Enterprise Resource Planning, Design, and Implementation

Instructor: Richard W. Vawter
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Phone: (213) 740-9541

Office Hours: Tues. 11:00 - 1:00 p.m.
Wed. 10:00 - 12:00 p.m.
Thurs. 11:00 - 1:00 p.m.
or by appointment

Class Web Page: https://blackboard.usc.edu/
or
http://www-bcf.usc.edu/~vawter/classes.html

Course Description:

This course takes an in-depth look at the process and requirements necessary to implement an Enterprise Resource Planning System (ERP) for an organization. The Accelerated SAP method (as outlined by the ERP tool SAP) will be followed throughout the semester. Students will first be grouped into small project teams. Each team will be responsible for setting up a Windows Server system and monitoring that server system during the semester. The teams will then implement onto the servers an ERP system used for coordinating an organization's activities. The final tasks performed by the teams will be the transportation of data from a case company's legacy system into the newly implemented ERP system and the configuration of that ERP system to model the case company's Customer Order process.

Suggested Textbooks:


All other necessary material will be provided to you in class.

Class Schedule:

<table>
<thead>
<tr>
<th>Class</th>
<th>Topic</th>
<th>Reading Assignment</th>
<th>Lab Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Jan. 14</td>
<td>Course Overview Review: The Sales (Fulfillment) process</td>
<td>Class notes: Overview of the Sales Process</td>
<td>Assignment #1 – The Sales process. Due Jan. 21, before 5:00 pm.</td>
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• Windows 2003 Install.  
• Print Server set up. | Begin setting up your server.  
Assignment #2 – ECC Installation. Due Wednesday, Feb. 17, before 5:00 pm. |
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| 3. Jan. 28 | Setting up RAID Arrays, Installing the DBMS | Online documents:  
  - Disk RAID Arrays  
  - Distribution Worksheet  
  - Installing Oracle’s DBMS | Continue w/ Assignmnt #2 Install the Oracle Db                                   |
| 4. Feb. 4  | Installing the ECC Instance                | Online documents:  
  - Installing the ECC Central Instance | Continue w/ Assignmnt #2 Install the ECC Instance.                                |
| 5. Feb. 11 | Post Implementation Procedures            | Online documents:  
  - Installing the SAP GUI  
  - Configuring TMS  
  - Setting Profile Files | Continue w/ Assignmnt #2  
  - Check your ECC System and begin post installation procedures. Due **Wednesday**, Feb. 18, before 5:00 pm. |
| 6. Feb. 18 | **Exam 1**                                 |                                                                                  | No assignment this week                                                        |
| 7. Feb. 25 | Continue Post Installation by updating kernel & loading patches | Online documents:  
  - Updating the Kernel  
  - Installing Patches | Update the kernel and load the necessary patches.  
  - **Assignment #3** – Updating the ECC System. Due March 3, before 5:00 pm. |
| 8. Mar. 3  | System Monitoring and Performance tools.   | Class notes: System Monitoring  
  - List of Transactions for Daily Check  
  - Performance Roadmap  
  - SAPDBA tool  
  - Local Client Copy | Local Client Copy of the administrative client.  
  - **Assignment #4** – Client Copy Methods. Due **Wed.**, Mar. 23, before 5.  
  - **Assignment #5** – System Monitoring. Due Mar. 10, before 5:00 pm. |
  - RFC Client Copy | Remote Client Copy  
  - **Assignment #6** – System Administration. Due **Wed** Mar. 24, before 5:00 pm. |
| Mar. 14-20 |                                             |                                                                                  | **Spring Recess**                                                             |
| 10. Mar. 24| **Exam 2**                                 |                                                                                  | In class after the exam, secure your system as explained in Assignmnt 5          |
| 11. Mar. 31| **Configuration and the IMG**              | Class notes: Configuration  
  - Configuring your new Client | Configure your new client based on case company's requirements.  
  - Assignment #7 – Configuration Due Apr. 14, before 5 pm. |
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<tr>
<td>12. Apr. 7</td>
<td>Configuration (cont.)</td>
<td>Handout: <em>Testing the Client Configuration for the Sales process</em></td>
<td>Continue w/ Assignmnt #7 Test your new client by completing a typical Sales Order process.</td>
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<tr>
<td>13. Apr. 14</td>
<td>Performing Data Transfer</td>
<td>Class notes on data transfer strategies.</td>
<td>Project #8 – Transferring Legacy Data to your new system. Due Apr. 21 before 5:00 pm.</td>
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<tr>
<td>14. Apr. 21</td>
<td>Preparation to Go Live</td>
<td>Handout: <em>Adapt Initial Screen</em></td>
<td>Final Preparation to go live. (Run Assignmnt #1)</td>
</tr>
<tr>
<td>15. Apr. 28</td>
<td>Course Review</td>
<td>GO LIVE !</td>
<td>Self-Peer Evaluations Final system test.</td>
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**Lab Projects:**
- In the second week of class, you will be grouped into teams of four to set up and implement an SAP ECC system.
- Your team will be assigned a server that you will be responsible for during the semester. At the end of the semester, your team’s ECC system will be tested to verify its integrity and ability to complete a standard sales process, including creating a delivery document, an invoice, and collecting/recording payment for the order.
- During the semester, projects will be assigned to provide you with the practical information needed to guide you through the implementation process.
- Some of the assignments are to be worked on individually while others are to be worked on as a team. Each assignment will explain how it is to be completed.
- It is your responsibility (or in some cases, your team's responsibility) to submit the lab assignments to the class blackboard assignment’s page before the beginning of lecture on the dates indicated on the class schedule. **You will not have time to complete the assignment during class on the date the assignment is due!**
- When you submit your assignment, you are to verify that your document is in the class “assignment box” and to double-click on the file to open it up. If you can’t see or open your document, then neither can I or the grader!
- **Failure to correctly submit assignments 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.

**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. Your assignment will therefore be considered late at this time.
- **Late assignments will automatically have 50% of the possible points deducted prior to grading.** No excuses! So, please turn in your assignments on time or simply submit what you have completed.
- **No assignments will be accepted after 2 weeks** beyond the project’s original due date or after the last day of the semester (April 29th).
Final System: Each team’s system will be checked on the last day of class. The team’s system will be tested for integrity, security, configuration and the ability to perform all transactions necessary in the Sales process. A check list will be provided to each team a week prior to “going live”.

Examinations: There will be two exams plus a final exam covering material from the class notes, lectures, and lab assignments. They will be of the form: multiple choice, short answer, and short problem solving. The exams will be both closed book and closed notes. The exams will include material presented up to the date of the exam. The “Final” exam will include material presented during the entire semester, but will be weighted more heavily on information presented during the last third of the semester.

- Exam 1: Thursday, Feb. 18, 5:00-6:00 p.m. KAP 160
- Exam 2: Thursday, Mar. 24, 5:00-6:00 p.m. KAP 160
- Final Exam: Thursday, May 5, 4:30-6:30 p.m. KAP 160

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 extra credit assignments be offered.

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

The weighted average of your work will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
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<tbody>
<tr>
<td>Average of all Lab Projects</td>
<td>20%</td>
</tr>
<tr>
<td>Final System Check</td>
<td>25%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>10%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Inner-team Evals</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
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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