

CHS 223 COURSE SYLLABUS COMPUTER PROGRAMMING IN HEALTHCARE

Instructor: Hala Alhodaib.

Office Hours: Sunday, Tuesday (9:00am – 12:00pm), or by appointment; Please email.

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Time and Location

The course meets Wednesday from 8:00am to 12:00am at Computer Lab.

COURSE DESCRIPTION

CHS 223, Computer Programming in Health Care, is designed to introduce computer technology to health care students by presenting fundamental computer terminology while stressing applications that are important to the delivery of health care. In addition, the laboratory will enhance students' proficiency in the use of Microsoft Office and their understanding of computer use and the management of electronic data in a healthcare environment.

COURSE OBJECTIVES

At the end of this semester, the student should have a clear understanding of how personal computers work. You should be able to identify various hardware and software components of computers as well as their use in Health environment. You will also be able to effectively use the Microsoft Office software package for your work needs.

MATERIALS

There is no textbook for this class. In most cases, lecture notes will be given to you. You may download the notes electronically before class, or print them and make handwritten notes.

Textbooks

There are many sources of help with computer, both on the web and in bookstores:

- Joyce Cox, Joan Preppernau, Steve Lambert, and Curtis Frye. *The 2007 Microsoft Office System Step by Step*. 2007, 2nd Edition. ISBN: 978-0735625310
- Timothy j. O'Leary and Linda I. O'Leary. *Computing Essential*. 2004, 15th Edition. ISBN: 978-0-07-251958-7
- Bill Daley. *Computers Are Your Future*. 2005, 7th Edition. ISBN: 978-0131139701

GRADING

Semester grades are determined according to the following weights:

| Assessment task | Week due | Proportion of Final Assessment |
|----------------------------|--|--------------------------------|
| Attendance & participation | From 1 st to 15 th week | 10 % |
| Practical Evaluation | From 10 th to 15 th week | 10 % |
| Midterm test | 6 th week | 20 % |
| Course Work | 14 th , 15 th | 20 % |
| Final exam | 16 th week | 40 % |

EXAMINATIONS

One midterm test and final. In addition, lab evaluation will be assigned last weeks; students should be prepared every week.

COURSE WORK

Each student will be expected to choose one of the subjects that will be scheduled later and prepare:

1. Patient education materials (Brochures, Pamphlets, Poster, etc).

Grading Policy

Absences on the dates of scheduled tests will result in a lowered grade. Make-up Exams will only be given after **an excused absence**. They must be taken on or before the next class session after the missed exam. Exams taken late will be reduced by 10 percentage points for each day they are overdue. It is the student's responsibility to schedule the make up with the instructor. Failure to do so will result in no credit.

Attendance Policy

Class attendance is required for all lecture and lab classes. Absences will affect the course grade.

TOPICS TO BE COVERED: (as anticipated)

*The topics may be revised at the instructor's discretion.

| List of topics | Week due | Contact hours |
|---|-------------------------------------|---------------|
| Introduction to the Course. | 1 st | 2 |
| Introduction to Information Technology | 2 nd | 2 |
| The Internet, The Web & E-Commerce | 3 rd | ۲ |
| System Software & Application Software | 4 th | 2 |
| The System Unit | 5 th | ۲ |
| Midterm Test | 6 th | 2 |
| Input & Output Devices, Secondary Storage | 7 th | ۲ |
| Communications & Networks | 8 th | ۲ |
| Privacy & Computer Security | 9 th | ۲ |
| Microsoft Word 2007 | 10 th | 2 |
| Microsoft PowerPoint 2007 | 11 th | ۲ |
| Microsoft Excel 2007 | 12 th , 13 th | 4 |
| Microsoft Access 2007 | 14 th , 15 th | ۴ |
| Final Exam | 16 th | 2 |

Lecture (1) **Introduction to Information Technology** - computer definitions, information systems, advantages & disadvantages of using computers, types of computers, computer applications in society, the wireless revolution.

Lecture (2) **The Internet, The Web & E-Commerce** - the Internet, the web, access, email & communication, search tools, e-commerce.

Lecture (3) **System software & Application Software** - operating system, GUI, device drivers, basic application software, specialized application software.

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|--------------------------|--|
| Lecture (4) | System Unit - motherboard, CPU, memory, data representation, coding schemes, expansion slots, I/O ports, system buses, power supply. |
| Lecture(5) | Input & Output Devices, Secondary Storage - keyboard, pointing devices, scanner, image capturing devices, monitor, printers, audio I/O devices, multifunctional devices, hard disks, optical discs, other types of secondary storage. |
| Lecture (6) | Communications & Networks - communication channels, connector devices, data transmission, network types, organizational networks. |
| Lecture(7) | Privacy Computer Security - information security, features of computer security system, security tips, passwords, computer back up, security rights and obligations, computer threats, antivirus software, firewalls, spyware, spam, scams. |
| Lecture (8) | Microsoft Word 2007 - word environment, creating & saving & printing a document, editing and formatting a document, creating and formatting tables, inserting and manipulating pictures. |
| Lecture (9) | Microsoft Power Point 2007 - plan & create a presentation, applying & modifying text & graphics, adding special effects to a presentation. |
| Lectures (10, 11) | Microsoft Excel 2007 - excel basics, creating workbooks, entering and revising data, cell & worksheet formatting, formulas (basic, logical), charts, graphs. |
| Lectures (12,13) | Microsoft Access 2007 - creating tables & relationships, data entry and formatting the file, creating forms & queries & reports, locating specific information (filters and sorts). |

* Students are required to join the course Learning Management System.