SWEETWATER UNION HIGH SCHOOL DISTRICT

DIVISION OF ADULT EDUCATION

Career Technical Education

## Introduction to Computer Concepts

### COURSE APPROVAL

##### Course submitted by:

##### \_\_Mary Alvarado\_\_\_\_\_\_\_\_ \_\_Teacher\_\_\_\_ \_\_\_Imperial Beach Adult\_\_\_\_\_\_

Name Position Site

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Signature Date

##### Course reviewed by CTE Coordinator

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Signature Date

##### Course approved by the Sweetwater Board of Trustees

December 15, 1983

##### Course Revision:

January 23, 1992

May 20, 2002

May 17, 2004

May 9, 2006

May 20, 2008

July 27, 2009

Title change approved

Nee “Computer Operator/Software Applications – Intro to Computers”

May 20, 2008

Nee “Introduction to Computer Technology – Part B”

July 27, 2009

July 23, 2012

May 12, 2014

June 27, 2016

#### 

## Introduction to Computer Concepts

##### Course reviewed by Members of the Industry Advisory Board (EAB)

1. **\_\_**Alor F. Calderon**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_**May 28, 2014**\_\_\_\_**

Name of Advisory Committee Member Date

**\_**Worker Education & Advocacy Center**\_\_\_\_\_ \_\_**Program Director**\_\_**

Place of Business Occupation

2. **\_\_**Douglas Thompson **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_**March 8, 2011**\_\_\_\_\_**

Name of Advisory Committee Member Date

**\_\_\_**Seacoast Commerce Bank**\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_**Compliance Officer**\_\_**

Place of Business Occupation

3. **\_**Alex F. Calderon**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_**February 24, 2011**\_\_\_**

Name of Advisory Committee Member Date

**\_\_\_**Employee Rights Center**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_**Program Coordinator**\_**

Place of Business Occupation

4. **\_**Flavia Toscano **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_**March 3, 2011**\_\_\_\_\_**

Name of Advisory Committee Member Date

**\_\_**Chula Vista Elementary School Dist.**\_\_\_\_\_\_ \_\_**School Secretary **\_\_\_**

Place of Business Occupation

5. **\_**Emilia Luna**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_**March 3, 2011**\_\_\_\_\_\_**

Name of Advisory Committee Member Date

**\_**South County Career Center**\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_**Sps Manager**\_\_\_\_\_\_\_**

Place of Business Occupation

## Introduction to Computer Concepts

# Basic Course Information

|  |  |
| --- | --- |
| **Course Title:** | **Introduction to Computer Concepts** |
| **CTE Industry Sector:** | **Information Technology Industry** |
| **Career Pathway:** | **Information Support & Services** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Course Level:** | x | Introductory |  | Concentration |  | Capstone |

|  |  |
| --- | --- |
| **Course Number:** | **0662** |
| **CBEDS Title:** | **Office Systems and Technologies** |
| **CBEDS Number:** | **4615** |

|  |  |
| --- | --- |
| Course Hours: | 60 hours (maximum of 120 hours) or until competencies are achieved |
| Prerequisites: | No Prerequisite. This course is designed for students with limited keyboarding experience and limited knowledge of computer applications. |
| Evaluation: | 1. Instructor observation. and assessment of student proficiency in mastering class lessons and over-all operational procedures; 2. Satisfactory attendance and participation in class activities as evaluated by the instructor. 3. Performance-based testing; student demonstrates computer proficiency. |
| Conditions for Repetition: | Students who have failed to satisfactorily meet the course objectives because of insufficient attendance or inability to master content may, with permission, repeat the course. |
| **Articulation Information:** | Southwestern College  Computer Literacy  CL 120 |
| **Articulation Credit:** | 1 Credit |
| **High School elective Credit:** | Upon successful completion of course objectives, participants may earn participants 2 elective credits. The course may also be taken for no credit. |
| **Advisory Committee Meetings:** |  |

**Course Description**

|  |
| --- |
| Introduction to Computer Concepts is designed to meet increasing needs in computer-oriented technical fields. It offers students an opportunity to learn basic computer terminology, identify basic computer components and operate computer hardware. Students will acquire fundamental skills using applications in word processing, spreadsheets, database management, the Internet and email. This course is designed for students new to technology with a main focus on software. |

**Instructional Strategies**

|  |
| --- |
| Teacher lecture and demonstration 10%  Teacher supervision of lab work 80%  Instructor/student consultations 10% |

**Instructional Materials**

|  |
| --- |
| Textbooks: Teacher provides copy of the first several chapters of the Microsoft Office Word 2010 Complete text book. |

**Career Plan: How this Course fits into the Course Sequence**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sequence of Courses** | **Course Level** | | | **Primary Funding Source** | | **Perkins**  **Funded** | **Total Duration** |
| Name of Course | Intro. | Concentration | Capstone | District/COE | ROCP | Yes or No | (In hours) |
| Intro to Computer Concepts |  |  |  |  |  | Yes | 120 |
| Keyboarding |  |  |  |  |  | Yes | 60 |
| Computer Applications – MS Word 2010 |  |  |  |  |  | Yes | 300 |
| Computer Applications – MS Excel 2010 |  |  |  |  |  | Yes | 180 |
| Computer Applications – MS Access 2010 |  |  |  |  |  | Yes | 180 |
| Computer Applications – MS PowerPoint 2010 |  |  |  |  |  | Yes | 180 |
| * Student can choose from the following groups: | | | | | | | |
|  |  |  |  |  |  | Yes |  |
|  |  |  |  |  |  | Yes |  |

**Occupations for Identified Pathway**

|  |  |
| --- | --- |
| Pathway occupations organized by level of education and training required for workplace entry.(Asterisked occupations require certification or licensure.) | |
| Postsecondary Training (certification and/or AA degree) | College University (bachelor’s degree or higher) |
| Computer Operators  * Data Entry Keyers * Office Support Supervisor | • Computer Support Specialist  * Database Administrators * Executive Secretaries |

# Course Goals

|  |
| --- |
| 1. Gain an introduction to the background of the Information Technology industry as well as the qualifications of successful computer operators. |
| 1. Learn basic computer terminology that is relevant to the lessons. |
| 1. Learn to operate computer hardware. |
| 1. Learn the fundamentals of a word processing software program. |
| 1. Learn the fundamentals of an electronic spreadsheet software program. |
| 1. Learn the fundamentals of a presentation software program. |
| 1. Learn the fundamentals of using the Internet and email. |
| 1. Learn to improve Keyboard skills by the touch method. |
| 1. Learn how to develop a career plan and complete documentation such as a job application resume, and cover letter. |
| 1. Learn work based expectations and the day-to-day aspects of running a business. |

# Instructional Module/Unit

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit 1** | **Introduction** | Class Hrs. | 4 | Lab Hrs. |  |

Description:

|  |
| --- |
| Students gain an introduction to the course and learn class expectations. They are introduced to the common traits exhibited by people successfully working in this field, personal qualifications, interests, aptitiudes, and knowledge of skills necessary to succeed this career pathway. Students examine the historical and economic background of this field as well as current opportunities available. In addition students will examine the personal, professional, and educational requirements needed to meet their goals. |
| **Unit 1 Competency:** Upon Completion of this unit, the student is able to: |
| **1.** Identify the personal qualifications, interests, aptitudes, knowledge and skills of successful **computer operators.** |
| **2.** Demonstrate an understanding of personal, professional, and educational requirements of this career field. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit 2** | **Terminology** | Class Hrs. | 10 | Lab Hrs. | **5** |

Description:

|  |
| --- |
| Students will be introduced to basic computer terminology. They will practice using these terms throughout their computer projects. They will also engage in discussions where they will practice using terminology. |
| **Unit 2 Competency:** Upon Completion of this unit, the student is able to: |
| **1.** Practice proper use of computer terminology in conversation, writing and evaluations. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit 3** | **Computer Hardware** | Class Hrs. | 5 | Lab Hrs. | **3** |

Description

|  |
| --- |
| Students will be introduced to the different pieces of computer hardware. They will be instructed on how each of these parts works and how the computer works as a whole. They will practice using these skills when completing classroom projects. |
| **Unit 3 Competency:** Upon Completion of this unit, the student is able to: |
| **1.** Demonstrate proper power-up and power-down procedures. |
| **2.** Learn to use storage such as diskettes/USB. |
| **3.** Demonstrate familiarity with computer keyboard and some of the special keys and features. |
| **4.** Operate printer and/or scanner. |
| **5.** Explain computer capabilities and limitations. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit 4** | **Word Processing** | Class Hrs. | 10 | Lab Hrs. | **10** |

Description

|  |
| --- |
| Students will be instructed on the fundamentals of a word processing software program. They will complete projects that will reinforce these skills. |
| **Unit 4 Competency:** Upon Completion of this unit, the student is able to: |
| **1.** Manipulate text using correct procedures for: marking, moving, deleting, and restoring blocks and columns, and hard/soft returns and spaces. |
| **2.** Format page layout: margins, justification, align right, line spacing, tab settings, centering, page length, print enhancements, endnotes, footnotes, page numbering, and creation of header and footers. |
| **5.** Perform a spelling check. |
| **6.** Utilize thesaurus feature. |
| **7.** Print documents |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit 5** | **Spreadsheet** | Class Hrs. | 15 | Lab Hrs. | **10** |

Description

|  |
| --- |
| Students will be instructed on the fundamentals of an electronic spreadsheet software program. They will complete projects that will reinforce these skills. |
| **Unit 5 Competency:** Upon Completion of this unit, the student is able to: |
| **1.** Build a simple worksheet. |
| **2.** Design spreadsheet layout. |
| **3.** Create, save, retrieve and edit a worksheet. |
| **4.** Enter formulas and values. |
| **5.** Print worksheet/specify print strings. |
| **6.** Perform basic formatting changes and functions, i.e., insert, delete, move and erase. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit 6** | **Presentation** | Class Hrs. | 5 | Lab Hrs. | **5** |

Description

|  |
| --- |
| Students will be instructed on the fundamentals of a presentation software program. They will complete projects that will reinforce these skills. |
| **Unit 6 Competency:** Upon Completion of this unit, the student is able to: |
| **1.** Build a simple worksheet. |
| **2.** Design spreadsheet layout. |
| **3.** Create, save, retrieve and edit a worksheet. |
| **4.** Enter formulas and values. |
| **5.** Print worksheet/specify print strings. |
| **6.** Perform basic formatting changes and functions, i.e., insert, delete, move and erase. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit 7** | **Internet & Email** | Class Hrs. | 10 | Lab Hrs. | **5** |

Description

|  |
| --- |
| Students will be instructed on the fundamentals of using the internet and email. They will learn what a web browser is and how to use a browser for research and job hunting as well as for recreational purposes. Students will also be instructed on how to set up a web based email program and how to use email. They will complete reading assignments as well as projects in the classroom that reinforce their skills. |
| **Unit 7 Competency:** Upon Completion of this unit, the student is able to: |
| **1.** Identify the World Wide Web and how it operates. |
| **2.** Learn to access website URL’s. |
| **3.** Learn basics of downloading/uploading files. |
| **4.** Learn to create access and use email. |
| **5.** Learn to integrate Internet with other applications. |
| **6.** Learn to use search engine and research for information. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit 8** | **Keyboard Techniques** | Class Hrs. | 5 | Lab Hrs. | **10** |

Description

|  |
| --- |
| Students will be instructed on keyboarding using the touch method on a computer. They will practice keyboarding in the classroom to increase accuracy and speed. |
| **Unit 8 Competency:** Upon Completion of this unit, the student is able to: |
| **1.** Demonstrate correct keyboarding techniques in the stroking and touch  control rhythm. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit 9** | **Job Career Planning** | Class Hrs. | 2 | Lab Hrs. | **2** |

Description:

|  |
| --- |
| Students create a sample cover letter, personal resume, completed job application, thank you letter, and list of personal references. They develop their personal career portfolio that contains documents for getting a job as well as a career plan and selected work samples. Students practice appropriate interviewing techniques. |
| **Unit 9 Competency:** Upon Completion of this unit, the student is able to: |
| **1.** Demonstrate the ability to write a cover letter. |
| **2.** Demonstrate the ability to complete a job application. |
| **3.** Demonstrate the ability to write a resume. |
| **4.** Demonstrate successful job interview skills. |
| **5.** Successfully assemble a personal career portfolio. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit 10** | **Work-Based Learning Experiences** | Class Hrs. | 4 | Lab Hrs. |  |

Description

|  |
| --- |
| Students will be taught the work based expectations of punctuality, professionalism, dress, demeanor, and telephone etiquette. Students will engage in discussions with the instructor regarding workplace experiences and the day-to-day aspects of running a small business. |
| **Unit 10 Competency:** Upon Completion of this unit, the student is able to: |
| **1.** Demonstrate the ability to work successfully in the Information Technology Industry. |
| **2.** Demonstrate the ability to “go to work” with a proper attitude towards the work place expectations of punctuality, professionalism, dress, demeanor, and telephone etiquette. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Totals** | **Theory Hrs.** | **70** | **Lab Hrs.** | **50** | **Total Hrs.** | **120** |

**APPENDIX A:**

**MATRIX FOR ALL ASPECTS OF THE INDUSTRY**

All Aspects of the Industry is a key element of the Carl D. Perkins Vocational and Applied Technology Education Act and the School-to Work Opportunities Act. Both acts emphasize giving students a comprehensive perspective and range of skills across an industry. The Perkins Act requires programs to “provide students with strong experience in and understanding of all aspects of the industry students are preparing to enter”. The Act identifies eight aspects in particular, which are common to any business or industry. Programs receiving Perkins funds are required to include the teaching of these concepts to provide students with the skills necessary to be successful in their employment.

**STRATEGIES**

Below is a matrix showing the components of “All Aspects of the Industry for the *name of Course*.” A list of strategies is provided for each component.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ASPECTS** | **SEQUENCE OF COURSES** | | | | |
|  | **Course 1: Introduction to Computer Concepts** | **Course 2: Computer Applications Word Processing** | **Course 3: Computer Applications Spreadsheet** | **Course 4: Computer Applications Presentation Software** | **Course 5: Computer Applications Database** |
| **Planning** | Bridge the gap by becoming technologically literate students able to access information, solve problems, create, innovate and express themselves through the skillful use of a variety of technologies. | Set goals and objectives so student can effectively use word processing in their daily lives and areas of employment. | Set goals and objectives so students can effectively use electronic spreadsheets in a variety of business and job environments. | Set goals and objectives showing student how to effectively use Presentation Software for employment and personal use. | Set goals and objectives showing student how to effectively use Database Software for employment and personal use. |
| **Management** | Learn basic concepts of how computer programs work, through a hands-on, show and tell type approach with a focus on increasing foundational skills. | Lead students through management of class goals and objectives for completion of assignments and projects.  . | Lead students through management of class goals and objectives for completion of assignments and projects.  . | Lead students through management of class goals and objectives for completion of assignments and projects.  . | Lead students through management of class goals and objectives for completion of assignments and projects. |
| **Finance** | Access up-to-date and useful information including current technologies; allowing student to become better decision maker when purchasing computing devices. | N/A | Create and maintain electronic spreadsheets. | N/A | N/A |
| **Technical &**  **Production Skills** | Acquire new avenues for learning (such as Internet research) and overcome barriers associated with computing so that student can achieve success and gain practical skills. | Students learn fundamentals of Word processing and basic communication skills through computer software applications. | Students learn how to create worksheets and workbooks; learn how to use formulas; and learn effective uses of charts. | Students learn fundamentals and customization of Presentation Software; and communication skills through integration of other software applications and email/web presentations. | Students learn fundamentals and customization of Database Software; and communication skills through integration of other software applications and email/web presentations. |
| **Underlying Principles**  **Of Technology** | Gain awareness of the underlying principles of technology which are essential for future development. | Students learn concepts of word processing to be able to meet employment requirements; students trained to be able to pass the MOU certification for job employment. | Students use technology to analyze and solve problems; learn and upgrade basic computer skills. | Students learn concepts of Presentation Software to be able to meet employment requirements; students trained to be able to pass the MOUS certification for employment. | Students learn concepts of Database Software to be able to meet employment requirements; students trained to be able to pass the MOU certification for employment. |
| **Labor Issues** | Obtain effective learning strategies and become aware of career options and lifelong learning opportunities. (General workplace knowledge and skills are infused throughout the course). | Certification of level skills for job requirements. | Certification of level skills for job requirements. | Certification of skills for job requirements. | Certification of skills for job requirements. |
| **Community Issues** | Use technology in an ethical and legal manner, and understand how technology affects society. | Students are learning skills to make them productive and proficient members of the community. | Students are learning skills to make them productive and proficient members of the community. | Students are learning skills to make them productive and proficient members of the community. | Students are learning skills to make them productive and proficient members of the community. |
| **Health, Safety, &**  **Environmental Issues** | Increase awareness of health, safety and environmental issues ensuring student is able to make informed and responsible decisions. | Ergonomics as well as safety issues related to use of computer equipment and software. | Ergonomics as well as safety issues related to use of computer equipment and software. | Ergonomics as well as safety issues related to use of computer equipment and software. | Ergonomics as well as safety issues related to use of computer equipment and software. |

Standards-Aligned Course: PLC work in progress

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Instruction Unit / Subunits** | **Concepts/Skills** | **Benchmarks** | **Student Learning Outcomes** | **Model Curriculum Standards**  **Mentioned = M Reinforced = R Taught = T** | | | | | |
| K & P Anchor |  | Pathway |  | Other |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

