

FOLSOM CORDOVA UNIFIED SCHOOL DISTRICT

COMPUTER APPLICATIONS - ACE

Date: January 2009

Category: Career Technical Education

Proposed Grade Level(s): 9th - 12th

Course Length: 1 Year

Grading: A-F

Number of Credits: 5 per Semester

Subject Area Credit: Technology

Prerequisites: None

BRIEF COURSE DESCRIPTION:

This course is designed to introduce students to keyboarding, word processing, desktop publishing, spreadsheets, database, presentation skills, and integration concepts. The emphasis is placed on problem solving, document preparation, and computer literacy. Students will be utilizing the Microsoft Office package using Word, Excel, PowerPoint, Publisher, and Access. Internet and Emailing techniques will also be used. Students receiving an A or B in this course are eligible for three units of computer science credit at California State University, Sacramento.

GOAL AND OBJECTIVES:

This course is a college level study in computer applications. Special emphasis on career opportunities in the field of technology will be incorporated throughout the curriculum. Projects will allow students to become familiar with applicable business tasks essential to real-world applications with varying degrees of difficulty, designed to help students practice and apply important software skills.

Upon successful completion of this course, the student will be able to:

- Create business documents using appropriate word processing software.
- Create spreadsheets including formulas and charts using spreadsheet software.
- Create multimedia presentations using presentation software.
- Create business publications using desktop publishing software.
- Create integrated projects using a variety of software applications.

STUDENT READING COMPONENT:

Students will be required to read technical manuals, internet-based learning activities, online resources, multimedia presentations, portfolios, pre-and post-evaluations, textbooks, and other reference materials pertaining to technology and will demonstrate their understanding and expertise in a variety of ways. These include mastery of computer applications, vocabulary, organizing and recording what is read in note taking and summaries, concept reviews, extending ideas from text and visual media using prior knowledge and experiences, locating information in a text, finding main ideas and supporting points. The student creates and critiques a variety of functional documents by analyzing the design and formatting techniques of various documents (e.g., spreadsheets, financial reports, newsletters, brochures, etc.) The students work independently and collaboratively with various resource materials showing evidence of self-assessment and goal setting.

STUDENT WRITING COMPONENT:

Students will be required to write and present reports describing methods of research, data collection and problem solving. Spreadsheets, business letters, reports, newsletters, brochures, story-boards, career portfolios, and slide presentations will be incorporated throughout the curriculum. Students will maintain portfolios of work generated throughout the course and develop an exit project demonstrating all competencies learned.

STUDENT ORAL COMPONENT:

Students will be required to give oral presentations throughout the school year. These presentations will be developed in conjunction with multimedia projects on an advanced level. Individual and group project presentations will reflect activities inclusive of each unit of instruction.

DETAILED UNITS OF INSTRUCTION:

Intro to Computers

- Keyboarding
- Internet
- E-mail
- Operating System

Word Processing

- Creating, formatting and editing Documents
 - Setting up Business Letters, Memos and MLA format reports
- Working with Columns and Breaks
- Illustrating Documents with Graphics
- Creating and Formatting Tables
- Merging Word Documents

Spreadsheets:

- Working with Formulas, Functions and Charts
- Managing Workbooks
- Working with Multiple Worksheets
- Using Lists and Filters (versus database)

Integration:

- Integrating Word Processing, and Spreadsheets (Linking, Embedding, Hyperlinks)

Databases:

- Modifying a Database Structure
- Creating Multiple Table Queries
- Developing Forms and Subforms
- Sharing Information and Improving Reports

Integration:

- Integrating Word Processing, Spreadsheets, and Databases

Presentation:

- Customizing Your Presentation
- Enhancing Charts

- Working with Embedded and Linked Objects and Hyperlinks
- Using Advanced Features
- Oral and Written Presentation Skills

Integration:

- Integrating Word Processing, Spreadsheets, Databases, and Presentation

Desktop Publishing:

- Introduction to Desktop Publishing
- Working with Text and Graphics
- Creating Brochures, Newsletters, and Flyers

SUBJECT AREA CONTENT STANDARDS TO BE ADDRESSED:

California Career Technical Education Framework for California- May 2005
 Information Technology Standards (May 2005)

2.0 Communications

Students understand the principles of effective oral, written, and multimedia communication in a variety of formats and contexts.

(The standards listed below retain in parentheses the numbering as specified in the English–language arts content standards adopted by the State Board of Education.)

2.1 Reading

- (2.1) Analyze the structure and format of functional workplace documents, including the graphics and headers, and explain how authors use the features to achieve their purposes.

2.2 Writing

- (1.7) Use appropriate conventions for documentation in the text, notes, and bibliographies by adhering to those in style manuals (e.g., Modern Language Association Handbook, The Chicago Manual of Style).
- (1.8) Design and publish documents by using advanced publishing software and graphic programs.
- (2.5) Write business letters:
 - a. Provide clear and purposeful information and address the intended audience appropriately.
 - b. Use appropriate vocabulary, tone, and style to take into account the nature of the relationship with, and the knowledge and interests of, the recipients.
 - c. Highlight central ideas or images.
 - d. Follow a conventional style with page formats, fonts, and spacing that contribute to the documents' readability and impact.
- (1.8) Integrate databases, graphics, and spreadsheets into word-processed documents.
- (2.6) Deliver multimedia presentations:
 - a. Combine text, images, and sound and draw information from many sources (e.g., television broadcasts, videos, films, newspapers, magazines, CD-ROMs, the Internet, electronic media-generated images).
 - b. Select an appropriate medium for each element of the presentation.
 - c. Use the selected media skillfully, editing appropriately and monitoring for quality.
 - d. Test the audience's response and revise the presentation accordingly.

4.0 Technology

Students know how to use contemporary and emerging technological resources in diverse and changing personal, community, and workplace environments:

- (4.1) Understand past, present, and future technological advances as they relate to a chosen pathway.

- (4.2) Understand the use of technological resources to gain access to, manipulate, and produce information, products, and services.
- (4.3) Understand the influence of current and emerging technology on selected segments of the economy.

10.0 Technical Knowledge and Skills

Students understand the essential knowledge and skills common to all pathways in the Information Technology sector:

- (10.1) Know how to use a variety of business- and industry-standard software and hardware, including major proprietary and open standards.
- (10.2) Understand the information technology components of major business functions (e.g., marketing, accounting, and human resource management) and their interrelationships.
- (10.3) Understand the economic effects of technology on a business in the global marketplace.
- (10.6) Understand the interrelationships between hardware components and supportive software.
- (10.7) Analyze the functions, features, and limitations of different operating systems, environments, applications, and utilities.
- (10.8) Know how to use appropriate help resources (e.g., help desks, online help, manuals) to install, configure, upgrade, diagnose, and repair operating systems, environments, applications, and utilities.

(11.0) Demonstration and Application

Students demonstrate and apply the concepts contained in the foundation and pathway standards.

THIS COURSE WILL PREPARE STUDENTS FOR THE CAHSSE AND/OR CSTs:

Language Arts

LAB FEE IF REQUIRED:

None

DISTRICT ESLRs TO BE ADDRESSED:

Student will be:

- **Self-directed Learners:** Students will plan, evaluate, work in teams, and execute technology projects. Students will employ technology in the development of strategies for solving problems in the real world.
- **Effective Communicators:** Students will incorporate communication skills (oral and written) to present and assemble projects. Students will use telecommunications to collaborate, publish and interact with peers, experts and other audiences.
- **Quality Producers/Performers:** Students will work in collaborative groups, in teams, and independently to produce projects incorporating appropriate technologies. Students will use technology to locate, evaluate, and collect information from a variety of sources.
- **Constructive Thinkers:** Students will question various media, evaluate on-line resources and research, synthesize information, and use technology for solving problems and making informed decisions.
- **Collaborative Workers:** Students will work collaboratively to use technology tools to enhance learning, increase productivity, and promote creativity. Students will use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative work.
- **Responsible Citizens:** Students will use technology resources for solving problems and making informed decisions. They will understand the ethical, cultural, and societal issues related to technology and practice responsible use of technology systems, information, and software.