ISE583 - Enterprise Wide Information Systems

Instructor: Richard W. Vawter

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Zoom Office: https://usc.zoom.us/j/92533897852

Office Hours: M/W 10:00 - 11:00 am
                            12:00 - 1:00 pm *(except on 1st Wed. of each month)*
                   T/Th. 10:00 - 11:00 am

Class Web Page: http://courses.uscden.net/

Teaching Assistant: Akash Sankaran, akashsan@usc.edu

ISE 583, Fall 2020
Location: On-line[1]
T/Th 2:00-3:20 p.m.
[1] Refer to class Website for daily WebEx links

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. 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:

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 ebooks and account will be available for purchase online a week prior to the start of the semester. Cost $50 CAD payable online by credit card. You will receive an e-mail from HEC inviting you to set up your account for the simulation games. The first game will be played during the second week of the semester. If you wish to participate, you will have to have purchased your account by then. Participation in the second game at the end of the semester is required however.

Online Class Setting, WebEx Etiquette
- Each class will be conducted "Live" using WebEx software.
- You can access your live class by clicking on the "Virtual Meetings" link located in the D2L main menu of our course homepage.
- Your microphone will initially be muted. When you want to talk, simply un-mute yourself by pressing and holding down your space bar. When you release your space bar, you will continue to be muted.
- Your video webcam will be enabled. Please be sure your name on your video is correct. If you are unable to keep your camera on during the synchronous WebEx session, contact me prior to the class session to discuss expectations and accommodations that might be required.
- Later in the day following class, the recording of the WebEx session will be updated to that week's D2L module.

Required Software:
- SAP is the leading vendor of Enterprise Resource Planning Systems in the world. USC Viterbi has had an Academic Alliance with SAP University Alliances Program for the past 20 years. Several Viterbi ISE and ITP courses utilize the SAP system as a tool and platform for class Homework.
- You will receive instructions via the class web site on downloading and configuring the software (SAP GUI for both Windows and MAC) to connect to the SAP S/4 HANA system so you can work from your personal computer.
- You will also need Microsoft Excel for analyzing the data from the ERP Simulation Games.

Assignment Policies
- The Assignments dropbox in 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 assignment and your assignment will be considered late.
- **No late assignments will be accepted for credit**. **No excuses!** So, <u>please</u> turn in your assignments at the beginning of lecture on the dates indicated in the syllabus!
- **No late Midterm Project will be accepted for credit either**.
- The **self and team evaluations must be submitted before midnight Tuesday evening, Nov. 24<u>th</u>** in order to receive credit. Again, no excuses!

Discussion Board: To aid in completing the homework assignments, follow these steps:
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. **Students are encouraged to use the Discussion Board to collaborate and help each other solve problems on the homework assignments.**
3. If you cannot solve the problems by performing the first two steps then you're welcome to contact the TA or see me during my Zoom office hours for assistance. Upon finding the solution, you will then be required to post the problem/solution on the Discussion Board for others to view.

Weekly Reviews
- After each week's topic, you will be required to take a short multiple-choice *quiz* on-line reviewing the material just presented.
- You may take the reviews as many times as you wish. Your highest score will be recorded.
- Failure to complete a review before the first class of the following week will result in a score of "0" for that review!
- Points from your reviews will be totaled at the end of the semester and account for 5% of your class grade.

Simulation Games:
- Student teams will be formed during the semester to play the ERP Simulation Games.
- The first ERP Simulation Game (the Logistics game) will be played during the second week. The purpose of this game is to introduce you to the role ERP systems play in business. (And, of course, the other purpose is to have fun!)
- The second ERP Simulation Game (the Manufacturing game) will be played during the last third of the semester.
- The games can be played in real time remotely by off-campus students by using the GUI.
- **Participation in the <u>second</u> game is mandatory for all students**. If you have a conflict with other commitments on game days, please reconsider your enrollment in this course.

Examinations: Exams cover material from the reading assignments, lectures, and lab assignments. 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 are not considered to be cumulative; however, knowledge and understanding of the material presented in the early part of the semester will be expected.

| Midterm: | Tuesday, | Sept. 29, | 2:00-3:20 p.m. | On-line |
| Final Exam: | Thursday, | Dec. 3, | 2:00-4:00 p.m. | On-line |

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).

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.	

The grades will be calculated by weighing the following work as listed below:

Weekly Reviews	5%	
Average of Assignment Scores	20%	
Midterm Exam	15%	
Midterm Project	10%	
ERP Sim Game		
Practice Game Performance	5%	
Practice Game Analysis	5%	
Extended Game Performance	10%	30%
Sim Game Final Analysis	5%	
Peer Evaluation	5%	
Final Exam	20%	
	100%	

The Final letter grade is based strictly on the total percentage earned. NO EXCEPTIONS! In addition, no extra credit assignments will be offered.

Students with Disabilities - *(213) 740-0776*

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 TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. - 2:00 p.m., Monday through Friday.   http://dsp.usc.edu

Incomplete and Missing Grades

A grade of Incomplete (IN) "is assigned when work is no completed because of documented illness or other 'emergency' occurring after the twelfth week of the semester (or 12th week equivalency for any course scheduled for less than 15 weeks)."

A grade of Missing Grade (MG) "should only be assigned in unique or unusual situations… for those cases in which a student does not complete work for the course before the semester ends. All missing grades must be resolved by the instructor through the Correction of Grade Process. One calendar year is allowed to resolve a MG. If an MG is not resolved [within] one year the grade is changed to [Unofficial Withdrawal] UW and will be calculated into the grade point average as zero grade points.

Please refer to: http://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html

Academic Conduct

Sharing of course materials outside of the learning environment - USC has a policy that prohibits sharing of any synchronous and asynchronous course content outside of the learning environment. SCampus Section 11.12(B):

Distribution or use of notes or recordings based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study is a violation of the USC Student Conduct Code. This includes, but is not limited to, providing materials for distribution by services publishing class notes.

Plagiarism – is a serious academic offense with serious consequences

Presenting someone else's ideas as your own, either verbatim or recast in your own words.

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!!

Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, "Behavior Violating University Standards" https://policy.usc.edu/scampus-part-b.

Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct

Support Systems:

Counseling and Mental Health *- (213) 740-9355 – 24/7 on call*
https://studenthealth.usc.edu/counseling
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline *- 1 (800) 273-8255 – 24/7 on call*
http://suicidepreventionlifeline.org
Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) *- (213) 740-9355(WELL), press "0" after hours – 24/7 on call*
https://studenthealth.usc.edu/sexual-assault
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED) *- (213) 740-5086 | Title IX – (213) 821-8298*
https://equity.usc.edu, http://titleix.usc.edu
Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment *- (213) 740-5086 or (213) 821-8298*
https://usc-advocate.symplicity.com/care_report
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity |Title IX for appropriate investigation, supportive measures, and response.

USC Campus Support and Intervention *- (213) 821-4710*
https://campussupport.usc.edu
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101
https://diversity.usc.edu
Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call
http://dps.usc.edu, http://emergency.usc.edu
Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call
http://dps.usc.edu
Non-emergency assistance or information.

> Assignments, lectures, grades, discussion and all other course materials will be posted on D2L (http://courses.uscden.net/). Please check the class website regularly.

Class Schedule:

Class	Topic	Reading Assignment	Assignment
Week 1. Aug. 25 Aug. 27	Overview • Course Overview • Overview of ERP Systems & Functionality	Magal: Chapters 1 and 2	**Assignment #1** – The ERP Environment, due Tues., Sept. 1st before class. **Review** of ERP Environment, due Tues., Sept. 1st before class.
Week 2. Sept. 1 Sept. 3	Intro to Accounting • Financial Accounting • Managerial Accounting	Magal: Chapter 3	**Assignment #2** – Accounting, due next Tues., before class. **Review** of Accounting, due next Tues., before class.
Week 3. Sept. 8 Sept. 10	Demand Planning, MRP • Master Data & Forecasts • MRP & The Planning Process	Magal: Ch 8	**Assignment #3** – Demand Planning, due next Tues., before class. **Review** of Planning, due next Tues., before class.

Class	Topic	Reading Assignment	Assignment
Week 4. Sept. 15 Sept. 17	The Procurement Process • Organizational Elements and Master Data • The Business Process and Financials	Magal: Ch 4	**Assignment #4** – Procurement, due next Tues, before class. **Review** of Procurement, due next Tues., before class.
Week 5. Sept. 22 Sept. 24	Production • Bill of Materials, Routing Documents & Work Centers • The Production Process	Magal: Ch 6	**Assignment #5** – Production, due next **Monday**, before 5:00 pm. **Review** of Production due next **Monday**, before 5:00 pm.
Week 6. Sept. 29 Oct. 1	**Midterm Exam** • No Class today. Work on your Midterm Proj.	--	**Midterm Project**, due next Tues., before class.
Week 7. Oct. 6 Oct. 8	Materials Management • Inventory Management • Warehouse Management	Magal: Ch 7	**Assignment #6** – Material Mgmt, due next Tues., before class. **Review** of Material Mgmt due next Tues., before class.
Week 8. Oct. 13 Oct. 15	The Sales Process • The Sales Process • Wrap up the Sales process	Magal: Ch 5	**Assignment #7** – Sales, due next Tues, before class. **Review** of Sales due next Tues., before class.
Week 9. Oct. 20 Oct. 22	The ERP Simulation Game • Overview of the ERP Sim Game • Continue w/ discussion & preparation	Reference: ERPSim Participant Guide Manufacturing Game	Live (online or on premise participation is mandatory).
Week 10. Oct. 27 Oct. 29	ERP Sim – Practice Game • Practice Game, Round 1 • Practice Game, Round 2	Reference: ERPSim Participant Guide Mfg Game	Live (online or on premise participation is mandatory).

Class	Topic	Reading Assignment	Assignment
Week 11. Nov. 3 Nov. 5	Practice Game (cont.) • Practice Game, Rounds 3 & 4. • Analyze resulting data from Practice game and discuss additional business strategies	Reference: ERPSim Participant Guide Manufacturing Game	Live (online or on premise participation is mandatory) **SIM Analysis 1** – Practice Sim Game Analysis, due next Tuesday before class.
Week 12. Nov. 10 Nov. 12	ERP Sim – Extended Game • Extended Game, R1-R3 • Extended Game, R4-R6	Reference: ERPSim Participant Guide Mfg Game	Live (online or on premise participation is mandatory).
Week 13. Nov. 17 Nov. 19	Extended Game (cont.) • Extended Game, R7-R9 • Extended Game, R10-12	Reference: ERPSim Participant Guide Mfg Game	**SIM Analysis 2** – due Tuesday Nov. 24th before 11:59 pm. **Team Evals** due Nov. 24th before 11:59 pm. **Game Review** due Nov. 24th before 11:59 pm.
Week 14. Nov. 24	Course Wrap-up • Discuss Extended Game results and winning strategies.	--	SIM Analysis 2, Team Evals, and Game Review due tonight before 11:59 pm.
Week 15. Dec. 3	**Final Exam** – 2:00-4:00 pm		