



King Saud University
Applied Medical Sciences College
Quality and Development Unit



Course Syllabus

Course title and code:	Computer Programming in Healthcare (CHS 223)
Department :	Community Health Sciences
Program in which the course is offered:	Health Education (CHHE) and Clinical Laboratory Sciences (CLS)
Credit hours:	2 hours
Total contact hours per semester	30 hours
Level at which this course is offered:	Level 3 / Second Year (CHHE) and Level 5 / Third Year (CLS)
Course prerequisites:	Tech 140
Time:	Sunday 10-12 and Monday 8-10
Location:	Computer lab 19, second floor
College member responsible for the course	Meaad Altwaimi
Contact information:	8052824
Office Number:	195
Phone :	52767
Email:	mattuwaimi@ksu.edu.sa
Website:	
Office hours:	Sunday 8-10, Thursday 8-10
Course Description	CHS 223, Computer programming in health care, is designed to introduce computer technology to health care students by presenting Programming Languages and Program Development, Components inside the System Unit, Databases and Computer Security. Also, the course will cover Statistical Analysis Software, Desktop Publishing Software and Reference Management Software.
Course Objectives	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> -Provide students with basic knowledge and understanding of the use of a computer, and the various hardware and software components of computers as well as their uses in health environment. -Distinguish between the various types of memory found in a computer system and explain the purpose of each -Identify the factors that determine a computer's performance -Identify what is meant by databases and their uses. -Recognise the applications of computer in health care and the effect of medical informatics in health sector -Recognise computer system security risks and describe how a computer can be protected. -Recognise the importance of using referencing system in researches -Learn and apply one of the reference management software such as EndNote program in referencing -Learn and apply one of the publishing software such as InDesign to create work such as posters, flyers and brochures.

Teaching strategies	-Interactive lectures using class discussion and brain storming. -Reading from scientific journals, textbooks and other sources. -Project, guiding and assisting the students during searching a selected topic, preparing seminars and presentation.
Learning Resources	
<u>Required Text (s)</u>	
<ul style="list-style-type: none"> • <u>Essential References</u> 	<ul style="list-style-type: none"> • LaBerta, C. (2012). Computers Are Your Future (12th ed.). USA: Prentice Hall. • Sullivan, F., Wyatt, J. (2006). ABC of Health Informatics. USA: Blackwell publishing Ltd.
<ul style="list-style-type: none"> • <u>Recommended Journals</u> 	<ul style="list-style-type: none"> • The Computer Journal. Available at http://comjnl.oxfordjournals.org/ • Journal of Computer Science and Technology. Available at http://www.springer.com/computer/journal/11390
<ul style="list-style-type: none"> • <u>Electronic Materials and Web Sites</u> 	<ul style="list-style-type: none"> • EndNote website: available at http://endnote.com/ • InDesign website: available at http://www.adobe.com/mena_ar/downloads.html

Topics to be covered

List of topics	Week due	Contact hours
Introduction to the course	1	2
Components Inside the System Unit	10,11	4
Databases	9	2
PC Security	6,7	4
Medical Informatics	8	2
Introduction to referencing	2	2
Application of one of the reference management software (EndNote Program)	3,4,5	6
Application of one of the publishing software (InDesign Program)	12,13,14	6

Schedule of Assessment Tasks for Students During the Semester

Assessment task	Week due	Proportion of Final Assessment
Midterm I	6	20
Midterm II	11	20
Classdiscussion and participation	All weeks	0
Assignment and Presentation	14	20
End Semester Exam	17	40

Required Assignments:

Week	Assignments	Evaluation	Week due
5	InDesign Assignment	15	8

Criteria for evaluation :

- Submitting two softcopies of the design via blackboard; one as InDesign document and the second as PDF file on the due date.
- Fulfilling all the required aspects in the design.
- Well organized and interesting design.
- Well explanation and understanding to what the student used and did to produce the design during the assessment session.

Course rules :

- Class Leader: Name:
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- Duties of the Class leader:

More comments for instructor :