SYSTEMS ENGINEERING DEPARTMENT
SE-464 (Lab) INDUSTRIAL INFORMATION SYSTEMS

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Office Hours: Sat - Tues: 11:00 AM – 12:00 AM (Or By Appointment)

Objective: The objective of this lab is to present and practice basic ERP concepts with the help of hands on training using an ERP software (SAP).

Course Outcomes: At the end of the course the students will be able to perform the following:
1. Define ERP.
2. Define and differentiate between business function and business process.
3. Define the basic architecture and features of SAP.
4. Navigate and perform various tasks through SAP easy access and transaction codes.
5. Define and map procurement process used in SAP
6. Perform transaction related to procurement process such as PO processing, PO monitoring, good receipts, invoice verification etc.
7. Maintain material and vendor master data.
8. Define maintenance structure and task available in SAP and to be able to perform some of the transaction such as creating/following maintenance orders, maintaining task list etc..
9. Write basic SQL statements using (SELECT, WHERE, FROM, GROUP BY, HAVING, DISTINCT, BETWEEN, IN and other aggregate and scalar functions etc).
10. Perform forecasting for products and materials both in SOP and material master modules.

Lab Material: Lab slides, Lab exercise and solutions, Handouts are provided either in print form or electronically through WebCT

Grading:

Attendance	5%
Homework	5%
Discussion	10%
Mid Term	40%
Final	40%

Course Outline:

LAB	Topic	Chapter
LAB 01:	Introduction to basic concepts	
LAB 02:	Introduction to SAP structure (Homework: Cases or paper summary + Discussion on WebCT)	
LAB 03:	SAP Basics (Navigation & key concepts Hands On Experience)	
LAB 04 & 05:	Procurement + Related Exercise	
Lab 06:	Mid Term	
LAB 07:	Master DATA + Related Exercise (Homework needed for Forecasting Lab)	
LAB 08 & LAB 09:	Forecasting in SAP + Related Exercise	
LAB 10:	Plant Maintenance + Related Exercise	
Lab 11:	Introduction to SQL (Databases) + Related Exercise	
Lab 12:	Final Exam	
Lab xx–	Visit to Aramco SAP center or a visit by a SAP consultant	

Caveat: the above information is subjected to changes during the course of the semester e.g. number of quizzes, course content etc.