



Department of Teaching & Learning
Parent/Student Course Information

Advanced Creative Coding & Computer Solutions
(BE 3217)
No Credit, One Quarter
Grades 7 - 8

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

This semester course is a culmination of topics covered in the previously completed Foundations and Creative Coding and Computer Solutions II courses. Students will take a closer look at cloud computing, app design, privacy and encryption. This course concludes with the development of an independent project where students work to design, build, present, and market a game or app. Admission to this course is based upon the successful completion of the Foundations of Creative Coding and Computer Solutions course as well as the Creative Coding and Computer Solutions II course.

CERTIFICATION

None

STUDENT ORGANIZATION

The Future Business Leaders of America (FBLA) is the co-curricular organization for middle and 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

Foundations of Creative Coding and Computer Solutions, and Creative Coding and Computer Solutions II

OPTIONS FOR NEXT COURSE

None

REQUIRED STUDENT TEXTBOOK

None

COMPETENCIES FOR ADVANCED CREATIVE CODING & COMPUTER SOLUTIONS

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.

Addressing Elements of Student Life

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

Demonstrating Keyboarding Skills

- 026 Identify computer system components.
- 027 Boot, access, and exit operating system and software.
- 028 Key alphabetic, numeric, and symbol information, using a touch system and correct techniques.
- 029 Improve keyboarding techniques, speed and accuracy.
- 030 Proofread copy.
- 031 Edit copy.
- 032 Describe ergonomic guidelines related to safe computer use.

Using Word Processing Software to Solve Problems

- 033 Key and format documents (e.g., letters, memoranda, reports, outlines, flyers, newsletters and tables).
- 034 Compose documents (e.g., letters, memoranda, reports, outlines and tables).
- 035 Apply word-processing skills to solve a problem.
- 036 Use word-processing program to develop note-taking skills.

Using Database Software to Solve Problems

- 037 Create a database by defining fields and designing formats.
- 038 Populate the database.
- 039 Process material using database features such as sort and merge.
- 040 Apply database skills to solve a problem.

Using Spreadsheet Software to Solve Problems

- 041 Input data and formulas.
- 042 Edit data within the spreadsheet (e.g., retrieve, update, move and save).
- 043 Create graphs and charts to visually represent data.
- 044 Apply spreadsheet skills to solve a problem.

Using Telecommunications to Solve Problems

- 045 Identify emerging telecommunication technologies available to solve problems.
- 046 Identify local and worldwide network communication systems.
- 047 Use search strategies to retrieve electronic information.
- 048 Use electronic sources (e.g., encyclopedias, almanacs, indexes and catalogs) to retrieve and select relevant information.
- 049 Analyze a problem to determine the telecommunication options needed for a solution.
- 050 Apply telecommunication skills to solve a problem.

Solving Ethical and Security Problems Relating to Computers

- 051 Identify security issues related to computer hardware, software, and data.
- 052 Analyze problems involving integrity, courtesy and confidentiality related to information and communications systems.
- 053 Analyze the impact of regulations such as copyright and licensing agreements in computer software applications.

Solving Problems Relating to Computer Maintenance

- 054 Identify safety precautions associated with computer use.
- 055 Describe the care necessary for internal and external storage devices.
- 056 Describe methods of preventing the spread of computer viruses.

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

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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/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.

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CHARTING THE COURSE

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