HOWARD UNIVERSITY
COLLEGE OF ARTS AND SCIENCES
COMPREHENSIVE SCIENCES
SPRING 2014

COURSE: Computers and Society Lc- Lb   **COURSE NUMBER:** COMP-004-04/05

PROFESSOR: Dr. Anil Jain   **OFFICE:** LKH, B-6

LECTURE ROOM: LKH, B-2   **LAB ROOM:** LKH, B-22

LECTURE DAY(S): M,W   **LABORATORY DAY(S):** M/W

OFFICE TELEPHONE: (202)806-9187   **E-MAIL:** ajain@howard.edu

CONFERENCE HOURS: M,W 4-5 & T,Th 8-9   **FASCIMILE:** (202)806-5786

DEPARTMENT WEB SITE: http://www.comprsci.howard.edu

TEXT: Catherine Laberta "Computers are your Future ", Complete 12th Edition, Prentice Hall, New Jersey, 2012.

OTHER MATERIAL: USB disk.

COURSE RATIONALE:
    Comprehensive Sciences Lecture-Laboratory courses are Life Sciences (COMP-001), Planetary Sciences (COMP-002), Physical Sciences (COMP-003) and Computer Science (COMP-004). These courses are designed among the introductory natural science course offerings. Theses courses are requirements in the general education curricula of the College of Arts and Sciences; The School of Business, Communications, and Education; The Divisions of Nursing and Allied Health; and Programs in the School of Engineering and Architecture. These academic units have determined the necessity of a natural science component in the schedule of courses that students must complete in order to receive a degree from the University.

COURSE OVERVIEW:
        Computers and Society is an introductory course in computer science. Course activities include lectures, laboratory sessions, and discussions. Lecture topics include vocabulary, computer hardware and its operation, operating systems, applications, networks and computer communications, the Internet and the World Wide Web, development of information systems, Artificial Intelligence, Ethics, Security, Privacy, History, and Future directions of computers. Students will explore and discuss how these and other topics affect their lives specifically and society overall.

        Laboratory is equipped with the Dell computer systems on a Local Area Network with the access to Internet. Introductory experience with the general use of a computer, Windows 7 operating system along with the workings of a LAN will be provided. These skills will enable students to troubleshoot the common boot up problems, network connection and security issues. Specific features of applications including Word Processing, Spreadsheet, and Presentation will be introduced using Microsoft Office 2010 suite. The emphasis will be on collaboration, use of existing data sources and formatting for the new electronic medium. Finally, web publishing will be covered from plain HTML to using modern drag and drop tools.

COURSE LABORATORY FEES STATEMENT:

The laboratory fee that is assessed for this course is used to supplement the expenditures for the purchase of supply items that are necessary for the maintenance of the operations of the computers (*i.e.* hardware, software, and peripherals) that are in the laboratory.

Americans with Disabilities Act (ADA) Procedures Statement

Howard University is committed to providing an educational environment that is accessible to all students. In accordance with this commitment, students in need of accommodations due to a disability should contact the Office of the Dean for Special Student Services for verification and determination of reasonable accommodations as soon as possible after admission to the University, or at the beginning of each academic semester. The Dean of the Office for Special Student Services may be reached at 202-238-2420.

COURSE RELATIONSHIP TO OTHER COMPREHENSIVE SCIENCES COURSES:

Computer Science (COMP-004) provides technology information that augments Life sciences (COMP-001), Planetary Sciences (COMP-002), and Physical Science (COMP-003) courses.

COURSE POLICIES:

- Students must attend the lab sessions on their assigned day.
- All the exams contain only short answer type questions.
- Answer to the questions in the exam must be provided in complete sentence form, not in abbreviated, 'telegram" form.
- Students are allowed to use their own notes to take the lab exams.
- Term paper topic, written report, on-line quizzes must be submitted on the Blackboard.
- No late work will be accepted for credit.
- No make-up exam(s) will be given.
- No extra credit work will be given to substitute the required work.
- Regarding policy on cheating, please read "Academic Code of Conduct" published in the H-Book and the student Reference Manual and Directory of Classes.
- All the policies will be enforced without any exceptions.

TERM PAPER:

Students will complete a term paper that will be equivalent of a test. Completion of the term paper is divided into three phases. In phase one, students select a topic of their choice that is pertinent to information technology. Once the selection is made, it must be submitted to the professor by uploading on the Blackboard for feedback and approval by Wednesday, February12. Following three items are required for the topic approval:

(1) Title of the term paper   (2) A brief description   (3) References

Upon the approval of the topic phase two begins in which students develop and complete their research on the approved topic. In the third and final phase, the completed work is presented to the class in the form of an oral report and a written report is submitted to the professor. The oral report is usually 5-7 minutes long. Students will be scheduled for the presentation before Thanksgiving recess. The written report should be at least 5 pages long, 1 ½ line spacing, 12-point font, and 1-inch margins. Written reports are due on Monday, April 7.

GRADING SYSTEM:

Two intra session lecture exams (50 points each)	100 points
Ten on-line quizzes (10 points each)	100 points
Two lab exams (100 points each)	200 points
Term Paper (25+50+25)	100 points
Final Exam (Departmental and Comprehensive)	100 points

Gross Total possible points	600
Drop one of the lowest test score	- 100
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Net Total possible points	500

Net total points earned by the student will determine the course grade. Point ranges for letter grades are outlined below:

GRADE	POINTS NEEDED
A	450 OR ABOVE
B	400 – 449
C	350 – 399
D	300 – 349
F	299 OR BELOW

SIGNIFICANT DATES:

Proposal for the Term paper Topic	Wednesday, February 12
Lecture Exam 1	Wednesday, February 19
Lab Exam 1	M/W, February 24/26
Lecture Exam 2	Wednesday, April 16
Lab Exam 2	M/W, April 14/16
Term Paper Final Report	Monday, April 7

Final examination will be held on Tuesday, April 29 from 12:30 – 2:30. The location will be announced in the class.

HOLIDAYS:

Martin Luther King, Jr.'s Birthday	Monday, January 20
Presidents' Day	Monday, February 17
Spring Recess	March 8 through March 16

OTHER:

Midterm grades, UW, & NR due in EM/records	Thursday, March 6
Last day to withdraw from a course	Friday, April 4
Final Examinations for Prospective Graduates	Wednesday, April 23
Last day of classes	Thursday, April 24

SAMPLE KEYWORDS:

4GL	FIBER OPTICS	OCR
A/D CONVERTER	FILE COMPRESSION	OOP
ADDWARE		
ALU	FIREWALL	OPERATING SYSTEM
ANALOG	FIRMWARE	PARALLEL PORT
ARTIFICIAL INTELLIGENCE	FLAMING	PARALLEL PROCESSING
ASCII	FRAMES	PARITY BIT
ASYNCHRONOUS	FTP	PCMCIA CARD
TRANSMISSION		
AUTORECALCULATION	FUZZY LOGIC	PICOSECOND
BANDWIDTH	GATEWAY	PIXEL
BINARY SYSTEM	GROUPWARE	POP3
BIOS	GUI	PROCEDURAL/NONPROCEDURAL
		LANGUAGES
BLUETOOTH	HACKER	PHISHING
BYTE	HARD COPY	PROTOCOL
CACHE	HEURISTICS	PSU
CAD/CAM	HIGH LEVEL/LOW LEVEL LANGUAGES	RAID
CAI/ITS	HTML	RAM
CLOUD COMPUTING	HTTP	
COAXIALE CABLE	HTTPS	RECORD
COMMUNICATION CHANNEL	INFERENCE ENGINE	REFRESH RATE
COMPILER	INFORMATION SUPERHIGHWAY	RELATIONAL DATABASE
COMPUTER COMPETENCY	INFRARED PORT	RISC
COMPUTER GRAPHICS	INTEGRATED SOFTWARE	ROBOTICS
COMPUTER VIRUS	INTERNET	ROM
COMPUTER VISION	INTERPRETER	SAM
CONTROL UNIT	INTRANET	SECONDARY STOTRAGE
COOKIE	ISAM	SEEK TIME
CPU	LAN	SERIAL PORT
CUI	LSICs/VLSICs	SMTP
		SSID
CYPERPHOBIA	MALWARE	SOFTWARE PIRACY
D/A CONVERTER	METAFILE	SOCIAL ENGINEERING
DAM	MICR	SOURCE CODE
DATA ENCRYPTION	MICROPROCESSOR	SYNCHRONOUS TRANSMISSION
DATABASE	MICROWAVES	SYSTEM UNIT
DBMS	MINI COMPUTER SYSTEM	TCP/IP
DEBUGGING	MIPS	TOPOLOGY
DIGITAL	MIS	TRANSISTOR
DOT MATRIX	MODEM	TURING TEST
DOT PITCH	MULTIMEDIA	TWISTED PAIR WIRE
DSS	MULTITASKING	UNICODE
EBCDIC	MULTITHREADING	URL
ENCAPSULATION	NANOSECOND	USB
ETHERNET	NETIQUETTE	VIRUS
		VPN
		VIRTUALIZATION
ERGONOMICS	NEURAL NETWORKS	WAN
EXPERT SYSTEMS	NIC	WLAN
FAQ	OBJECT CODE	WORD
FAULT TOLERANT SYSTEM	OPEN SOURCE	WYSIWYG