The University of Texas at Tyler
Bachelor of Science in Computer Information Systems

Syllabus

Course Number:	COSC 4375
Course Title:	Information Systems Design Project
Course Description: An integrated perspective of the problems in today's information systems environment, concentration on contemporary design, methodologies, and considerations unique to users of computers and information systems.	
Pre-requisites:	COSC 3315, COSC 1337/1137 COSC 3385, GENB 3370
Credits:	3
Text(s): John G. Burch, *Systems Analysis, Design, and Implementation* (Boyd & Fraser Publishing Company, ISBN0-87835-818-8)	
Languages Used: (If applicable)	This is not a programming course, but various programming languages are reviewed to demonstrate appropriate designing, coding, and testing procedures. These languages include: • VB.NET • ASP.NET • ADO.NET • Object-oriented COBOL • SQL • VBA
Topics: Systems Development Methodologies and Modeling. Project Management Techniques and Systems Planning. Systems Analysis. General Systems Design and Systems Evaluation. Designing Input/Output, Processing, and Database. Designing Systems Controls and the Technology Platform. Software Development, Design, and Coding. Software Testing, Implementation, and Maintenance.	
Additional Materials:	• On occasion, if some concept or technique is difficult to understand, handouts are provided to enhance and extend material presented in class. Parts of the lecture material include concepts not covered in the textbook, such as computer ethics, specific needs applicable to the business world, quality assurance, and team work.

Evaluation Method: (only items in dark print apply)	
1. Examination/Quiz	**2. Homework**
3. Paper/Report	**4. Computer Program**
5. Project	6. Presentation
7. Class Participation	8. Peer Review

Course Objectives[1]: By the end of this course students are expected to:	
1.	To apply development methodologies, such as SDLC, RAD, and Prototyping. [1,2,4]
2.	To use various modeling tools, such as DFD, ERD, State Transition, and Structure Diagrams. [1,2,3,4]
3.	To create and run JAD sessions. [1,3]
4.	To understand how business process reengineering (BPR) and strategic systems planning interrelate. [1,2,3,4]
5.	To perform systems analysis and use various fact-finding techniques in order to determine user requirements. [1,2,3,4]
6.	To outline general systems design alternatives. [1,2,3,4]
7.	To ascertain the optimum systems design alternative using feasibility, strategic, quality, and financial factors. [1,2,3,4]
8.	To create a detailed, functional systems design, which is the "blueprint" of the systems project. [1,2,3,4]
9.	To design the software that supports the functional systems design and perform structured software design walkthroughs. [1,2,3,4]
10.	To code the program design using proper software engineering procedures. [1,2,5]
11.	To build test plans to verify the accuracy, integrity, maintainability, and extensibility of the software. [1,2]
12.	To implement a working system in a real-world organization using suitable conversion methods. [4]
13.	To employ effective training methods.
14.	To know how to perform systems maintenance and use change management systems (CMS).
15.	To recognize the need to carry out post-implementation reviews.

Relationship to Program Outcomes: (only items in dark print apply)[2]

This course supports the following Computer Information Systems Program Outcomes, which state that our students at the time of graduation are expected to:

1. Be prepared to contribute immediately as information systems professionals. [1-15]

2. Be able to design and implement information systems that satisfy user requirements. [1-15]

3. Demonstrate effective written, visual, and oral communication skills. [1-15]

4. Understand the global context in which computer information systems are practiced including:

- **a. Contemporary issues related to business and technology**
- **b. The impact of computers on society**
- **c. The role of ethics in the practice of information systems profession. [1-15]**

5. Be able to contribute effectively as members of systems development teams. [1-15]

6. Recognize the need to pursue continued learning throughout their professional careers. [1-15]

[2]Numbers in brackets refer to course objective(s) that address the Program Outcome.

Prepared By: John Burch	Date: 11/10/2004
	Revised: