ITP454
Enterprise Resource Planning,
Design, and Implementation

Instructor: Richard W. Vawter
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E-Mail: vawter@usc.edu
Phone: (213) 740-9541

Office Hours: Tues. 11:00 - 12:00 p.m.
   Wed. 10:00 - 12:00 p.m.
   Thurs. 11:00 - 12:00 p.m.
   3:30 - 4:30 p.m.

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>Class Assignment</th>
<th>Lab Assignment</th>
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</thead>
<tbody>
<tr>
<td>1. Jan. 15</td>
<td>Course Overview Review: The Sales (Fulfillment) process</td>
<td>Class notes on the Sales process</td>
<td>Project #1 – The Sales process. Due Jan. 22, before 5:00 pm.</td>
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<td>3. Jan. 29</td>
<td>Setting up RAID Arrays Installing the DBMS</td>
<td>Continue with the R/3 Implementation Guide.</td>
<td>Continue w/ Project #2. Set up Oracle Db</td>
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<td>4. Feb. 5</td>
<td>Installing the R/3 System</td>
<td>Continue with the R/3 Implementation Guide.</td>
<td>Continue w/ Project #2. Load R/3 software</td>
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<tr>
<td>5. Feb. 12</td>
<td>Post Implementation Procedures</td>
<td>Handouts: • Installing the SAP GUI&lt;br&gt;• Configuring TMS&lt;br&gt;• Setting Profile Files&lt;br&gt;• Updating the Kernel&lt;br&gt;• Installing Patches</td>
<td>Continue w/ Project #2. Check your R/3 System and load updates. Due Wednesday, Feb. 18, before 5:00 pm.</td>
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<td>7. Feb. 26</td>
<td>System Monitoring and Performance tools. Local Client Copy.</td>
<td>Class notes: System Monitoring Handouts: • List of Transactions for Daily Check&lt;br&gt;• Performance Roadmap&lt;br&gt;• SAPDBA tool&lt;br&gt;• PCC Install Prelim</td>
<td>Continue w/ Project #3. <strong>Project #4</strong> – System Monitoring. Due Mar. 5, before 5:00 pm.</td>
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<td>8. Mar. 5</td>
<td>System Administration and Security Issues. Remote Client Copy, Importing Best Practices.</td>
<td>Class notes: System Administration Handouts: • RFC Client Copy&lt;br&gt;• Pre-BP Install&lt;br&gt;• J00, &amp; J01 BP Guides</td>
<td>Continue w/ Project #3. <strong>Project #5</strong> – System Administration. Due Wed Mar. 11, before 5:00 pm.</td>
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<td>9. Mar. 12</td>
<td><strong>Exam 2</strong></td>
<td>In class after the exam, complete BP Installation</td>
<td>No assignment this week</td>
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<td>Mar. 16-21</td>
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<td><strong>Spring Recess</strong></td>
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<td>10. Mar. 26</td>
<td>Configuration and the IMG</td>
<td>Class notes: Configuration Handouts: • Post BP Installation Configuration Config. Addendum</td>
<td>Begin configuring the BP client based on the case company's requirements. <strong>Project #6</strong> – Configuration Due Apr. 16, before 5 pm.</td>
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<td>11. Apr. 2</td>
<td>Configuration (cont.)</td>
<td>Handout: • Testing the Client Configuration for the Sales process</td>
<td>Continue w/ Project #6. Test the BP client by completing a Customer Order.</td>
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<tr>
<td>12. Apr. 9</td>
<td><strong>No class tonight</strong></td>
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<td>Topic</td>
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<td>13. Apr. 16</td>
<td>Performing Data Transfer</td>
<td>Class notes on data transfer strategies. Handout: <em>Data Transfer Made Easy</em></td>
<td><em>Project #7 – Transferring Legacy Data to your new system. Due Apr. 23 before 5:00 pm.</em></td>
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<td>14. Apr. 23</td>
<td>Preparation to Go Live</td>
<td>Handout: <em>Adapt Initial Screen</em></td>
<td><em>Final Preparation to go live. (Run Project #1)</em></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 R/3 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 system will be tested to verify its integrity and ability to complete a standard customer order, including creating a delivery document, an invoice, and collecting/recordings 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 projects are to be worked on individually while other projects are to be worked on as a team. Each project will explain how it is to be completed.
- It is **your** responsibility (or in some cases, your team's responsibility) to submit the lab projects 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 project during class on the date the project is due!**
  - You are to only turn in the “Answer sheet” and “Summary” portion of the project write-up as one document.
  - 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.

**Late Projects:**
- The “Assignments” section of the class web site “closes” after the due date and time and is replaced by the answer key and you will no longer be able to submit your project. Your project will be considered late at this time.
- **Late projects will automatically have 50% of the possible points deducted prior to grading.** No excuses! So, please turn in your projects on time or simply submit what you have completed.
- **No projects will be accepted after 2 weeks** beyond the project’s original due date or after the last day of the semester (May 1st).
Implementation: Each team is responsible for putting together a notebook, the purpose of which would be to aid in the installation of an R/3 System upon a Windows - Oracle platform. At minimum, the notebook should contain:

- Steps in setting up a Windows server including issues & decisions made.
- Steps in implementing the R/3 System including problems encountered and the appropriate release notes.
- Notes on administering and monitoring the R/3 system.
- Information on installing a pre-configured, Best Practice, client.
- Notes regarding the required configuration of the BP client.
- Notes on transferring data from a legacy system to your R/3 System.

Additional items that should be included in the notebook will be mentioned in class throughout the semester.

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 customer order management 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 projects. 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. 19, 5:00-6:00 p.m. KAP 267
- Exam 2: Thursday, Mar. 12, 5:00-6:00 p.m. KAP 267
- Final Exam: Thursday, May 7, 4:30-6:30 p.m. KAP 267

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 will be offered.

<table>
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<tr>
<th>Percentage Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>94% and above</td>
<td>A</td>
</tr>
<tr>
<td>90% - 94%</td>
<td>A-</td>
</tr>
<tr>
<td>87% - 90%</td>
<td>B+</td>
</tr>
<tr>
<td>83% - 87%</td>
<td>B</td>
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<td>etc.</td>
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The weighted average of your work will be calculated as follows:

- Average of all Lab Projects 20%
- Final System Check 20%
- Exam 1 10%
- Exam 2 15%
- Final Exam 20%
- Lab Notebook 10%
- Inner-team Evals 5%

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:

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