

Standard Course Outline

I. General Information

- ♦ Course number: IS 482
- ♦ Title: Enterprise Systems
- ♦ Units: 3
- ♦ Prerequisites: IS 301, IS 340, IS 380
- ♦ Course Coordinator: Sophie Lee
- ♦ SCO Prepared by: Sophie Lee
- ♦ Date prepared/revised: October 5, 2012

II. Catalog Description

Introduction to theories and application of enterprise systems. Issues and management of enterprise systems adoption. Understanding and hands-on experience of major business processes in enterprise systems. Enterprise systems configuration and customization with back-end programming language.

Letter grade only (A-F).

III. Curriculum Justification(s)

The field of information systems (IS) – the use of computer technologies to support business operations and decision making – has moved from stand-alone, in-house systems to the concept of enterprise adoption. The complex interaction of data and processes across different business functional areas are modeled and implemented in enterprise resource planning (ERP) software. Major business processes are embedded and often dominated by system vendors. This paradigm shift has created enormous opportunities and challenges to business professionals, both IS and users alike. For the past decade, companies have been overhauling their entire information system to ERP systems, often spending hundreds of millions of dollars. It is imperative for business students to gain an understanding of business process and enterprise system.

This course introduces students the concept of business process and its models and tools. Students will gain an understanding of ERP system through hands-on practice of. Major business processes identified in an enterprise system will be introduced, with a focus on the Sales and Distribution module.

ERP adoption has been and will continue to be one of the major topics in IS development. It is a daunting and costly task, and not all adoptions are successful. ERP adoption issues such as implementation and development, integration with legacy system, and system usability issue will be discussed in this course.

IV. CBA Undergraduate Program Learning Goals:

This course meets the following CBA undergraduate learning goals:

Learning Goal #5. Business Functions

Students will have advanced understanding of business functions in Information Systems, and how an enterprise systems works in the entire organization

Learning Goal #6. Quantitative and Technical Skills

Students will have enhanced knowledge in quantitative and technical skills in enterprise management systems.

V. Course Objectives, Measurable Student Learning Outcomes, Evaluation Instruments, and Instructional Strategies for Skill Development

Upon completion, students will

1. be able to identify and understand major business processes in a business organization,
2. be able to understand current enterprise system landscape,
3. be able to understand essential business process models,
4. have in depth understanding and hands-on experience of the Sales and Distribution module of SAP, including fulfillment, production, and procurement,
5. have an overall understanding of other modules of SAP, such as accounting, financial, customer relationship management (CRM), and business analytics, and
6. have an understanding of the integration and other adoption issues of enterprise systems.

VI. Outline of Subject Matter

Topic 1. History and overview of Enterprise Systems and SAP

Topic 2. Process Modeling

- Flow chart, Data Flow Diagram

Topic 3. Process Modeling

- Activity Diagram, Transition Diagram
- Business Process Management Notations (BPMN)

Topic 4. Enterprise Data Models

Topic 5. Introduction to SAP

- Review of SAP Modules
- Introduction to SAP Sales and Distribution module

Topic 5. SAP Sales Order Process

Topic 6. SAP Purchase Order Process

Topic 7. SAP Configuration:

- Sales and Distribution module (SD)

Topic 8. ABAP Programming 1

- Basic, Navigation, view source code

Topic 9. ABAP Programming 2

- TYPE, Internal table, LOOP AT

Topic 10. ABAP Programming 3

- SAP Database Access and operation

Topic 11. ABAP Programming 4

- Dynamic Programming

VII. Methods of Instruction

This course should be taught by lectures and heavily hands-on. Instructors should build a solid conceptual foundation on how enterprise systems functions, and the concept of business process and flow. Various methods of modeling of an enterprise system and business processes should be emphasized. It is encouraged to use readings, case studies, guest speakers, real life examples so the students can relate to what an enterprise system is. After a student grasps the basic concept of various parts and dynamics in an enterprise, the course should cover the technical portion by hands-on practices of an enterprise system software. Students needs to be able to maneuver in a actual enterprise system, and be able to develop an application using an enterprise system. The conceptual foundation and technical aspects should be BOTH emphasized in this course.

VIII. Extent and Nature of Technology Use

Instructors must assign homework, exercises, and projects that involves hands-on exercises of an enterprise system.

IX. Textbooks

The following is a short list of textbooks that are most likely to be used for this course. Instructors may assign one or more of these and/or include other relevant texts/readings. Instructors may be asked to justify the use of old textbooks, if updated texts are available.

S. Magal and J. Word, **Integrated Business Process with ERP Systems**, Wiley, 2012, ISBN 978-0-470-47844-8.

Horst Keller, **The Official ABAP Reference**, 3rd Ed, SAP PRESS, ISBN-13: 978-1592293766

X. Instructional Policies Requirements

A. Assessment Criteria

Homework

Students will complete individual homework profiling their competence in various subject matters.

Quizzes and Exams

Students will complete quizzes (optional), mid-term exam (required; at least one), and final exam (required).

Projects

Instructors must assign comprehensive course project that requires problem solving and use of enterprise system.

Suggested workload and grading:

Homework	100 pt (10 homeworks @10pt each)
Exam 1	100 pt
Exam 2	100 pt
<u>Project</u>	<u>100 pt</u>
TOTAL	400 pt

B. Required Statement

In compliance with university policy: Final grades will be based on at least three, and preferably four or more, demonstrations of competence. In no case will the grade on any class tests count for more than one-third of the course grade.

C. Attendance, Withdrawal, Late Assignments

Students are expected to attend courses and turn in assignments on time. Specific attendance and late assignment policies are up to each individual instructor's discretion. The withdrawal policy is the same as that of the university.

D. Disabilities

Students with disabilities are responsible for notifying their instructor as early as possible of their needs for an accommodation of a verified disability. A student with a disability is urged to consult with Disabled Student Services as soon as possible in order to identify possible accommodations to enhance academic success.