



CSET 124 – System Analysis and Design

Second Semester 2008/2009 (082)

2006/2007 Catalog Description: (2 2 3) CSET 124: This course is an introduction to System Analysis and Design in the Computer Science Engineering & Technology Unit. Software life cycle will be introduced with the understanding of the project life cycle. Students will be trained how to design system and manage a project. **Co-requisites:** CSET 104, CSET 122.

Textbook: Alan Dennis & Haley Wixom, System Analysis and Design, Wiley & sons. (TB)
Laboratory manuals: HBCC, System Analysis and Design, CSET 124 manuals. (LM)
Notes: HBCC, System Analysis and Design, handouts. (HO)
Coordinator: Dr. Lawan Ahmed Muhammad
Instructor: Mr. Athar al-Quraishi

Goals: To understand the fundamental concepts and principles required for system analysis and design activities. Using techniques and tools of structured systems analysis and design methodology for developing computerized business information systems. Generate commonly expected deliverables of systems analysis using a Computer-Aided Software Engineering (CASE) tool. To apply the tools and techniques used in the classroom in a project.

Topics:

1. Course Overview (1 class)
2. Introduction (2 classes)
3. Planning (3 classes)
4. Gathering Information (5 classes)
5. Process Modeling (3 classes)
6. Data Modeling (3 classes)
7. System Design (2 classes)
8. Architectural Design (2 classes)
9. User Interface Design (3 classes)
10. Data Storage Formats (2 classes)
11. Major I & II Exams (2 classes)

Weekly schedule: attached.

Assessment Policy:	Weighting:	Letter Grading Scale:
Lab Work	15%	0% < 60% F
Homework	05%	60 % < 65% D
Class Quizzes	10 %	65% < 70% D+
Major-I exam	15%	70% < 75% C
Major-II exam	15%	75% < 80% C+
Project I & II (Mid & Final lab exam)	10%	80% < 85% B
Final Examination	<u>30%</u>	85% < 90% B+
	100%	90% < 95% A
		95% to 100% A+

Some clustering and adjustment of threshold values may be applied depending on final results statistics of discreet groups.

HBCC Rules and Regulations:

1. **Attendance:** students are expected to attend all meeting of their courses. In the case of any absence, students are responsible for course content during their absence.
2. **Absenteeism:** a record is consistently compiled and updated. If the student has been absent too many times without a valid excuse, he will be excluded from the college.
3. **Smoke free college:** smoking is prohibited in all college facilities.
4. **Behavior:** students who engage in behavior that disrupts the learning environment for others may be subjected to disciplinary action under the KFUPM code.
5. **Exam cheating:** it is not permitted to speak during the exam. Failure to abide by this rule will result in their exam marks being cancelled.
6. **Student IDs:** Students should carry their IDs with them all the time while at the college premises.

Prepared by: ATHAR AL-OURAISHI

Signature : _____

Date: MARCH 05, 2009

Approved by: DR HAMZA MAGHRABY (Dean HBCC)

Signature : _____

Date: _____



Week No.	Contents	Handout No. & Text Ref.	Practical / Supporting Activities	Assessment
1	Course Overview System Development Life Cycle.	TB 2-7	Introduction Introduction to MS Project	
2	Introduction System Development Methodologies.	TB 8-19	Practice on MS Project	HW # 1
3	Planning Feasibility Analysis	TB 25-77	Experiment 1 Project Management	Quiz # 1 <i>HW # 1 Due</i>
4	Planning (continued) Creating Work plans. Staffing the Project.		Experiment 2 Project Planning and Building Plans	
5	Gathering Information System Analysis, Interviewing Job Application Design	TB 85-127	Experiment 3 Planning the Interviews	HW # 2
6	Gathering Information (continued) Questionnaires Observation.	TB 128-139	Experiment 4 Designing and Administering the Questionnaire	Quiz # 2 <i>HW # 2 Due</i>
	Major-I Examination			
7	Gathering Information (continued) Review Process Modeling Dataflow Diagrams	TB 143-182	Experiment 5 Developing Prototypes	
8	Midterm Lab Exam – LAB EXAM 1			
	Process Modeling (continued) Creating Use Cases Creating Dataflow Diagrams		Experiment 6 Software Development Project Management	HW # 3
9	Data Modeling ER Diagrams.	TB 190-207	Experiment 7 Creating Dataflow Diagrams (I)	Quiz # 3 HW # 3 Due
10	Data Modeling (continued) Creating ER Diagrams Balancing ER Diagrams		Experiment 8 Creating Dataflow Diagrams (II)	



11	<u>System Design</u> Design Strategies Logical & Physical Models	TB 216-238	Experiment 9 Creating ER Diagrams (I)	HW # 4
	Major-II Examination			
12	<u>Architectural Design</u> Computing Architectures Infrastructure Design	TB 245-269	Experiment 10 Creating ER Diagrams (II)	Quiz # 4 <i>HW # 4 Due</i>
13	<u>User Interface Design</u> Principles for User Interface Design	TB 275-300	Experiment 11 ER Diagrams and Database Design	
14	<u>User Interface Design (continued)</u> User Interface Design Process Object I/O, I/O with Multiple Objects		Experiment 12 Database Design	HW # 5
15	Final Lab Exam – Lab Exam 2			
	<u>Data Storage Formats</u> Files, Databases, Selecting a Storage Format, Optimizing Data Storage, and Revision	TB 335-363	Experiment 13 User Interface Design	Quiz # 5 <i>HW # 5 Due</i>
16	FINAL EXAMINATION			

EXAMINATION SUMMARY

Examination	Major I	Midterm Lab Exam	Major II	Lab Project Submission	Final Lab Exam	Final Exam
Week No.	6	8	11	14	15	16

Laboratory Software : MS Project 2003, MS Visio 2003
Supporting Software : MS Word, MS Power Point