University of Macau Department of Computer and Information Science SFTW100 – Computers in Modern Society Syllabus Fall 2011 Part A – Course Outline

Required course in Computer Science

Catalog description:

(3-2) 4 hours credit. Basic notions for an efficient use of computers. General overview of hardware architecture, organization and components; a brief introduction to concepts of system software, data communications, software uses, applications, data processing; the role and use of Internet; the computer's impact on society.

Prerequisites:

• None

Textbook(s) and other required material:

• Peter Norton, Introduction to Computers, 6th edition, McGraw-Hill 2006 (Required)

References:

• None

Major prerequisites by topic:

None

Course objectives*:

- 1. Introduce to students fundamental concept of computers, hardware architecture, Internet use, and data communications. [i, j]
- 2. Lead them to use Internet to search for latest information about computer systems. [i]

Topics covered:

- 1. Introducing Computer Systems
- 2. Internet & Services
- 3. Input Devices
- 4. Output Devices
- 5. Processing Devices
- 6. Storage Devices
- 7. Operating Systems
- 8. Application Software
- 9. Networking
- 10. Security & Protection Issues

Class/laboratory schedule:

One 3-hour lecture per week (14 weeks), 2-hour laboratory for group presentation (5 weeks).

Contribution of course to meet the professional component:

This course introduces to students the fundamental concepts and terminologies of computer system, Internet, and data communication. In addition, this course gets the students prepared to study in the major of computer and information science.

Relationship to CS program objectives and outcomes:

This course primarily contributes to CS program outcomes that develop student abilities to:

(i) a recognition of the need for, and an ability to engage in life-long learning.

(j) a knowledge of contemporary issues.

Relationship to CS program criteria:

Criterion	DS	PF	AL	AR	OS	NC	PL	HC	GV	IS	IM	SP	SE	CN
Scale: 1 (highest) to 4 (lowest)				2								1		

Discrete Structures (DS), Programming Fundamentals (PF), Algorithms and Complexity (AL), Architecture and Organization (AR), Operating Systems (OS), Net-Centric Computing (NC), Programming Languages (PL), Human-Computer Interaction (HC), Graphics and Visual Computing (GV), Intelligent Systems (IS), Information Management (IM), Social and Professional Issues (SP), Software Engineering (SE), Computational Science (CN).

Person who prepared this description:

Chi-man Vong, May 27, 2010.

Part B General Course Information and Policies

Fall 2010

Instructor:	Dr. Chi-man Vong	Office:	N307
Office Hour:	by appointment	Phone:	83974357
Email:	cmvong@umac.mo		

Time/Venue:

Assessment:

Final assessment will be determined on the basis of:

Attendance	5%
Computer Group Presentation I	10%
Computer Group Presentation II	10%
Computer Group Presentation III	10%
Computer Group Presentation IV	10%
Computer Group Presentation V	10%
Final Exam (Written)	45%

Grading Distribution:

Percentage	Final Grade				
100 - 93	А	92 - 88	A-		
87 - 83	B+	87 - 83	В	82 - 78	B-
77 - 73	C+	72 - 68	С	67 - 63	C-
62 - 58	D+	57 - 50	D	49 or below	F

Comment:

The objectives of the lectures and the slides are to explain and to supplement the text material. Students are responsible for studying the text material for fully understanding. Students are encouraged to look at other sources (other texts, etc.) to complement the lectures and the text.

Computer Group Project Policy:

Computer group project is a powerful learning experience and also an effective training to improve interpersonal skill and collaboration, because students in CS will collaborate with others for analysis, design, and computer programming in their future careers; therefore:

- There are 5 computer group presentations.
- The group presentations are related to the topics discussed in lectures. The time for presentation are scheduled during semester and announced through UM Moodle (<u>http://ummoodle.umac.mo</u>)

Note

- Check Moodle (ummoodle.umac.mo) for announcement, project presentation schedule, and lectures. Report any mistake on your grades within one week after posting.
- No make-up exam is given except for CLEAR medical proof.
- Cheating is absolutely prohibited by the university.