



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

12. CREATING, EDITING, AND FORMATTING FILES
13. COMMON PRINTING FUNCTIONS
14. FORMATTING TEXT AND DOCUMENTS
15. WORKING WITH TABLES
16. WORKING WITH TEXT AND NUMBERS IN A SPREADSHEET
17. USING FORMULAS, FUNCTIONS, AND CHARTS
18. CREATING AND DELIVERING PRESENTATIONS
19. NETWORK FUNDAMENTALS
20. COMPUTER NETWORKS, TELEPHONE NETWORKS, AND THE INTERNET
21. UNDERSTANDING E-MAIL
22. USING E-MAIL
23. "NETIQUETTE"
24. INFORMATION SOURCES ON THE INTERNET
25. USING A WEB BROWSER
26. SEARCHING THE INTERNET
27. COMPUTERS AT WORK, SCHOOL, AND HOME
28. THE RISKS AND HAZARDS OF USING COMPUTER HARDWARE AND SOFTWARE
29. USING COMPUTERS AND THE INTERNET SAFELY, LEGALLY, ETHICALLY, AND RESPONSIBLY



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

ASSESSMENT:

Please provide a brief description (250 characters maximum) that details how students will be assessed on the course outcomes.

Assessment may include (but is not limited to) written examinations, skills-based examinations, in-class and homework assignments/projects, and presentations.

**** Complete the following only if course is seeking general education status ****

GENERAL EDUCATION Competencies and Skills*:

Please highlight in green font all Competencies/Skills from the list below that apply to this course. In the box to the right of the Competency/Skill, enter all specific learning outcome numbers (i.e. 1.1, 2.7, 5.12) that apply.

1. Read with critical comprehension	
2. Speak and listen effectively	
3. Write clearly and coherently	
4. Think creatively, logically, critically, and reflectively (analyze, synthesize, apply, and evaluate)	
5. Demonstrate and apply literacy in its various forms: (highlight in green ALL that apply) (1. technological, 2. informational, 3. mathematical, 4. scientific, 5. cultural, 6. historical, 7. aesthetic and/or 8. environmental)	
6. Apply problem solving techniques to real-world experiences	
7. Apply methods of scientific inquiry	
8. Demonstrate an understanding of the physical and biological environment and how it is impacted by human beings	
9. Demonstrate an understanding of and appreciation for human diversities and commonalities	
10. Collaborate with others to achieve common goals.	
11. Research, synthesize and produce original work	
12. Practice ethical behavior	
13. Demonstrate self-direction and self motivation	
14. Assume responsibility for and understand the impact of personal behaviors on self and society	
15. Contribute to the welfare of the community	

** General Education Competencies and Skills endorsed by '05-'06 General Education Task Force*



UNITS

Unit 1 – TYPES OF COMPUTERS

General Outcome:

- 1.0** The student shall be able to identify types of computers, how they process information and how individual computers interact with other computing systems and devices.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 1.1** Categorize types of computers based on their size, power and purpose
- 1.2** Identify types of microcomputers
- 1.3** Identify other types of computing devices
- 1.4** Identify the role of the central processing unit
- 1.5** Identify how the speed of the microprocessor is measured
- 1.6** Identify the role of types of memory and storage and the purpose of each, including RAM, ROM and CD ROMs
- 1.7** Identify concepts related to how memory is measured, including bits, bytes, and megabytes
- 1.8** Identify the flow of information between storage devices (such as floppy or hard disks) to the microprocessor and RAM in relation to everyday computer operations
- 1.9** Identify the differences between large systems and desktop computers and appropriate uses for large vs. small systems
- 1.10** Identify that computers integrate into larger systems in a variety of ways
- 1.11** Identify how computers share data, files, hardware and software



Common Course Number: CGS1060C

Unit 2 – COMPUTER HARDWARE COMPONENTS AND THEIR FUNCTIONS

General Outcome:

- 2.0** The student shall be able to identify the function of computer hardware components.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 2.1** Identify the types and purposes of external computer components, including standard input and output devices
- 2.2** Identify the types and purpose of internal computer components
- 2.3** Identify the types and purposes of specialized input devices (e.g. digital cameras and touch screens)
- 2.4** Identify the types and purposes of specialized output devices (e.g. projectors)
- 2.5** Identify the types and purposes of storage media (e.g. DVDs and network drives)
- 2.6** Identify ports used to connect input and output devices to a computer (e.g. USB ports and Ethernet ports)
- 2.7** Identify how hardware devices are installed on a computer system



Common Course Number: CGS1060C

Unit 3 – EVALUATING AND PURCHASING COMPUTER EQUIPMENT

General Outcome:

- 3.0** The student shall be able to identify the factors that go into an individual or organizational decision on how to purchase computer equipment.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 3.1** Identify criteria for selecting a personal computer
- 3.2** Identify factors that affect computer performance
- 3.3** Identify hardware and software considerations when purchasing a computer
- 3.4** Identify other factors that go into decisions to purchase a computer including warranties and support agreements



Common Course Number: CGS1060C

Unit 4 – MAINTAINING COMPUTER EQUIPMENT

General Outcome:

- 4.0** The student shall be able to identify how to maintain computer equipment and solve common problems relating to computer hardware.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 4.1** Identify how to protect computer hardware from theft or damage
- 4.2** Identify factors that can cause damage to computer hardware or media (e.g. heat and humidity)
- 4.3** Identify how to protect computer hardware from fluctuations in the power supply, power outages and other electrical issues
- 4.4** Identify common problems associated with computer hardware such as inoperable hardware devices
- 4.5** Identify common problems that can occur if hardware is not maintained properly
- 4.6** Identify maintenance that can be performed routinely by users such as cleaning and defragmenting hard drives
- 4.7** Identify maintenance that should ONLY be performed by experienced professionals
- 4.8** Identify the steps required to solve computer-related problems



Common Course Number: CGS1060C

Unit 5 – SOFTWARE AND HARDWARE INTERACTION

General Outcome:

- 5.0** The student shall be able to identify how software and hardware work together to perform computing tasks and how software is developed and upgraded.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 5.1** Identify how hardware and software interact
- 5.2** Identify simple terms and concepts related to the software development process
- 5.3** Identify issues relating to software upgrades such as pros and cons and methods to upgrade



Common Course Number: CGS1060C

Unit 6 – SOFTWARE CATEGORIES

General Outcome:

- 6.0** The student shall be able to identify different types of software, general concepts relating to software categories, and the tasks to which each type of software is most suited or not suited.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 6.1** Identify fundamental concepts relating to word processing and common uses for word-processing applications
- 6.2** Identify fundamental concepts relating to spreadsheets and common uses for spreadsheet applications
- 6.3** Identify fundamental concepts relating to presentation software and common uses for presentation applications
- 6.4** Identify fundamental concepts relating to databases and common uses for database applications
- 6.5** Identify fundamental concepts relating to graphic and multimedia programs and common uses for graphic or multimedia software
- 6.6** Identify the types and purposes of different utility programs
- 6.7** Identify other types of software
- 6.8** Identify how to select the appropriate application(s) for a particular purpose, and problems that can arise if the wrong software product is used for a particular purpose



Common Course Number: CGS1060C

Unit 7 – OPERATING SYSTEM FUNCTIONS

General Outcome:

- 7.0** The student shall be able to identify what an operating system is and how it works, and solve common problems related to operating systems.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 7.1** Identify the purpose of an operating system and the difference between operating system and application software
- 7.2** Identify different operating systems including DOS, Windows and Macintosh
- 7.3** Identify the difference between interacting with character-based and graphical operating systems
- 7.4** Identify the capabilities and limitations imposed by the operating system
- 7.5** Identify and solve common problems related to operating systems



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number: CGS1060C

Unit 8 – WINDOWS BASICS

General Outcome:

- 8.0** The student shall be able to manipulate and control the Windows desktop, files and disks.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 8.1** Identify elements of the Windows desktop
- 8.2** Manipulate Windows such as minimizing windows
- 8.3** Shut down, logoff and restart the computer
- 8.4** Use the Windows Start menu and Taskbar
- 8.5** Manipulate the desktop folders and icons
- 8.6** Manage files using the Windows Explorer/File Manager
- 8.7** Identify precautions one should take when manipulating files including using standardized naming conventions
- 8.8** Solve common problems associated with working with files



Common Course Number: CGS1060C

Unit 9 – INSTALLING, CONFIGURING, AND REMOVING SOFTWARE

General Outcome:

- 9.0** The student shall be able to identify how to change system settings, install and remove software.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 9.1 Display control panels
- 9.2 Identify different control panel settings
- 9.3 Change simple control panel settings such as date and time settings
- 9.4 Display and update a list of installed printers
- 9.5 Identify precautions regarding changing system settings
- 9.6 Install software including installing updates from online sources
- 9.7 Identify common problems associated with installing and running applications



Common Course Number: CGS1060C

Unit 10 – WINDOWS APPLICATIONS

General Outcome:

10.0 The student shall be able to start and exit a Windows application and utilize sources of online help.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

10.1 Start a Windows application

10.2 Exit a Windows application

10.3 Identify and prioritize help resources, including online help within software and contacting a help desk

10.4 Use various forms of automated help



Common Course Number: CGS1060C

Unit 11 – MANAGING WINDOWS APPLICATIONS

General Outcome:

- 11.0** The student shall be able to identify common on-screen elements of Windows applications, change application settings and manage files within an application.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 11.1** Identify on-screen elements common to Windows applications (e.g. menus, tool bars and document windows)
- 11.2** Display or hide toolbars
- 11.3** Switch between open documents
- 11.4** Change views
- 11.5** Change magnification level
- 11.6** Create files
- 11.7** Open files within an application and from the Windows desktop, identify file extensions including .xls or.doc
- 11.8** Save files in specified locations/formats
- 11.9** Close files
- 11.10** Identify and solve common problems relating to working with files (e.g. product or version incompatibility)



Common Course Number: CGS1060C

Unit 12 – CREATING, EDITING, AND FORMATTING FILES

General Outcome:

12.0 The student shall be able to perform common editing and formatting functions.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 12.1** Navigate around open files using scroll bars, keyboard shortcuts, etc.
- 12.2** Insert text and numbers in a file
- 12.3** Perform simple editing (e.g. cut, copy and move information)
- 12.4** Use the Undo, Redo and Repeat commands
- 12.5** Find information
- 12.6** Replace information
- 12.7** Check spelling
- 12.8** Perform simple text formatting
- 12.9** Insert pictures into a file
- 12.10** Modify pictures in a file
- 12.11** Add drawn objects into a file, including creating and modifying objects



Common Course Number: CGS1060C

Unit 13 – COMMON PRINTING FUNCTIONS

General Outcome:

13.0 The student shall be able to perform common printing functions.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 13.1** Format a document for printing
- 13.2** Preview a file before printing
- 13.3** Print files, specifying common print options
- 13.4** Manage printing and print jobs
- 13.5** Identify and solve common problems associated with printing



Common Course Number: CGS1060C

Unit 14 – FORMATTING TEXT AND DOCUMENTS

General Outcome:

14.0 The student shall be able to format text and documents including the ability to use automatic formatting tools.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 14.1** Identify on-screen formatting information, including breaks, paragraph markers, etc.
- 14.2** Select word, line, paragraph, and document
- 14.3** Change line and paragraph spacing
- 14.4** Indent text
- 14.5** Create and modify bulleted and numbered lists
- 14.6** Use outline structure to format a document
- 14.7** Insert symbols/special characters
- 14.8** Insert date and time
- 14.9** Insert, view and print document comments
- 14.10** Display the ruler
- 14.11** Use tabs
- 14.12** Insert and delete a page break or section break
- 14.13** Insert, modify and format page numbers
- 14.14** Create, modify and format headers and footers
- 14.15** Create, modify and format footnotes and endnotes
- 14.16** Apply borders and shading to text paragraphs
- 14.17** Create, modify and apply styles
- 14.18** Copy formatting (Format Painter)



14.19 Use language tools

14.20 Track changes in a document

14.21 Display document statistics



Common Course Number: CGS1060C

Unit 15 – WORKING WITH TABLES

General Outcome:

15.0 The student shall be able to insert, edit and format tables in a document.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

15.1 Create a table

15.2 Insert and edit data in a table

15.3 Modify table structure

15.4 Format tables

15.5 Sort data in a table



Common Course Number: CGS1060C

Unit 16 – WORKING WITH TEXT AND NUMBERS IN A SPREADSHEET

General Outcome:

16.0 The student shall be able to modify worksheet data and structure and format data in a worksheet.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

16.1 Identify how a table of data is organized in a spreadsheet

16.2 Select information with the keyboard and mouse including selecting rows, columns and worksheets

16.3 Insert and modify data

16.4 Modify table structure

16.5 Identify and change number formats, including currency, date and time and percentage formats

16.6 Apply borders and shading to cells

16.7 Specify cell alignment (e.g. wrapping text within a cell)

16.8 Apply table AutoFormats



Common Course Number: CGS1060C

Unit 17 – USING FORMULAS, FUNCTIONS, AND CHARTS

General Outcome:

17.0 The student shall be able to sort data, manipulate data using formulas and functions, and add and modify charts in a worksheet.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 17.1** Sort worksheet data
- 17.2** Demonstrate an understanding of absolute vs. relative cell addresses
- 17.3** Insert arithmetic formulas into worksheet cells
- 17.4** Demonstrate how to use common worksheet functions (e.g. SUM, AVERAGE and COUNT)
- 17.5** Insert formulas that include worksheet functions into cells
- 17.6** Modify formulas and functions
- 17.7** Use AutoSum
- 17.8** Identify common errors made when using formulas and functions
- 17.9** Draw simple conclusions based on tabular data in a worksheet
- 17.10** Insert and modify charts in a worksheet
- 17.11** Be able to identify if a presented chart accurately represents worksheet data shown in a table
- 17.12** Identify appropriate chart types for presenting different types of information



Common Course Number: CGS1060C

Unit 18 – CREATING AND DELIVERING PRESENTATIONS

General Outcome:

18.0 The student shall be able to create and format simple presentations.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 18.1** Identify effective design principles for simple presentations
- 18.2** Manage slides (e.g. delete a slide)
- 18.3** Add information to a slide
- 18.4** Change slide view
- 18.5** Change slide layout
- 18.6** Modify a slide background
- 18.7** Assign transitions to slides
- 18.8** Change the order of slides in a presentation
- 18.9** Create different output elements (speaker's notes, handouts, etc)
- 18.10** Preview a slide show presentation
- 18.11** Navigate an on-screen slide show



Common Course Number: CGS1060C

Unit 19 – NETWORK FUNDAMENTALS

General Outcome:

19.0 The student shall be able to identify network fundamentals and the benefits and risks of network computing.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

19.1 Identify terminology relating to telecommunications, networks, and the Internet

19.2 Identify types of networks

19.3 Identify how networks work

19.4 Identify the benefits of networked computing

19.5 Identify the risks of networked computing

19.6 Identify fundamental principles of security on a network



Common Course Number: CGS1060C

Unit 20 – COMPUTER NETWORKS, TELEPHONE NETWORKS, AND THE INTERNET

General Outcome:

- 20.0** The student shall be able to identify the relationship between computer networks, other communications networks (like the telephone network) and the Internet.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 20.1** Identify the different ways the telephone system is used to transmit information
- 20.2** Identify that telecommunication devices such as modems convert information from analog to digital and digital to analog formats
- 20.3** Identify the units used to measure data transmission rates
- 20.4** Identify the Internet as a “super network” of smaller computer networks and that computers connect to the Internet via the “onramp” of a smaller computer network
- 20.5** Identify the hardware and software required to connect to the Internet
- 20.6** Identify different types of Internet connections and the advantages and disadvantages of each connection type
- 20.7** Identify the roles and responsibilities of an Internet Service Provider (IPS)



Common Course Number: CGS1060C

Unit 21 – UNDERSTANDING E-MAIL

General Outcome:

21.0 The student shall be able to identify how electronic mail works.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

21.1 Identify how electronic mail works on a network and on the Internet

21.2 Identify the components of an electronic mail message

21.3 Identify the components of an electronic mail address

21.4 Identify when to use different electronic mail options

21.5 Identify different ways electronic mail is accessed

21.6 Identify the difference between standard electronic mail and other forms of messaging, such as paging or Instant Messaging



Common Course Number: CGS1060C

Unit 22 – USING E-MAIL

General Outcome:

22.0 The student shall be able to identify how to use an electronic mail application.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 22.1** Read and send electronic mail messages
- 22.2** Identify ways to supplement a mail message with additional information
- 22.3** Manage attachments
- 22.4** Manage mail
- 22.5** Manage addresses
- 22.6** Identify the purpose of frequently used mail-configuration options



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number: CGS1060C

Unit 23 – “NETIQUETTE”

General Outcome:

- 23.0 The student shall be able to identify the appropriate use of e-mail and e-mail related “netiquette”

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 23.1 Identify the advantages of electronic mail
- 23.2 Identify common problems associated with electronic mail
- 23.3 Identify the elements of professional and effective e-mail messages
- 23.4 Identify when other forms of correspondence are more appropriate than e-mail
- 23.5 Identify when to include information from an original e-mail message in a response as a method of tracking the “history” of e-mail communication
- 23.6 Identify appropriate use of e-mail attachments and other supplementary information
- 23.7 Identify issues regarding unsolicited e-mail (“spam”) and how to minimize or control unsolicited mail
- 23.8 Identify effective procedures for ensuring the safe and effective use of electronic mail



Common Course Number: CGS1060C

Unit 24 – INFORMATION SOURCES ON THE INTERNET

General Outcome:

24.0 The student shall be able to identify different types of information sources on the Internet.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

24.1 Identify terminology related to the Internet

24.2 Identify the purpose of a browser in accessing information on the World Wide Web

24.3 Identify different elements of a Web site

24.4 Identify different types of Web sites by their extensions, and the purposes of different types of sites

24.5 Identify the difference between secure and un-secure Web sites (such as password-protected sites or sites secure for online transactions) and how to tell if a Web site is secure

24.6 Identify different ways of communicating and corresponding via the Internet



Common Course Number: CGS1060C

Unit 25 – USING A WEB BROWSER

General Outcome:

25.0 The student shall be able to use a Web browsing application.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 25.1** Identify the make-up of a Web address/Uniform Resource Locator (URL)
- 25.2** Navigate the Web using a browser
- 25.3** Reload/Refresh the view of a Web page
- 25.4** Show a history of recently visited Web sites and delete the list of recently visited Web sites
- 25.5** Find specific information on a Web site
- 25.6** Manage Bookmarked sites / Favorite sites
- 25.7** Save the content of a Web site for offline browsing
- 25.8** Copy elements of a Web site including copying text or media to another application
- 25.9** Print all or specified parts of a Web site
- 25.10** Download a file from a Web site to a specified location
- 25.11** Identify settings that can be modified in a Web browser application
- 25.12** Identify problems associated with using a Web browser



Common Course Number: CGS1060C

Unit 26 – SEARCHING THE INTERNET

General Outcome:

26.0 The student shall be able to effectively search the Internet for information.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 26.1** Identify the ways a search engine classifies and looks for Web sites
- 26.2** Identify other ways of searching for information on the Web
- 26.3** Use a search engine to search for information based on specified keywords
- 26.4** Search effectively
- 26.5** Identify issues regarding the quality of information found on the Internet
- 26.6** Identify how to evaluate the quality of information found on the Web



Common Course Number: CGS1060C

Unit 27 – COMPUTERS AT WORK, SCHOOL, AND HOME

General Outcome:

27.0 The student shall be able to identify how computers are used in different areas of work, school, and home.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

27.1 Identify how computers and the Internet are used to collect, organize, and evaluate information and promote learning

27.2 Identify the technology and processes involved with computers operating “behind the scenes” in everyday activities

27.3 Identify the impact of electronic commerce (e-commerce) on business, individuals, and governments

27.4 Identify technologies that support or provide opportunities to the disabled and disadvantaged (such as voice recognition)



Common Course Number: CGS1060C

Unit 28 – THE RISKS AND HAZARDS OF USING COMPUTER HARDWARE AND SOFTWARE

General Outcome:

28.0 The student shall be able to identify the risks of using computer hardware and software.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

28.1 Identify how to maintain a safe working environment that complies with legal, health, and safety rules

28.2 Identify injuries that can result from the use of computers for long periods of time

28.3 Identify risks to personal and organizational data

28.4 Identify software threats, including viruses and WORMS



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number: CGS1060C

Unit 29 – USING COMPUTERS AND THE INTERNET SAFELY, LEGALLY, ETHICALLY, AND RESPONSIBLY

General Outcome:

29.0 The student shall be able to identify how to use computers and the Internet safely, legally, ethically, and responsibly.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

29.1 Identify reasons for restricting access to files, storage devices, computers, networks, and certain Internet sites

29.2 Identify concepts related to intellectual property laws including copyrights, trademarks, and plagiarism

29.3 Identify the principles regarding when information can or cannot be considered personal, including the difference between computer systems owned by schools or businesses that may have rules and guidelines as to who owns data stored on the system, and computers owned by individuals

29.4 Identify how to avoid hazards regarding electronic commerce, including giving credit card information only on secure sites

29.5 Identify how to protect privacy and personal security online, including understanding how Web sites track your activity online using “cookies” and other “behind-the scenes” systems

29.6 Identify how to find information about rules regarding the use of computers and the Internet, including laws, use policies at school, and company guidelines at places of employment

29.7 Identify how to stay informed about changes and advancements in technology

29.8 Identify how to be a responsible user of computers and the Internet