISE 583,** Fall 2013

**Location:** KAP 145

T/Th 9:30-10:50 a.m.

**Class Web Page:**

<https://blackboard.usc.edu/>

or

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

### **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 Enterprise software designed to integrate every aspect of a company's operation. The hands-on exercises, 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
  - Sales (Fulfillment)
  - 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 and Accessories:**

1. Integrated Business Processes with ERP Systems, by Simha R. Magal & Jeffrey Word, Wiley & Sons, Inc., ©2011, ISBN: 978-0-470-47844-8
2. ERP Simulation Game: *Participant's Manual* (ebook) will be available for purchase online. (Cost \$40 CAD payable online by credit card, details to be announced mid semester.)
3. (On-campus students only) TurningPoint RF Response Card, aka "clicker" available at the Student Store's checkout counter.



## Class Schedule:

Class		Topic	Reading Assignment	Assignment
Labor Day Sept. 2 <sup>nd</sup>	<b>Week 1.</b> Aug. 27 Aug. 29	Course Overview <ul style="list-style-type: none"> <li>• Overview of ERP Systems &amp; Functionality</li> <li>• Intro to the case company Global Bike Inc.</li> </ul>	Magal: Chapters 1 and 2	No assignment this week.
	<b>Week 2.</b> Sept. 3 Sept. 5	The ERP Environment <ul style="list-style-type: none"> <li>• Client/Server technology</li> <li>• Data in an ERP System</li> <li>• Reporting</li> </ul>	Magal: Chapters 1 and 2 (cont.)	<b>Project #1</b> – The ERP Environment, due Tuesday, Sept. 10 <sup>th</sup> before 2:00 pm.
	<b>Week 3.</b> Sept. 10 Sept. 12	Introduction to Accounting <ul style="list-style-type: none"> <li>• Organizational Elements</li> <li>• G/L Accounting, Debit and Credit entries</li> <li>• A/R &amp; A/P accounts</li> <li>• Assets and Depreciation</li> </ul>	Magal: Chapter 3	<b>Project #2</b> – Accounting, due Tuesday, Sept. 17 <sup>th</sup> before 2:00 pm.
	<b>Week 4.</b> Sept. 17 Sept. 19	The Procurement Process <ul style="list-style-type: none"> <li>• Organizational Elements and Master Data</li> <li>• The Business Process and Financials</li> </ul>	Magal: Chapter 4	<b>Project #3</b> – The Procurement Process, due Tuesday, Sept. 24 <sup>th</sup> before 2:00 pm.
	<b>Week 5.</b> Sept. 24 Sept. 26	Sales and Fulfillment <ul style="list-style-type: none"> <li>• Organizational Elements and Master Data</li> <li>• The Sales Process and Financials</li> </ul>	Magal: Chapter 5	<b>Project #4</b> – The Sales Process, due Tuesday, Oct. 1 <sup>st</sup> before 2:00 pm.
	<b>Week 6.</b> Oct. 1 Oct. 3	The Production Process <ul style="list-style-type: none"> <li>• Bill of Materials and Routing Documents</li> <li>• Work Centers</li> <li>• The Production Process</li> </ul>	Magal: Chapter 6	<b>Project #5</b> – Production, due Tuesday, Oct. 8 <sup>th</sup> before 2:00 pm.
	<b>Week 7.</b> Oct. 8 Oct. 10	Inventory Management <ul style="list-style-type: none"> <li>• Goods Receipts, Goods Issue, Transfer Postings, and Stock Transfers</li> </ul> Warehouse Management <ul style="list-style-type: none"> <li>• Stock Transport Orders</li> </ul>	Magal: Chapter 7	<b>Project #6</b> – Inventory Management, due Tuesday, Oct. 15 <sup>th</sup> before 2:00 pm.
	<b>Week 8.</b> Oct. 15 Oct. 17	Production Planning, MRP <ul style="list-style-type: none"> <li>• Required Master Data</li> <li>• MRP Strategy</li> <li>• The Planning Process</li> </ul>	Magal: Chapter 8	<b>Project #7</b> – Production Planning, due <u>Monday</u> , Oct. 21 <sup>st</sup> before <u>5:00 pm</u> .

	Class	Topic	Reading Assignment	Assignment
SAP Tech Ed. Oct. 21 <sup>st</sup> – 25 <sup>th</sup>	<b>Week 9.</b> Oct. 22 Oct. 24	<b>Midterm Exam</b> <i>No class on Thursday</i>	None	<b>Midterm Project</b> , due Tuesday, Oct. 29 <sup>th</sup> before 2:00 pm.
	<b>Week 10.</b> Oct. 29 Oct. 31	The ERP Simulation Game <ul style="list-style-type: none"> <li>• Goals of the Game</li> <li>• Game Description</li> </ul>	<i>Participant's Manual</i> Chapters 1 – 3	No assignment this week.
	<b>Week 11.</b> Nov. 5      Nov. 7	ERP Sim – Introduction <ul style="list-style-type: none"> <li>• How the Market Works, Demand and Supply</li> <li>• Forecasting and Planning</li> <li>• Interest &amp; Warehouse Costs</li> <li>• Production Improvemnts</li> <li>• Marketing Impact</li> </ul> Intro Game, Quarter 1	<i>Participant's Manual</i> Chapters 4 – 6	In class introductory game on Thursday. Participation required.
	<b>Week 12.</b> Nov. 12 Nov. 14	Intro Game (cont.) Intro Game Quarter 2 After the game... <ul style="list-style-type: none"> <li>• Analyze Resulting Data</li> <li>• Explore Profit &amp; Loss Statements for your Company</li> <li>• Consider impact of Production Improvemnts</li> </ul>	Reference: <i>Participant's Manual</i>	<b>SIM Analysis 1</b> – Intro Sim Game Analysis, due Tuesday Nov. 19 <sup>th</sup> <u>before class</u> .
Thanksgiving Holiday. no class, Nov. 27 <sup>th</sup> – 30 <sup>th</sup>	<b>Week 13.</b> Nov. 19 Nov. 21	ERP Sim Game Extended Game, Qtrs 1 & 2 Extended Game, Qtrs 3 & 4	Reference: <i>Participant's Manual</i>	In class ERP Sim game. Participation required.
	<b>Week 14.</b> Nov. 26 Nov. 28	ERP Sim Game (cont.) Extended Game, Qtrs 5 & 6 <i>No class on Thursday</i>	Reference: <i>Participant's Manual</i>	In class game. Participation required.  Sim Analysis – Things to consider for the final stretch.
	<b>Week 15.</b> Dec. 3 Dec. 5	ERP Sim Game (cont.) Extended Game, Qtrs 7 & 8 Extended ERP Sim game Analysis of the game and wrap-up	none	<b>SIM Final Analysis</b> – due <u>Sunday</u> Dec. 8 <sup>th</sup> before <u>midnight</u> . <b>Team Evals</b> due Dec. 8 <sup>th</sup> before <u>midnight</u> . <b>Game Quiz</b> due Dec. 8 <sup>th</sup> before <u>midnight</u> .

## Lab Policies

- The SAP GUI is installed on the computers in the GER 309 lab. In the third week of class, ITP computer labs and hours will be posted at: <http://itp.usc.edu/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 on a flash drive which you 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:

- After the 3<sup>rd</sup> day of class, Sept. 3<sup>rd</sup>, each of you will be given an account on the SAP system and assigned a number for working on the projects.
- Projects will be available via the "Assignments" section of the class web site.
- It is **your** responsibility to turn in the lab projects by the deadlines indicated above (or otherwise stated) **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 class web site (from where you originally obtained the project write-up).
  - You are to ① verify that your document is in the class "assignment box" and to ② double-click on the file to open it up. If you can't see or open your document, then neither can the grader!
  - **Failure to correctly submit projects will result in a 5% penalty.** This includes asking either the TA or myself to remove your submission so that you can submit another version of your answers.
- 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 class web site "closes" after the due date and time and is replaced by the answer key.
  - You will no longer be able to submit your project and your project will be considered late.
- **No late projects will be accepted.** No excuses!! So, please turn in your projects before the due dates indicated above!
- Please note: **No late Midterm Project will be accepted for credit either.**

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

1. Re-read the instructions carefully and view the Textbook Demo's which I have placed on the class web site.
2. Review the "Discussion Board" section of the 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 are always welcome and encouraged to stop by my office during my office hours or to 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"**.

### Simulation Game

- Student teams will be formed during the last third of the semester to play the ERP Simulation Game.
- **Participation in the game is mandatory.**
- Since the classroom is not equipped with computers, you will need to bring your own laptop to class during the days the game is played.

**Examinations:** Exams cover material from the reading assignments, lectures, and lab projects. The questions will be of the form: multiple choice, short answer, 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 cover material presented after the midterm and include questions regarding the "simulation game". The "Final" exam is not considered to be cumulative, however, knowledge and understanding of the material presented in the first half of the semester will be expected.

Midterm:	Tuesday,	Oct. 22,	9:30-10:50 a.m.	in KAP 145
Final Exam:	Thursday,	Dec. 12,	11:00-1:00 p.m.	in KAP 145

**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).

Final grades will be based strictly upon the total percentage earned. **No exceptions! Nor, will any extra credit assignments will be offered.**

94% and above	A
90% - 94% (not including 94%)	A-
87% - 90% (not including 90%)	B+
83% - 87% (not including 87%)	B
80% - 83% (not including 83%)	B-
77% - 80% (not including 80%)	C+
etc.	

Grades will be calculated by weighing the following work as described here:

Reviews/Participation	5%
Average of Lab Projects Scores	20%
Midterm Exam	15%
Midterm Project	10%
Final Exam	25%
ERP Sim Game	
Sim Game Analysis 1	2.5%
Sim Game Final Analysis	5%
Sim Game Quiz	7.5%
Game Performance	5%
Peer Evaluation	5%
	<u>100%</u>

### 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:

Excerpt taken from *SCampus Student Guidebook*:

*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 I encourage working together, all work claimed as yours must in fact be of your own effort. Students who plagiarize the work of other students or provide material for another student to copy, will receive zero points and **will be referred to** the Student Judicial Affairs and Community Standards (SJACS) board for further action. If SJACS determines the student violated the ethics codes, **the student will receive an F** in the course as suggested by the University. This is non-negotiable!!

The School of Engineering adheres to the University's policies and procedures governing academic integrity as described in SCampus. Students are expected to be aware of and to observe the academic integrity standards described in SCampus, and to expect those standards to be enforced in this course.

**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>

Additional excerpts taken from *SCampus Student Guidebook, 2012-13*:

§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.**