



## SYLLABUS

### CGS 1000 Introduction to Computers and Technology

Term – Spring 2010

**Instructor's Name:**

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**Office Hours (Day, Time, Location):**  
**Saturday 10:55 to 11:55 AM**

**Class Schedule:**  
**Saturday 8:00 – 10:55 AM**

**Course Description:**

Provides students with an introductory overview of the Internet, World Wide Web, impact of computer on society and business, historic development of data processing, basic functions and use of computer hardware, software applications, system software, basic skills in the use of word processing, spreadsheet, database, and presentation system and desktop publishing software applications, basic skills using a Web browser and search engine, and careers in the field of computer science

**Course Objectives:**

1. recognize the value of computer literacy within an individual's personal and career environments
2. identify the components of a computer
3. discuss the role the Internet and WWW serve in today's society
4. describe the categories of computers
5. discuss various computer applications in society
6. recognize the difference between installing and running a computer program
7. determine how the elements of an information system interact
8. define and discuss the representation of data in binary and hexadecimal forms
9. define the roles information systems play in today's business models

10. discuss the history of the Internet and WWW
11. compare and contrast the Internet and WWW
12. describe the various ways to access and connect to the Internet
13. analyze the components of a Web address – URL
14. identify the most common browsers
15. explain the purpose of a Web browser
16. define the purpose of a Web server
17. describe how to identify and define the purpose of a Web page hyperlink
18. define the purpose of a search engine, search text and Web subject directories
19. effectively use a search engine to locate information on the WWW
20. define the term multimedia
21. explain the purpose of a Web portal, Web community, and Web newsgroup
22. define the term graphic and the types of graphic formats used on the Web
23. define the purpose of a plug-in as related to a Web browser
24. define the term ecommerce and the role each of the following play in an ecommerce business model: electronic storefront, shopping cart, online auction, B2B, C2C and C2C
25. define the purpose of the following most popular Internet services: e-mail, FTP, newsgroups, message boards, mailing lists, chat rooms, and instant messaging
26. define the following terms as they relate to e-mail: username, password, email address, address book
27. demonstrate correct email etiquette and knowledge of using attachments
28. describe the difference between uploading and downloading files from the Internet
29. define and discuss the term netiquette as well as identifying appropriate communication behaviors as a user of Internet services
30. explain how to publish a Web site
31. compare and contrast the following categories of software: packaged, custom, shareware, freeware and public-domain
32. define the purpose of application software and system software
33. identify the most common operating systems
34. define the purpose of the following terms related to using an software application: desktop, icon, button, click, double-click, pointer, menu. Command, window, title bar, clip art, format, edit, font, and font size
35. define the general purpose of each of the following types of software applications: word processing, spreadsheet, database, presentation, and desktop publishing
36. demonstrate the basic skills to use the following types of software applications: word processing, spreadsheet, database, presentation and desktop publishing
37. compare and contrast application suite, integrated software application and application service providers
38. demonstrate effective use software application online help
39. define the function of the following terms related to computing: system unit, motherboard, processor, control unit, arithmetic logic unit, machine cycle, registers, system clock, clock speed, heat sink, heat pipe, parallel processing, analog, digital, bit, byte, memory, memory slot, memory module, RAM, Cache, memory cache, kilobyte, megabyte, gigabyte, ROM, firmware, Flash memory, CMOS, access time, expansion slot, adapter card, peripheral, video card, sound card, modem card, network card, plug and play, PC card slot, PC card, port, serial port, parallel port, USB port, USB hub, firewire port, midi port, IrDA port, bus, bay, power supply
40. compare and contrast the terms input and output
41. define the purpose of input and output devices
42. identify various types of input and output computing devices
43. define the terms display device, CRT, LCD
44. discuss the parameters to measure the quality of CRT and LCD display devices
45. discuss the parameters for printer quality
46. differentiate between storage media and storage device
47. describe the characteristics of CD and DVD storage media
48. define the terms reading and writing as related to storage media
49. describe the characteristics of a floppy disk, zip disk, and hard disk

50. discuss the purpose of the following as each relates to operating system functions: booting, cold boot, warm boot, POST, recovery disk (boot disk), user interface, command line interface, menu-driven interface, graphical user interface (GUI), memory management, virtual memory, spooling, and driver
51. define the general purpose of a system software utility programs: file manager, image viewer, uninstaller, disk scanner, disk defragmenter, diagnostic utility, backup utility, antivirus program, personal firewall, file compression,
52. define the term computer network
53. describe the role of the following basic components of a communications network: sending device, receiving device, and communications channel
54. define the following acronyms related to networks: LAN, WAN, MAN, client/server, bandwidth, transmission media,
55. define the term network topology
56. describe the characteristics of the following types of telephone network connections: dial-up, dedicated lines, ISDN, DSL
57. describe the characteristics of the following communication devices as related to a network: dial-up modem, wireless modem, cable modem and wireless access point
58. define the following terms related to databases: character, field, field name, data type, record, primary key, data file, file maintenance, query, report generator, and database administrator
59. discuss the following terms related to computer security risks: computer crime, cybercrime, virus, work, Trojan horse, trusted source, virus definition, quarantine, cracker, hacker, unauthorized access, firewall, online security service, password, username, biometric device, encryption, decryption, surge protector, power surge, uninterruptible power supply (UPS), denial of service attack (Dos attach), digital certificate, secure socket layer (SSL), and digital signature
60. discuss the following areas of computer ethics: unauthorized use of computers and networks, software piracy, information accuracy, intellectual property rights, codes of conduct and information privacy
61. discuss ethics as they may apply in a variety of implementation scenarios such as programming, database design, security, "whistle-blower" activities, etc.
62. discuss the issues related to electronic profiling, cookies, spyware, spam, and e-mail; filtering
63. discuss specific laws related to computers and privacy: 1986 Electronic Communications Privacy Act (ECPA), 1984 and 1994 Computer Fraud and Abuse Acts, 1970 Fair Credit Reporting Acts
64. discuss various health concerns related to the use of computers
65. discuss various careers available for individuals interested in the field of computer science
66. discuss the purpose of computer certifications and the benefits certifications bring to the individual holding the certification and to the potential employer

**Text Book and Materials:**

Technology in Action, 6<sup>th</sup> Edition Complete Alan Evans, Pearson Prentice Hall

**Myitlab.com**

## **Grading System:**

There will be 6 assignments, 5 class activities, 5 Quizzes, 2 Lecture Exams, 2 MS Office Exam, and 1 Project/Presentation.

Assignment = 6 X 5 points = 30 points

Class Activity = 5 X 2 points = 10 points

Quizzes = 5 X 4 points = 20 points

Lecture Exams = 2 X 10 points = 20 points

MS Office Exam = 2 X 5 points = 10 points

Final Project/Presentation = 10 points

**Total = 100 points**

Each assignment will be due in 1 week. Assignments late by one class period will result in deduction of 2 points. Extra Credit (2.5 points each) will be available in MS Office and Final Exams.

## **Final Grading Scale**

**90 – 100 = A**

**80 – 89 = B**

**70 – 79 = C**

**60 – 69 = D**

**59 – Below = F**

## **Academic Dishonesty Policy:**

**Any one handing in someone else's work as their work will receive a credit of '0' points for the assignment. The supplier of the original work will also receive '0' points for the assignment.**

## **Attendance Policy:**

Please go through HCC attendance policy particularly students receiving financial aid. Attendance will be taken during each class & students are encouraged to attend every class. Even though there are no points for attendance, class activities and quizzes carry 2 and 4 points respectively.

## **Instructional Methods (Including Examination Policies):**

I prefer to go with visual presentations & hands on training on MS Office tools.

## **Cell Phone Etiquette:**

Ideally, you would turn the phone off as you enter the classroom. Immediately turn off your ringing cell phone.

## **Microsoft Software Purchases**

Students at HCC have the ability to purchase Microsoft software for heavily discounted prices from retail. Examples of software available through this program include MS Office 2007, Windows Vista, MS Visio, and other related Microsoft products. These software products are the full academic versions and have the same benefits as software purchased off the shelf at a retail store. Students will need to access a website at <http://hccfl.onthehub.com> and will need to provide their HawkMail email address to be properly authenticated. This program requires that students pay for their selected software products with a credit card and the software will be mailed to their home address. Students will be allowed to purchase only one copy of a selected software product.