

FOLSOM-CORDOVA UNIFIED SCHOOL DISTRICT

Course Outline
Computers: Concepts and Applications – 8th Grade

Date: October 2002

Course Title: Computers, Concepts & Applications, 8th Grade

Proposed Grade Level(s): 8

Grading: A-F

Prerequisites: 8th Grade Standing

COURSE DESCRIPTION:

The 8th grade middle school computer elective focuses on individual and cooperative learning to enable the student to develop functional skills in productivity software, as well as an understanding of key computer concepts. Immersed in an active, engaging learning environment, the student will build a foundation in knowledge of common computer software, hardware, and typing proficiency. This competency with common productivity applications and operating systems will enable the student to leave the class confident and capable of putting computers to practical use in other settings. Students will learn proficiencies in the following applications:

- Microsoft Windows
- Microsoft Word
- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Publisher
- Microsoft Internet Explorer
- Microsoft FrontPage

GENERAL GOALS/PURPOSES:

Computers play an increasingly important role in our technologically developing society. Having skills to use the vast resources available will enable our students to achieve their full potential. With the skills developed in this and subsequent computer elective courses, our students will be better able to do such important things as compete in the job market, be accepted into colleges and universities, complete job training programs, take advantage of opportunities offered on the Internet, and generally participate in a society that is information- and technology-rich.

Simply having computers available in every classroom does not ensure that students will know how to use them. The main purpose of this course is to teach the student enough about computers and applications to make him or her comfortable and competent in any learning setting which requires the use of computers. Productivity is the ultimate goal – computers are tools that can be used to accomplish great things in our schools. Students must learn not only how to use hardware and applications, but also how to see the computer as the powerful tool that it is and, in doing so, unlock its potential.

The ability to produce reports, graphs, documents, pictures, diagrams, spreadsheets, charts, PowerPoint visual aids, etc. will enable our students to expand their learning potential in all classes and pursuits for their entire lives.

STUDENT READING COMPONENT:

The purpose of reading in this course is to promote understanding of key computer concepts as they relate to practical use of the computers and applications. Students will read from the textbook and web pages to gain knowledge of concepts and vocabulary that are important to proficient everyday computer use.

Methods will include, but are not limited to, guided reading, vocabulary-building activities, independent reading, and comprehension checks.

STUDENT WRITING COMPONENT:

Students will turn in written compositions consistent with expectations laid out in California Reading/Language Arts Standards for Grade 8. The main focus of these compositions is to allow students to practice and demonstrate skills and strategies learned in typing, word processing, and (when applicable) web browsing applications. However, students will be expected to edit for grade-level mechanical, grammatical, and rhetorical conventions.

STUDENT ORAL COMPONENT:

Students will use skills and strategies learned to research information and present it to the class using PowerPoint slides as a graphic organizer and visual aid.

DETAILED UNITS OF INSTRUCTION:

The following units are in order of instruction. The unit durations listed are approximate; pace of instruction may vary depending on the students, but all of the units will be taught.

Unit 1 – Typing Proficiency (4-week focus, 8 more weeks of practice)

This unit prepares students for typed assignments in other classes. Accurate, fast typing skills give students the ability to easily produce high-quality documents. Such skills will develop as students memorize keys and finger strokes to be able to type without looking down to search the keyboard for every key. Students will use software specifically designed to teach correct typing skills.

Unit goals - Students should be able to:

- Memorize keystrokes on all letters
- Type simple paragraphs at a rate of 20-30 AWPM

Unit 2 – Microsoft Word (2 weeks)

This unit prepares students to produce documents in Word. They will learn formatting procedures for documents consistent with MLA standards, so as to produce appropriate documents for all courses they take. Basic skills taught in Word will include, but not be limit to, the following: creating, saving, and opening documents to/from various locations; text alignment, size and appearance; line spacing; page numbering; indentation; inserting and editing objects such as pictures, graphs, and clip art; changing columns; setting page orientation; use bullets and numbering.

Unit goals - Students should be able to:

- Identify which toolbars are showing and know to always show appropriate ones for the task

- Modify font style, size, appearance (bold, italic, underline, etc.), alignment
- Use spelling/grammar check and thesaurus
- Insert and edit objects from various locations
- Cut, copy, and paste
- Set line spacing
- Insert page numbers
- Memorize an acceptable, MLA-compliant page format for reports, stories, etc.
- Set columns
- Change page orientation
- Use bullets and numbering

Unit 3 – Microsoft Excel (2 weeks)

This unit introduces students to basic concepts of spreadsheets – data entry, data manipulation, formulas, and graphing. Students learn to create simple sheets using formulas to solve problems. They also learn to create various types of graphs to analyze and depict information.

Unit goals - Students should be able to:

- Locate cells by coordinates
- Identify and input three types of cell data
- Cut, copy and paste
- Write formulas to solve arithmetic problems
- Create spreadsheets to calculate answers for multi-step problems; clearly label answers
- Given data, choose an appropriate type of graph and create it to be clearly labeled, neat, and accurately titled
- Print a spreadsheet to show data/graph, data/answers, or data/formulas

Unit 4 – Microsoft Internet Explorer/Internet (2 weeks)

This unit prepares students to effectively use the World Wide Web for research. Students learn effective search strategies using web directories and directed Boolean searches. The unit reviews and continues concepts of information literacy, including classification and website evaluation. Students learn to navigate the Web using the browser's primary functions. They also learn elements of the URL as they pertain to effective research.

In addition to search strategies, students also learn basic information about the Internet and the World Wide Web.

Unit goals - Students should be able to:

- Explain the Internet, the Web, and E-mail
- Use web directories to isolate appropriate topics
- Conduct an effectively narrow search from a search engine using Boolean strategies and characters
- Evaluate web sites by asking and answering basic questions about source reliability and pertinence
- Use a browser to navigate the Web and bookmark pages
- Identify parts of the URL

Unit 5 – Microsoft Publisher (2 weeks)

This unit prepares students to produce various types of desktop publishing documents for reports, projects, etc. Students learn principles of desktop publishing, including but not limited to the following topics: text boxes; borders and gutters; rulers; zoom tools; object placement; space utilization; background designs. After learning

the basics, students should be able to apply skills to create newsletters, brochures, fliers, signs, or most other desktop publishing projects required by a teacher.

Unit goals - Students should be able to:

- Create a new document using the catalog; modify, save, and open it
- Insert text and modify font, size, appearance, and alignment
- Insert, move, resize, and delete objects, including text boxes; link text boxes; wrap text
- Move objects between foreground and background
- Design projects to be appealing, easy to read, and informative

Unit 6 – Microsoft PowerPoint (2 weeks)

This unit prepares students to create multi-slide, multi-media PowerPoint presentations. Students will learn to use PowerPoint as both a visual aid in public speaking and as an independent or audience-directed presentation tool. Instruction will cover functions necessary to create effective, appealing presentations for school projects and reports.

Unit goals - Students should be able to:

- Create new slides and select appropriate layouts and backgrounds
- Insert text and modify font, size, appearance, and alignment
- Insert, move, resize, and delete objects, including text boxes
- Animate text and objects, with and without sound effects, with effective order; set to animate automatically or manually
- Record narration for slides
- Print slide outlines
- Design slides to be appealing, easy to read, and informative
- Present an oral report to the class using a multi-slide presentation as a visual aid

Unit 7 – Microsoft FrontPage (2 weeks)

This unit introduces students to web page design with an HTML editor and prepares them to create their own pages and sites for other classes. Students learn basic strategies for layout and use of several common web elements. They will also learn how to map and connect their pages to form a site. After successfully completing this unit, students will know how to create sites that can be uploaded onto the Web.

Unit goals - Students should be able to:

- Create, save, and open web pages
- Organize all elements into a common folder for the site
- Insert and manage objects including pictures, buttons, clip art, logos, and marquees; obtain and/or create the logos
- Create text, button, and picture hyperlinks to pages within and outside the site
- Design pages that are easily navigable within the site
- Use effective backgrounds/colors
- Effectively use tables to organize objects and text

LAB FEE, IF REQUIRED: None

SUBJECT AREA CONTENT STANDARDS TO BE ADDRESSED:

See “Detailed Units of Instruction”

DISTRICT ESLRs TO BE ADDRESSED:

When students exit this course, they will be:

- **Self-directed Learners** who will be able to use notes and a textbook to assist them in continuing their learning outside of the classroom setting.
- **Efficient Communicators** who can explain concepts to others and use computers to organize and explain data.
- **Quality Producers** who understand the importance of neat, organized work that demonstrates their thinking and understanding of the solution they've formed to solve a problem.
- **Constructive Thinkers** who are able to attack problems with organization, logic, and computer skills they've developed in a systematic fashion.
- **Collaborative Workers** who can work in a variety of settings in culturally diverse groups.
- **Responsible Citizens** who accept the consequences of their actions and who demonstrate their understanding of their role in the learning process.