



Department of Teaching & Learning
Parent/Student Course Information

Computer Information Systems
(BE 6612)
One Credit, One Year
Grades 9 - 12

Counselors are available to assist parents and students with course selections and career planning. Parents may arrange to meet with the counselor by calling the school's guidance department.

COURSE DESCRIPTION

Students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases, multimedia presentations, and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications and emerging technologies.

CERTIFICATION

Upon successful completion of practice exams, students who qualify may sit for the Microsoft Office Specialist certifications. These certifications can be used for student-selected verified credit.

COOPERATIVE OFFICE EDUCATION (COE)

Cooperative Office Education (COE) is the supervised on-the-job instructional phase of an occupational preparation program. Students attend classes for all or part of the day and work in an approved business/office position part of the day. The teacher-coordinator and business training sponsor develop an individualized training plan that identifies learning experiences according to the student's career objective. Transportation is the responsibility of the student. Many Business & IT courses are eligible for the cooperative office education method of instruction. Participation in COE is optional for Business and Information Technology students.

STUDENT ORGANIZATION

The Future Business Leaders of America (FBLA) is the co-curricular organization for secondary Business and Information Technology students. The organization enhances occupational preparation for students by helping them attain the following goals: leadership skills; knowledge of the American enterprise system; self-confidence; improvement of home, business, and community; scholarship; citizenship; and career goals.

PREREQUISITE

None

OPTIONS FOR NEXT COURSE

Advanced Computer Information Systems

REQUIRED STUDENT TEXTBOOK

None

COMPETENCIES FOR COMPUTER INFORMATION SYSTEMS

Demonstrating Workplace Readiness Skills: Personal Qualities and People Skills

- 001 Demonstrate positive work ethic.
- 002 Demonstrate integrity.
- 003 Demonstrate teamwork skills.
- 004 Demonstrate self-representation skills.
- 005 Demonstrate diversity awareness.
- 006 Demonstrate conflict-resolution skills.
- 007 Demonstrate creativity and resourcefulness.

Demonstrating Workplace Readiness Skills: Professional Knowledge and Skills

- 008 Demonstrate effective speaking and listening skills.
- 009 Demonstrate effective reading and writing skills.
- 010 Demonstrate critical-thinking and problem-solving skills.
- 011 Demonstrate healthy behaviors and safety skills.
- 012 Demonstrate an understanding of workplace organizations, systems and climates.
- 013 Demonstrate lifelong-learning skills.
- 014 Demonstrate job-acquisition and advancement skills.
- 015 Demonstrate time-, task- and resource-management skills.
- 016 Demonstrate job-specific mathematics skills.
- 017 Demonstrate customer-service skills.

Demonstrating Workplace Readiness Skills: Technology Knowledge and Skills

- 018 Demonstrate proficiency with technologies common to a specific occupation.
- 019 Demonstrate information technology skills.
- 020 Demonstrate an understanding of Internet use and security issues.
- 021 Demonstrate telecommunications skills.

Examining All Aspects of an Industry

- 022 Examine aspects of planning within an industry/organization.
- 023 Examine aspects of management within an industry/organization.
- 024 Examine aspects of financial responsibility within an industry/organization.
- 025 Examine technical and production skills required of workers within an industry/organization.
- 026 Examine principles of technology that underlie an industry/organization.
- 027 Examine labor issues related to an industry/organization.
- 028 Examine community issues related to an industry/organization.
- 029 Examine health, safety and environmental issues related to an industry/organization.

Addressing Elements of Student Life

- 030 Identify the purposes and goals of the student organization.
- 031 Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.
- 032 Demonstrate leadership skills through participation in student organization activities, such as meetings, programs and projects.
- 033 Identify Internet safety issues and procedures for complying with acceptable use standards.

Exploring Computer Concepts

- 034 Explain the functions of computer system components.
- 035 Illustrate the information processing cycle.
- 036 Trace the development of computers and their impact on society.

- 037 Demonstrate the use of various computer input devices.
- 038 Describe wireless and mobile devices.
- 039 Describe various computer output devices.
- 040 Describe various auxiliary storage devices.
- 041 Identify basic networking components.

Exploring Ethical Issues Related to Computers and Computer Systems

- 042 Identify security issues related to computer hardware, software, and data.
- 043 Identify concepts related to copyright, public domain, copy protection, intellectual property and licensing agreements, including, but not limited to, software, media (e.g. music, pictures), and logo requirements.
- 044 Identify concepts of security, honesty, courtesy, and confidentiality related to information and e-mail systems and social networking (e.g., spam, viruses, e-mail etiquette).
- 045 Investigate physical and logical security issues related to technology (e.g., viruses, firewalls, spam, system backup, passwords).
- 046 Investigate Internet privacy issues and computer crimes, including identity theft.

Managing Computer Systems

- 047 Maintain workstation, equipment, software, and supplies.
- 048 Identify information needed to purchase or replace computer equipment and peripherals.
- 049 Obtain assistance via electronic and hard-copy references and documentation.
- 050 Troubleshoot hardware problems (e.g., power supply, network and peripheral connections, printer malfunctions).
- 051 Operate components of the user interface (e.g., menus, toolbars, ribbons, icons).
- 052 Manage the desktop environment (e.g., creating shortcuts/aliases).
- 053 Manage files and folders/directories (in networked and stand-alone environments).
- 054 Backup/restore programs and data files.
- 055 Scan storage devices and equipment for viruses and spyware, and disinfect as needed.
- 056 Describe the steps to install and remove software.
- 057 Operate peripherals (e.g., flash drive, scanner, digital camera, fax machine, modem, CD/DVD burner, USB devices, LCD projector).
- 058 Identify safety precautions and devices (e.g., surge protectors, anti-static mats and pads, power plugs, and UPS systems) associated with computer use.

Producing Word Processing Documents

- 059 Compare features of a word processing program to determine the best tools to use for a given task.
- 060 Compose a variety of documents (e.g., letters, memoranda, reports, and tables).
- 061 Use word processing programs to perform desktop publishing functions (e.g., to create brochures, pamphlets, flyers, business cards, newsletters, programs).
- 062 Proofread and edit documents.
- 063 Enhance layout of documents by using a variety of formatting features.
- 064 Import graphics, using a variety of tools (e.g., from file, scanner, digital camera) and sources.
- 065 Analyze and use writing tools (e.g., speller, thesaurus, grammar check, readability test, comparison tools).
- 066 Utilize advanced word processing operations (e.g., merge, macros, template wizards).
- 067 Integrate databases, graphics, and spreadsheets into a word-processed document.
- 068 Manipulate word-processed documents in a variety of formats (e.g., .pdf, .html).

Developing Electronic Spreadsheets

- 069 Compare features of various spreadsheet programs to determine the best software for an individual's or organization's needs.

- 070 Create and edit a spreadsheet.
- 071 Enhance a spreadsheet by using formatting features and graphics.
- 072 Construct arithmetic formulas to solve typical business-oriented problems.
- 073 Apply basic function commands (e.g., AVG, MIN, MAX, SUM).
- 074 Apply intermediate functions.
- 075 Analyze and interpret data.
- 076 Create graphs and charts (embedded or stand-alone) to represent data visually.
- 077 Integrate word processing and database information.
- 078 Format graph features (e.g., chart titles, labels, colors).

Developing and Managing Databases

- 079 Determine when it is appropriate to use a database and identify the benefits derived.
- 080 Compare features of various database programs to determine the best software for an individual's or organization's needs.
- 081 Plan, design, and create a database file.
- 082 Edit a database file.
- 082 Sort, index, and filter databases.
- 084 Create and run queries to access information.
- 085 Generate reports and forms.
- 086 Enhance reports using formatting features and graphics.
- 087 Integrate database information into word processing and spreadsheet applications by creating links.

Developing Multimedia Presentations

- 088 Identify the components of an effective presentation.
- 089 Describe various output options from presentation software (e.g., slide show, transparencies, slide handout, streaming, interactive whiteboards).
- 090 Research and organize information for a multimedia presentation.
- 091 Plan and build a multimedia presentation.
- 092 Proofread and edit a multimedia presentation.
- 093 Utilize options for creating, inserting, and editing objects (e.g., styles, shapes, fills, borders).
- 094 Enhance a multimedia presentation with specialized features (e.g., color, transitions, animations, timings, backgrounds, graphics, charts, graphs).
- 095 Integrate a variety of software applications into a multimedia presentation.
- 096 Deliver a multimedia presentation according to the principles of effective communication.
- 097 Critique the clarity and effectiveness of multimedia presentations.

Communicating through Technology

- 098 Identify various new and emerging devices, methods, and channels for communicating electronically.
- 099 Describe networking features and concepts.
- 100 Describe how the Internet works (e.g., network structures, devices and components, protocols, Internet service providers, online services).
- 101 Explore uses of the Internet in business applications.
- 102 Incorporate information from the World Wide Web into a business project.
- 103 Create a Web site using Web page design software.
- 104 Describe Internet services (e.g., e-mail, FTP, instant messaging, newsgroups, file storage).
- 105 Describe the uses of electronic commerce (e-commerce).
- 106 Explore trends in emerging communications technology and information processing.

Preparing for Industry Certification

- 107 Describe the process and requirements for obtaining industry certifications related to the Computer Information Systems course.
- 108 Identify testing skills/strategies for certification examination.
- 109 Demonstrate ability to successfully complete selected practice examinations (e.g., practice questions similar to those on certification exams).
- 110 Successfully complete an industry certification examination representative of skills learned in this course (e.g., MOS, IC3, NOCTI).

Developing Employability Skills

- 111 Research career opportunities in Computer Information Systems.
- 112 Develop/update a résumé.
- 113 Compose a letter of application.
- 114 Complete manual and electronic application forms.
- 115 Create and maintain a portfolio.
- 116 Participate in a mock interview.
- 117 Compose an interview follow-up letter.
- 118 Identify criteria for evaluating self-performance.
- 119 Identify the steps to follow in resigning from a position.
- 120 Identify potential employment barriers for nontraditional groups and ways to overcome the barriers.

Aaron C. Spence, Ed.D., Superintendent
Virginia Beach City Public Schools
2512 George Mason Drive, Virginia Beach, VA 23456-0038

Produced by the Department of Media and Communications for the
Department of Teaching and Learning.
For further information please call (757) 263-1070.

Notice of Non-Discrimination Policy

Virginia Beach City Public Schools does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation/gender identity, pregnancy, childbirth or related medical condition, disability, marital status, age, genetic information or veteran status in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. School Board policies and regulations (including, but not limited to, Policies 2-33, 4-4, 5-7, 5-19, 5-20, 5-44, 6-7, 6-33, 7-48, 7-49, 7-57 and Regulations 2-33.1, 4-4.1, 4-4.2, 4-4.3, 4-6.1, 5-44.1, 7-11.1, 7-17.1 and 7-57.1) provide equal access to courses, programs, counseling services, physical education and athletic, vocational education, instructional materials and extracurricular activities.

To seek resolution of grievances resulting from alleged discrimination or to report violations of these policies, please contact the Title VI/Title IX Coordinator/Director of Student Leadership at (757) 263-2020, 1413 Laskin Road, Virginia Beach, Virginia, 23451 (for student complaints) or the Section 504/ADA Coordinator/Chief Human Resources Officer at (757) 263-1133, 2512 George Mason Drive, Municipal Center, Building 6, Virginia Beach, Virginia, 23456 (for employees or other citizens). Concerns about the application of Section 504 of the Rehabilitation Act should be addressed to the Section 504 Coordinator/ Executive Director of Student Support Services at (757) 263-1980, 2512 George Mason Drive, Virginia Beach, Virginia, 23456 or the Section 504 Coordinator at the student's school. For students who are eligible or suspected of being eligible for special education or related services under IDEA, please contact the Office of Programs for Exceptional Children at (757) 263-2400, Laskin Road Annex, 1413 Laskin Road, Virginia Beach, Virginia, 23451.

Alternative formats of this publication which may include taped, Braille, or large print materials are available upon request for individuals with disabilities. Call or write The Department of Teaching and Learning, Virginia Beach City Public Schools, 2512 George Mason Drive, P.O. Box 6038, Virginia Beach, VA 23456-0038. Telephone 263-1070 (voice); fax 263-1424; 263-1240 (TDD) or email at Theresa.Dougherty@vbschools.com.

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VIRGINIA BEACH CITY PUBLIC SCHOOLS
CHARTING THE COURSE

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