

**Denver Public Schools**  
**Department of Curriculum and Instructional Services**  
**2003/2004**  
**COURSE SYLLABUS**

**I. General Course Information**

**Code**

**ELA-E**

**MS**

7506 AA

**Course Title:** Technological Applications

**Department:** CTE

**Sub-Dept:** Business

**Credit Area:** Electives

**Grade Level:** 9

**Duration:** 1 semester

**Credits/Sem.** 5.00

**Special Grading:** AA Articulated Agreement for continuing education

**Graduation Info:** This course #7506 is applicable toward the graduation requirement for Electives (gen.)

**Pre-requisite:** Keyboard 15 wpm using "Touch Method"

**Fees, Materials, etc.:** Determined by school

**Note:**

**II. Course Description**

This course is an entry-level course, which is a pre-requisite to other Business and Marketing Education courses. Computer Applications will allow a student to develop and improve computer technology skills necessary to be successful in school, in his/her personal life, and in the world business economy. Units of instruction include word processing, database, spreadsheets, presentation media, the Internet and career planning.

**III. District Standards in Business and Marketing Education / Learning Objectives / District Standards**

**STANDARD 3:** The student will apply knowledge gained from personal assessment, career research, and the study of workplace expectations to develop strategies to make an effective transition from school to career.

In order to meet the standards, students will be able to:

- 3.1 Utilize self-assessment skills relative to business career options.
- 3.2 Utilize career resources to develop an information base that includes global occupational opportunities.
- 3.3 Relate work ethic, workplace relationships, workplace diversity, and workplace communication skills to career development.
- 3.4 Apply knowledge gained from individual assessment to a comprehensive set of goals and an individual career plan.
- 3.5 Develop strategies to make an effective transition from school to career.
- 3.6 Relate the importance of lifelong learning to career success.

**STANDARD 4:** The student will communicate for a variety of purposes and audiences, using various tools and methods.

In order to meet the standards, students will be able to:

- 4.1 Communicate in a clear, courteous, concise, and correct manner on a personal and professional level.
- 4.2 Use appropriate vocabulary, grammar, and format in oral and written communications.
- 4.4 Use technology to enhance the effectiveness of communications.

**STANDARD 5:** The student will utilize a variety of computer software demonstrating a mastery of workplace technical skills.

In order to meet the standards, students will be able to:

- 5.1 Use touch keyboarding skills to enter and manipulate text and data.
- 5.2 Demonstrate basic file drive management (network, hard drive, CD-ROM, and floppy drive).
- 5.4 Enter, sort, and retrieve data from spreadsheets, create formulas, use functions, and create charts and graphs.
- 5.5 Enter, sort, and retrieve data from databases; define records and fields. Create simple, complex queries, reports and forms.
- 5.6 Create and edit electronic presentations with transitions, images and charts.
- 5.7 Describe positions and career paths in information systems.
- 5.8 Establish and use a personal code of ethics for information systems use and management.
- 5.9 Identify, select, evaluate, use, customize and problem solve application software.
- 5.11 Create, save, retrieve, edit, and print word processing documents.
- 5.13 Demonstrate knowledge of electronic communication.

#### **DPS – READING AND WRITING**

**STANDARD 1:** Students read and understand a variety of materials.

In order to meet that standard, the student will be able to:

- 1.2 Make connections between prior knowledge and what they need to know about a topic before reading about it.

**STANDARD 2:** Students write and speak for a variety of purposes and audiences.

In order to meet that standard, the student will be able to:

- 2.3 Write and speak to peers, teachers, and the community.
- 2.4 Plan, draft, revise, proofread, edit, and publish written communication.

**STANDARD 7:** Students use appropriate technologies to extend comprehension and communication skills in reading, writing, speaking, listening, and viewing.

In order to meet that standard, the student will be able to:

- 7.1 Use appropriate technologies to increase literacy through a variety of formats (for example, textual, graphic, audio, video, electronic, multimedia.)
- 7.2 Use appropriate technologies to access, process, and communicate information for a variety of purposes.
- 7.3 Demonstrate problem-solving skills through the use of appropriate technologies.

## DPS – MATHEMATICS

**STANDARD 2:** Algebraic Concepts – Students use algebraic methods to explore, model, and describe patterns and functions involving number, shape, data, and graphs in problem-solving situations and communicate the reasoning used in solving these problems.

**STANDARD 6:** Computations – Students link concepts and procedures as they develop and use computational techniques, including estimation, mental arithmetic, paper and pencil, calculators, computers, and other manipulatives in problem-solving situations and communicate the reasoning used in solving these problems.

In order to meet that standard, the student will be able to:

- 6.2 Develop, use, and analyze algorithms and formulas.
- 6.3 Select and apply appropriate computational techniques to solve a variety of problems and determine whether the results are reasonable.

### IV. Course Outline

#### A. Word Processing

##### 1. Speed and Accuracy Building

- a. Timed writings for speed and accuracy using the “Touch Method” of keyboarding
- b. Proper technique and posture

- ◆ Identify/utilize examples of emerging hardware technology. (5.2)
- ◆ Utilize emerging application software. (5.9)
- ◆ Enter and manipulate alphabetic and numeric data using the touch method on an alphabetic and numeric keyboard/ a 10-key pad. (5.1)
- ◆ Identify vocabulary specific to word processed documents. (5.11)
- ◆ Demonstrate competency to create, save, retrieve, and print documents. (5.11)
- ◆ Demonstrate the use of a variety of tool bar/menu functions in document design. (5.11)

##### 2. Business Documents

- a. Definition of mailable document
- b. Terminology
- c. Letters and Envelopes
  - 1) Application
  - 2) Cover Letter
  - 3) Resume
  - 4) Follow-up Letter
- d. Reports with Title Pages

- ◆ Use business vocabulary for entry level jobs. (4.2)
- ◆ Identify factors affecting the readability of text. (4.2)
- ◆ Use acceptable steps in the writing process (plan, draft, edit and revise). (4.2)
- ◆ Compose and produce a variety of business documents. (4.2)
- ◆ Edit business documents to improve content and effectiveness. (4.2)
- ◆ Identify/utilize examples of emerging hardware technology. (5.2)
- ◆ Utilize emerging application software technology. (5.9)
- ◆ Use reference materials, such as software help feature, tutorials, and manuals, available for application software. (5.9)
- ◆ Enter and manipulate alphabetic and numeric data using the touch method on an alphabetic and numeric keyboard. (5.1)
- ◆ Identify vocabulary specific to word processed documents. (5.11)
- ◆ Make format and style changes to word processed documents. (5.11)
- ◆ Evidence ability to use speller and thesaurus to edit word processed documents. (5.11)
- ◆ Demonstrate competency to create, save, retrieve, and print documents. (5.11)
- ◆ Show competency to compose documents using correct grammar, punctuation, and spelling. (5.11)
- ◆ Demonstrate proofreading skills in production of mailable copy. (5.11)
- ◆ Demonstrate the use of a variety of tool/bar menu functions in document design. (5.11)
- ◆ Select word processing software appropriate for specific tasks in document design. (5.11)

#### B. Spreadsheets

1. Terminology
2. Uses for spreadsheets
3. Creating a spreadsheet

- ◆ Use reference materials, such as software help feature, tutorials, and manuals, available for application software. (5.9)
- ◆ Enter and manipulate alphabetic and numeric data using the touch method on an alphabetic and numeric keyboard/10-key pad. (5.1)
- ◆ Explain the purposes, functions, and common features of spreadsheet software. (5.4)
- ◆ Explain the meaning of common spreadsheet terms. (5.4)
- ◆ Use spreadsheet software to design, create, manipulate, store, retrieve, update, add, search, sort, print, chart, and delete data. (5.4)
- ◆ Design and enter formulas that permit user to ask “what if” questions to analyze spreadsheet data. (5.4)
- ◆ Demonstrate proofreading skills in production of mailable copy. (5.11)
- ◆ Demonstrate the use of a variety of tool bar/menu functions in document design. (5.11)

#### C. Databases

1. Terminology
2. Uses for databases
3. Creating a database

- ◆ Edit business documents to improve content and effectiveness. (4.2)
- ◆ Identify/Utilize examples of emerging hardware technology. (5.2)
- ◆ Utilize emerging application software. (5.9)
- ◆ Use reference materials, such as software help feature, tutorials, and manuals, available for application software. (5.9)
- ◆ Describe search strategies and use them to solve common information problems. (5.5)
- ◆ Plan and develop record specifications. (5.5)
- ◆ Enter and manipulate alphabetic and numeric data using the touch method on an alphabetic and numeric keyboard/ a 10-key pad. (5.1)
- ◆ Explain the purposes, functions, and common features of database software. (5.5)
- ◆ Explain the meaning of common database terminology. (5.5)
- ◆ Use database software to store, query, retrieve, and sort data. (5.5)
- ◆ Use database software to plan, create, update, add, and delete records. (5.5)
- ◆ Demonstrate the use of a variety of tool bar/menu functions in document design. (5.11)

#### D. Presentation Media

1. Terminology
2. Uses for presentation media
3. Creating a presentation
4. Graphic incorporation (scanned graphics, clip art, digital media, picture download)

- ◆ Write appropriate message for specific audience. (4.1)
- ◆ Compose messages that promote positive human behavior. (4.1)
- ◆ Use acceptable steps in the writing process (plan, draft, edit, revise). (4.2)
- ◆ Write formal and informal reports using suitable format supported by graphic aids. (4.2)
- ◆ Utilize emerging application software. (5.9)
- ◆ Use reference materials, such as software help feature, tutorials, and manuals, available for application software. (5.9)
- ◆ Enter and manipulate alphabetic and numeric data using the touch method on an alphabetic and numeric keyboard and a 10-key pad. (5.1)
- ◆ Explain the meaning of common presentations and multi-media software terminology. (5.6)
- ◆ Explain the purposes, functions and common features of presentation and multimedia software. (5.6)
- ◆ Develop advanced presentations that include transitions, images, and charts. (5.6)
- ◆ Identify principles and techniques of presentation and multimedia design and delivery. (5.6)
- ◆ Develop a personal code of ethics for information systems. (5.8)
- ◆ Demonstrate the use of a variety of tool bar/menu functions in document design. (5.11)
- ◆ Demonstrate competency to create, save, retrieve, and print documents. (5.11)
- ◆ Evidence ability to use speller and thesaurus to edit word processed documents. (5.11)
- ◆ Show competency to compose simple text documents using correct grammar, punctuation, and spelling. (5.11)

E. Internet Use

1. Introduction
2. Responsible use
3. Terminology
4. Access
5. Components
6. Career Research
7. ICAP
8. Post-Secondary Exploration

- ◆ Explore appropriate employment opportunities and further education. (3.4)
- ◆ Compare advantages and disadvantages of various secondary and post-secondary programs to the attainment of career goals. (3.4)
- ◆ Use computer networks to facilitate collaborative or individual learning and communicating. (4.4)
- ◆ Address ethical issues regarding ownership of information generated electronically. (4.4)
- ◆ Apply the rules of electronic messaging etiquette. (4.4)
- ◆ Evaluate and select messages, which may be addressed best by electronic media. (4.4)
- ◆ Use reference materials, such as software help feature, tutorials, and manuals, available for application software. (5.9)
- ◆ Select/utilize communications software appropriate for specific tasks. (5.13)
- ◆ Send and receive e-mail messages, voice messages, and faxes. (5.13)
- ◆ Utilize and follow the Denver Public Schools student technology agreement. (5.8)
- ◆ Develop a personal code of ethics for information systems. (5.8)
- ◆ Demonstrate proofreading skills in production of mailable copy. (5.11)
- ◆ Demonstrate the use of a variety of tool bar/menu functions in document design. (5.11)
- ◆ Demonstrate competency to create, save, retrieve, and print documents. (5.11)
- ◆ Evidence ability to use speller and thesaurus to edit word processed documents. (5.11)
- ◆ Show competency to compose simple text documents using correct grammar, punctuation, and spelling. (5.11)
- ◆ Apply for and establish a personal electronic mail account. (5.13)
- ◆ Recognize the impact of technological change on information systems positions and the resulting need for life-long learning and retraining. (5.7)
- ◆ Differentiate between reliable information and misinformation on web sites. (5.13)
- ◆ Explore web sites in different domains. (5.13)
- ◆ Conduct web searches to find desired information for projects. (5.13)
- ◆ Print, save and store e-mail messages. (5.13)
- ◆ Use an e-mail address book. (5.13)

## F. Career Planning

### 1. Career Research

#### a. Self Awareness

- 1) Interest/Personal
- 2) Aptitude
- 3) Values
- 4) Learning Style

- ◆ Assess and analyze personal talents and interests. (3.1)
- ◆ Compare personal skills and aptitudes with various career options. (3.1)
- ◆ Correlate personal characteristics and requirements of various career opportunities. (3.1)

### 2. Career Exploration Software

- ◆ Research several occupational interests. (3.2)
- ◆ Compare advantages and disadvantages of various secondary and post-secondary programs to the attainment of career goals. (3.4)

### 3. Other Options

#### a. Community Resources

- 1) Job Shadow
- 2) Speakers
- 3) Study Tours

#### b. Employability

- 1) Worker Qualities
- 2) Personal Profile
- 3) Seeking a Position
- 4) Retaining a Position
- 5) Job Departure

#### c. Preparing for Career Success

- 1) Using your portfolio
- 2) Job interview tips
- 3) Mock interviews

- ◆ Determine attitudes needed for career success. (3.1)
- ◆ Select and use resources available for projecting career opportunities and trends. (3.2)
- ◆ Research several occupational interests. (3.2)
- ◆ Role-play appropriate and inappropriate employer and employee interaction in workplace situations. (3.3)
- ◆ Practice appropriate interpersonal skills for working with and for others. (3.3)
- ◆ Demonstrate appropriate interviewing techniques (e.g., portfolio presentation, questioning, dress, and etiquette). (3.5)
- ◆ Explain the importance of interview follow-up. (3.5)
- ◆ List tasks to be completed following interview. (3.5)
- ◆ Demonstrate appropriate techniques for resigning from a position. (3.6)