Syllabus

Course	Course No.& Name	**305407 Special subjects in Information Systems**
	Prerequisite	**305305 Systems Analysis and Design**

Description

This course builds an understanding of human behavior with interactive objects, focusing on how to develop and evaluate interactive software using a human-centered approach. This includes examining the many different type of interactive software, understanding the principles of effective graphical user interface design, evaluating human-centered software and software development and exploring aspects of collaboration and communication as they affect individual and group interaction with software systems.

Course Objectives

This course is an elective that is determined by MIS faculty to contain specialized knowledge useful to most information professionals. The course will provide skills that coordinate those acquired by students in such specialized electives as Systems Analysis & Design and Internet Web Design. Students should be able to:

- identify features which exemplify good interface design practice;
- describe people's information processing abilities and their influence on the design of user-centered interfaces and applications;
- discuss affective computing and the role emotions play in human-computer interaction;
- discuss the system development lifecycle methods and how to work within specific information environments;
- select and apply methodologies appropriate for gathering needed information from potential system users;
- identify interface components and make intelligent decisions about how and why to use different design alternatives; and,
- use appropriate methodologies to test and assess the usability and effectiveness of specific information systems.

Knowledge:

Having successfully completed the module, you will be able to demonstrate knowledge and understanding of:

- how different disciplines (human factors, cognitive psychology, engineering, graphics design, etc.) influence the design of interactive systems
- how user interact (dialogue) with system.

- the classification of input/output devices and techniques
- how to design, prototype and evaluate a user interface

SKILLS:

Having successfully completed the module, you will be able to:

- describe the main concepts (conceptual model, metaphors and paradigms) that influence human-computer interaction
- explain the main theories of cognitions and how these are used when designing interactive systems
- classify the different input/output devises as to their effect on human-computer interaction.
- describe the process of designing for interaction and why a user centred approach is preferred.
- to choose appropriate method of evaluating an interactive system.
- Design a solution to a HCI problem.
- an ability to communicate effectively
- an ability to design and conduct experiments, as well as to analyze and interpret data

Course Outline:

Week/Date	Chapter	Description
1	1	What is Interaction Design
2	2	Understanding and conceptualizing interaction
3	3	Understanding Users
First exam		
4	5	Affective Aspects
	6	Interfaces and interactions
5	7	Data gathering
Second exam		
6	9	The process of interaction design
7	10	Identifying needs and establishing requirements

Assessment Instruments وسائل التقييم	
Examinations	
First Exam	20%
Second Exam	20%
Final Exam	40%
Homework, Quizzes, Assignments and/or group projects	20%

There will be a team project. You are required to work throughout the semester as a group. Each group will choose one interface design task early in the semester and do a series of small assignments to exercise a wide variety of HCI methods as well as to create an end product. Everyone is expected to fully participate in the group work. Throughout the semester there will be informal presentations and discussion on each group's project with the progress made, problems and solutions and with the feedback and evaluation to other groups work. In this sense, class attendance and participation will be an important factor for a good grade.

In addition, there will be a number of individual assignments. Students who turn in assignments late have an unfair advantage over their classmates. Therefore, I will deduct points from any assignment that is handed in late. Cheating in all of its forms is unacceptable. All work submitted in this class must be your own.

Text Book & Supporting Materials المرجع الأساسي والمراجع الإصافية	
Text Book:	
Author (s)	Sharp, Rogers & Preece
Title	Interaction Design: beyond human-computer interaction
Publisher	John Wiley & Sons Ltd.
Edition	2nd, 2007

Lecture Notes
The instructor will make lecture notes available on the blackboard. The notes do not substitute for reading the assigned materials.

Readings and Class Participation
You are responsible for the assigned readings every week. In a professional environment you would be conversing with your colleagues. We expect a similar effort in this class. Class participation and timely completion of the required readings will account for 5% of the total grade.

Attendance
Attendance is expected because class discussions are an important part of mastering the content of the course. If you miss a class, notify the instructors as soon as possible so that no points are deducted from the participation grade. You are responsible for taking notes from your classmates about the class session you miss.