

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 managing the Information Systems (IS) function. During the semester, homework will be assigned that afford the student the opportunity to work through many real-life business situations using the SAP S/4HANA 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 marketplace.

- Objectives** 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
 - Materials Planning
 - 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 (e.g. MRP)
 - Report on the reasons for the success (or failure) of their production and sales strategy

Instructor Mike S. Lee, mikelee@usc.edu
Applied Analytics | Enterprise Systems
Information Technology Program | Industrial & Systems Engineering
Viterbi School of Engineering

Professor Office Hours See <http://bit.ly/professorlee>

Lecture 5pm – 6:20pm PT, MW

Lecture Room OHE 100B & ONLINE

Teaching Assistant Pat Lertsakulcharoen, lertsaku@usc.edu

TA Office Hours See <http://bit.ly/professorlee>

Course Website courses.uscden.net (*Desire to Learn D2L aka Brightspace*)
You will access all live lectures, lecture notes, assignments, discussions and all other course related content through DEN Desire to Learn (D2L) course management system. *This system is different than the USC Blackboard system and requires separate login.*

Simulation Game An ERPSimulation Game will be played during the semester at various times during lecture. Game will be played (live) remotely by all students. Participation in the game is **mandatory** for all students. If you have a conflict with your other commitments on game days, please reconsider your enrollment in this course. Refer to the Lecture schedule in this syllabus for game days.

Textbooks

- ERP Simulation Game: *Participant's Manual* (ebook) will be available for purchase online (cost \$50 CAD payable online by credit card, details to be announced before the ERP Simulations lectures)

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 21 years. Several Viterbi ISE and ITP courses utilize the SAP system as a tool and platform for class Homework.
- You will also need Microsoft Excel for analyzing the data from the ERPSim game.
- You can access SAP and Excel by installing on your computer or through Viterbi Virtual Lab. Instructions will be provided in class and on the Course Website.

Grading The weight of graded material during the semester is listed below.

Fundamentals: Enterprise Systems

Homework	25%
Exam I	25%

Application: ERPSim Game

Intro Game Analysis	5%
Extended Game Performance (team)	5%
Extended Game Analysis (team)	10%
Peer Evaluation	5%
Exam II	25%
Total	100%

Final letter grade is based strictly on total percentage earned and the distribution curve of the class. NO EXCEPTIONS! No extra credit assignments will be offered.

Discussion Board

To get help on homework, follow these simple steps

- Read the homework instructions carefully
- Review the “Discussion Board” section of the DEN class website’s forum for other student questions and comments or post a question yourself to begin the forum.
- If you cannot find an answer above, attend TA office hours

Policies

- No late homework assignments will be accepted.
- No make-up exams (except for medical or family emergencies) will be offered

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 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.

Policy on Religious Holidays

University policy grants students excused absences from class for observance of religious holy days. Students should contact instructor IN ADVANCE to request such an excused absence. The student will be given an opportunity to make up work missed because of religious observance.

Students are advised to scan their syllabi at the beginning of each course to detect potential conflicts with their religious observances. Please note that this applies only to the sort of holy day that necessitates absence from class and/or whose religious requirements clearly conflict with aspects of academic performance. Please refer to the Holy Days Calendar <https://orl.usc.edu/life/calendar/>

Incomplete and Missing Grades

Excerpts for this section have been taken from the University Grading Handbook, located at <https://arr.usc.edu/services/grades/gradinghandbook/>. Please see the link for more details on this and any other grading concerns.

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 a zero grade points.

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).”

Course Schedule			
Week	Date	Lecture Topic(s)	Assignment Dates (See course website for due dates)
1	8/23	Course Overview & Student Intros	
	8/25	Enterprises, CIO, and How Decisions Are Made	
2	8/30	Introduction to Enterprise Systems	HW1: ERP Environment
	9/1	Accounting: Financial Accounting	HW2: Accounting
3	9/6	NO CLASS – LABOR DAY	
	9/8	Accounting: Managerial Accounting	
4	9/13	Sales Process	HW3: Sales
	9/15	Sales Process	
5	9/20	Procurement Process	HW4: Procurement
	9/22	Procurement Process	
6	9/27	Materials Management	HW5: Materials Management
	9/29	Materials Management	
7	10/4	Production Process	HW6: Production
	10/6	Production Process	
8	10/11	Discussion / Lab	
	10/13	Exam I Review	
9	10/18	Exam I (online w/in a windows of days)	
	10/20	ERP Simulation Game Introduction	Reading: ERPSim Website
10	10/25	ERP Sim – Intro Game – Round 1*	
	10/27	ERP Sim – Intro Game – Round 2, 3*	ERPSIM HW: Intro Game Analysis
11	11/1	ERP Sim – Extended Game – Lecture	Reading: ERPSim Website
	11/3	ERP Sim – Extended Game – Round 1*	
12	11/8	ERP Sim – Extended Game – Round 2, 3*	
	11/10	ERP Sim – Extended Game – Round 4, 5, 6*	
13	11/15	ERP Sim – Extended Game – Round 7, 8, 9*	
	11/17	ERP Sim – Extended Game – Round 10, 11, 12*	Team Presentations (video) HW: Extended Game Analysis HW: Peer Evaluation
14	11/22	Presentations / Special Topic	
	11/24	NO CLASS - THANKSGIVING	
15	11/29	Exam II Review	
	12/1	Course Wrap Up Exam II (online w/in a windows of days)	

* Live (online or on-premises) participation is mandatory.

Statement on Academic Conduct and Support Systems

Academic Conduct

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. 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, <https://policy.usc.edu/research-and-scholarship-misconduct/>

Support Systems

Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. <https://engemannshc.usc.edu/counseling/>

National Suicide Prevention Lifeline - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <http://www.suicidepreventionlifeline.org>

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. <https://studenthealth.usc.edu/sexual-assault/>

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <http://sarc.usc.edu/>

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. <https://equity.usc.edu/>

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. <https://studentaffairs.usc.edu/bias-assessment-response-support/>

The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. <http://dsp.usc.edu>

Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. <https://studentaffairs.usc.edu/ssa/>

Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. <https://diversity.usc.edu/>

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, <http://emergency.usc.edu>

USC Department of Public Safety – 213-740-4321 (UPC) and 323-442-1000 (HSC) for 24-hour emergency assistance or to report a crime.

Provides overall safety to USC community. <http://dps.usc.edu>