

SWEETWATER UNION HIGH SCHOOL DISTRICT
DIVISION OF ADULT EDUCATION
Career Technical Education

Key Applications

COURSE APPROVAL

A+ COMPUTER REPAIR: Essential & Practical Application

COURSE APPROVAL

Mission: The Division of Adult Education, a community-focused organization, promotes and facilitates life-long learning for adults to meet the challenges of the 21st century.

Student Learning Outcomes

- Students will establish personal, academic and/or workforce goals and demonstrate progress toward them
- Students will solve problems
- Students will communicate clearly and collaborate with others
- Students will use resources, including technology, to research, organize and communicate information

Course approved by the Sweetwater Board of Trustees

June 27, 2016

Course Revision:

Key Applications

Basic Course Information

Course Title:	Key Applications
CTE Industry Sector:	Information Technology Industry
Career Pathway:	Information Support & Services
Course Level:	Introductory Concentration x Capstone
Course Number:	0660
CBEDS Title:	Office Systems and Technologies
CBEDS Number:	4615
Course Hours:	A maximum of 288 hours or until competencies are achieved
Prerequisites:	Minimum typing speed of 30 words per minute (recommended)
Evaluation:	<ol style="list-style-type: none"> 1. Instructor observation and assessment of student proficiency in word processing operational procedures. 2. Satisfactory attendance and participation in class activities as evaluated by the instructor. 3. Students demonstrating proficiency in the operation of one word processing program may receive one semester credit of high school credit; students who complete intermediate word processing may receive another credit for a total of two high school credits.
Conditions for Repetition:	Students who have failed to meet the objectives because of insufficient attendance or inability to master content may repeat the course with updated equipment, software, or content.
Articulation Information:	NA
Articulation Credit:	NA
High School Elective Credit:	The class is offered on a CREDIT / NONCREDIT basis. Upon successful completion of course objectives, up to two semester credits of high school elective credit may be earned.
Advisory Committee Meetings:	Annually

Course Description

Key Applications The Key Applications module focuses on four of the Microsoft Office 2013 applications: Word, Excel, PowerPoint, and Access. The lessons explain the purpose of commonly used software features, and step-by-step exercises demonstrate how to use those features. The end-of-the-lesson projects provide additional practice to master using those features to complete typical day-to-day tasks at home, school, and work. The Module 2 IC³ Pretest includes review questions, projects, and an integrated project which entails using word processing, spreadsheets, presentations, and databases to process information and then share the information with others.

Instructional Strategies

Key Applications

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

Instructional Materials

Textbooks: IC3 Certification Guide Using Microsoft Windows 7 & Microsoft Office 2013

Career Plan: How this Course fits into the Course Sequence

Sequence of Courses	Course Level			Primary Funding Source		Perkins Funded Yes or No	Total Duration (In hours)
	Intro.	Concentration	Capstone	District/COE	ROCP		
Computing Fundamentals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes	144
Living Online	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes	144
Key Applications	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes	288

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)
<ul style="list-style-type: none"> • Computer Operators • Data Entry Keyers • Office Support Supervisor 	<ul style="list-style-type: none"> • Computer Support Specialist • Database Administrators • Executive Secretaries

Course Goals

1. Identify common features shared among the applications in MS Office 2013.
2. Learn basic Microsoft Word skills to create simple documents, including letters, reports, and brochures.
3. Learn basic skills necessary for working with a spreadsheet application.
4. Learn basic skills necessary for working with an application designed to manage presentations delivered in various mediums.
5. Gain an introduction to a relational database management tool to organize and retrieve large amounts of information.

Instructional Module/Unit

Unit 1	Common Features	Class Hrs.	10	Lab Hrs.	20
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Description:

In this lesson students will examine some of the common features shared among the applications in Microsoft Office 2013. Students also explore basic techniques for working in an Office application.

Unit 1 Competency: Upon Completion of this unit, the student is able to:

1. Identify similar layouts and features on the screen between applications.
2. Recognize tips and tools on the screen for easy access.
3. Know how to start or exit a Microsoft Office program.
4. Know how to use and customize the Quick Access Toolbar.
5. Use commands and navigate around the Ribbon.
6. Know how to navigate around the screen.

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7. Know how to get help in Microsoft Office.
8. Know how to use the file tab and Backstage.
9. Know how to change program options and defaults.
10. Understand how to use common methods to manipulate data.
Anchor Standard: 2.1 Recognize the elements of communication using a sender-receiver model.
Anchor Standard: 2.3 Interpret verbal and nonverbal communications and respond appropriately.
Anchor Standard: 2.4 Demonstrate elements of written and electronic communication such as accurate spelling, grammar, and format.
Anchor Standard: 2.6 Advocate and practice safe, legal, and responsible use of digital media information and communications technologies.
Anchor Standard: 5.1 Identify and ask significant questions that clarify various points of view to solve problems.
Anchor Standard: 5.3 Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.
Anchor Standard: 5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.
Anchor Standard: 5.6 Know the available resources for identifying and resolving problems.
Anchor Standard: 8.3 Demonstrate ethical and legal practices consistent with Information and Communication Technologies sector workplace standards.
Anchor Standard: 10.1 Interpret and explain terminology and practices specific to the Information and Communication Technologies sector.
Anchor Standard: 10.2 Comply with the rules, regulations, and expectations of all aspects of the Information and Communication Technologies sector.
Anchor Standard: 10.3 Construct projects and products specific to the Information and Communication Technologies sector requirements and expectations.
Anchor Standard: 10.9 Use common industry-standard software and their applications including word processing, spreadsheets, databases, and multimedia software.
Anchor Standard: 11.1 Utilize work-based/workplace learning experiences to demonstrate and expand upon knowledge and skills gained during classroom instruction and laboratory practices specific to the Information and Communication Technologies sector program of study.
Anchor Standard: 11.2 Demonstrate proficiency in a career technical pathway that leads to certification, licensure, and/or continued learning at the postsecondary level.
Pathway Standard: A2.4 Define and use appropriate naming conventions and file management strategies.
Pathway Standard: A6.1 Use available resources to identify and resolve problems using knowledge bases, forums, and manuals.
Academic Standards: LS 11-12.1, 11-12.3 11-12.5, 11-12.6

Unit 2	Microsoft Word	Class Hrs.	15	Lab Hrs.	40
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Description:

Students will learn some of the basic skills required to create simple documents, including letters, reports, and a brochure.

Unit 2 Competency: Upon Completion of this unit, the student is able to:

1. Enter and edit Text.

2. Move around in the document.
3. Create new, save, close and open files.
4. Select specific types of text.
5. Change the view mode.
6. Format text, paragraphs, or the page.
7. Organize Data
8. Work with pictures in a document.
9.Track changes and comments in a document.
Anchor Standard: 2.1 Recognize the elements of communication using a sender-receiver model.
Anchor Standard: 2.3 Interpret verbal and nonverbal communications and respond appropriately.
Anchor Standard: 2.4 Demonstrate elements of written and electronic communication such as accurate spelling, grammar, and format.
Anchor Standard: 2.6 Advocate and practice safe, legal, and responsible use of digital media information and communications technologies.
Anchor Standard: 5.1 Identify and ask significant questions that clarify various points of view to solve problems.
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Pathway Standard: A2.4 Define and use appropriate naming conventions and file management strategies.
Pathway Standard: A4.1 Use different systems and associated utilities to perform such functions as file management, backup and recovery, and execution of programs.
Pathway Standard: A6.1 Use available resources to identify and resolve problems using knowledge bases, forums, and manuals.
Academic Standards: LS 11-12.1, 11-12.3 11-12.5, 11-12.6 RSIT 11-12.7 WS 11-12.4, 11-12.5

Unit 3	Microsoft Excel	Class Hrs.	15	Lab Hrs.	40
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Description

Students will be introduced to the basic skills for working with a spreadsheet application. They will learn to enter and format text and formulas, navigate and manage worksheets, filter and sort data, create and modify charts and set printing options.

Unit 3 Competency: Upon Completion of this unit, the student is able to:

1. Add or change numbers and labels
2. Enter simple formulas.
3. Manage worksheets
4. Format Data
5. Sort or Filter Data
6. Create and manipulate charts
7. Customize the page setup
Anchor Standard: 2.1 Recognize the elements of communication using a sender-receiver model.
Anchor Standard: 2.3 Interpret verbal and nonverbal communications and respond appropriately.
Anchor Standard: 2.4 Demonstrate elements of written and electronic communication such as accurate spelling, grammar, and format.
Anchor Standard: 2.6 Advocate and practice safe, legal, and responsible use of digital media information and communications technologies.
Anchor Standard: 5.1 Identify and ask significant questions that clarify various points of view to solve problems.
Anchor Standard: 5.3 Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.
Anchor Standard: 5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.
Anchor Standard: 5.6 Know the available resources for identifying and resolving problems.
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Anchor Standard: 10.3 Construct projects and products specific to the Information and Communication Technologies sector requirements and expectations.
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Anchor Standard: 11.2 Demonstrate proficiency in a career technical pathway that leads to certification, licensure, and/or continued learning at the postsecondary level.
Pathway Standard: A2.4 Define and use appropriate naming conventions and file

management strategies.
Pathway Standard: A4.1 Use different systems and associated utilities to perform such functions as file management, backup and recovery, and execution of programs.
Pathway Standard: A6.1 Use available resources to identify and resolve problems using knowledge bases, forums, and manuals.
Academic Standards: LS 11-12.1, 11-12.3 11-12.5, 11-12.6 RSIT 11-12.7 F-IF 1

Unit 4	Microsoft PowerPoint	Class Hrs.	15	Lab Hrs.	40
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Description

Students will be introduced to the basic skills for working with an application designed to manage presentations delivered in various mediums. You will set up presentations, and create and edit slides that include text, images, charts, tables, or multimedia.

Unit 4 Competency: Upon Completion of this unit, the student is able to:

1. Understand and apply general structure and guidelines for presentations.
2. Create new blank presentations or use a template to create a new presentation.
3. Save, close or open presentations.
4. Change the view display for slides
5. Insert, delete, or duplicate slides.
6. Change slide layout or design.
7. Add or manipulate text on the slides.
8. Add or manipulate tables and charts on the slides.
9. Add or manipulate multimedia objects such as pictures, movies, music files.
10. Set up and run a slide show.
11. Create notes or handouts to accompany slides.
12. Print slide items.
Anchor Standard: 2.1 Recognize the elements of communication using a sender-receiver model.
Anchor Standard: 2.3 Interpret verbal and nonverbal communications and respond appropriately.
Anchor Standard: 2.4 Demonstrate elements of written and electronic communication such as accurate spelling, grammar, and format.
Anchor Standard: 2.6 Advocate and practice safe, legal, and responsible use of digital media information and communications technologies.
Anchor Standard: 5.1 Identify and ask significant questions that clarify various points of view to solve problems.
Anchor Standard: 5.3 Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.
Anchor Standard: 5.4 interpret information and draw conclusions, based on the best analysis, to make informed decisions.
Anchor Standard: 5.6 Know the available resources for identifying and resolving problems.
Anchor Standard: 8.3 Demonstrate ethical and legal practices consistent with Information and Communication Technologies sector workplace standards.
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Pathway Standard: A6.1 Use available resources to identify and resolve problems using knowledge bases, forums, and manuals.
Academic Standards: LS 11-12.1, 11-12.3 11-12.5, 11-12.6 RSIT 11-12.7 WS 11-12.4, 11-12.5

Unit 5	Microsoft Access	Class Hrs.	23	Lab Hrs.	70
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Description

Students will be introduced to a relational database management tool that can be used to organize and retrieve large amounts of information.

Unit 5 Competency: Upon Completion of this unit, the student is able to:

1. Define database.
2. Create, save, open or close a database.
3. Create and modify records.
4. Use simple queries.
5. Create and use reports.
Anchor Standard: 2.1 Recognize the elements of communication using a sender-receiver model.
Anchor Standard: 2.3 Interpret verbal and nonverbal communications and respond appropriately.
Anchor Standard: 2.4 Demonstrate elements of written and electronic communication such as accurate spelling, grammar, and format.
Anchor Standard: 2.6 Advocate and practice safe, legal, and responsible use of digital media information and communications technologies.
Anchor Standard: 5.1 Identify and ask significant questions that clarify various points of view to solve problems.
Anchor Standard: 5.3 Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.
Anchor Standard: 5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.
Anchor Standard: 5.6 Know the available resources for identifying and resolving problems.
Anchor Standard: 8.3 Demonstrate ethical and legal practices consistent with Information and Communication Technologies sector workplace standards.
Anchor Standard: 10.1 Interpret and explain terminology and practices specific to the Information and Communication Technologies sector.
Anchor Standard: 10.2 Comply with the rules, regulations, and expectations of all

aspects of the Information and Communication Technologies sector.
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Academic Standards: LS 11-12.1, 11-12.3 11-12.5, 11-12.6 RSIT 11-12.7

Totals	Theory Hrs.	78	Lab Hrs.	210	Total Hrs.	288
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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: Key Applications	Course 2: Living Online	Course 3: Computing Fundamentals
Planning	Provide core office skills that will prepare students for a wide range of jobs in the technology field in order to prepare for the workplace of tomorrow.	Following guidelines and polices, exercising ethical behavior, and respecting copyright laws govern your use of computers, devices, and online services.	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.
Management	Monitor work performance and identify opportunities for improvement. Understand the standard of work expected at a work site. Learn how to manage time and priorities.	Understand that software components provide remote access to networks and the tools needed to transmit data in the required formats. Also, know that electronic communications is the technology that enables users to transmit text, numbers, voice, and video from one computer or device to another.	Learn basic concepts of how computer programs work, through a hands-on, show and tell type approach with a focus on increasing foundational skills.
Finance	Learn relevant workforce readiness skills that differentiate students in the job market and increase employability. Become aware of career options and lifelong learning opportunities	Make informed decisions about the acquisition of technology to facilitate electronic and other forms of communication.	Access up-to-date and useful information including current technologies; allowing student to become better decision maker when purchasing computing devices.
Technical & Production Skills	Students learn to maximize office productivity and efficiency developing practical skills while increasing proficiency with Microsoft Office Software.	Be aware that there are several types of networks that can be categorized by the scope of the network and the design of the communication method. Also, know that network connections present challenges and we should evaluate potential risks when we access them.	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.
Underlying Principles Of Technology	Enable students to be productive users of Microsoft Office and other software tools for a wide range of jobs and other life pursuits.	Be aware that Principles of Technology blends an understanding of basic principles with practice, which will be used for upcoming practice.	Gain awareness of the underlying principles of technology which are essential for future development.

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Labor Issues	Certification of level skills for job requirements.	Understand that computers are used in different areas of work, school, and home to collect, organize, evaluate, and communicate information. Computers help users increase productivity, collaborate with others, facilitate learning, promote creativity, support critical thinking, and facilitate daily life.	Obtain effective learning strategies and become aware of career options and lifelong learning opportunities. (General workplace knowledge and skills are infused throughout the course).
Community Issues	Students learn to implement effective verbal communication with clients and colleagues. Students acknowledge and act upon constructive feedback from team members.	Know that society has benefitted in many ways because of developments in the internet and network capabilities in the last several years.	Use technology in an ethical and legal manner, and understand how technology affects society.
Health, Safety, & Environmental Issues	Ergonomics as well as safety issues related to use of computer equipment and software.	Gain awareness that advantages in technologies provide beneficial assistance for individuals with disabilities, unrestricted access to data can be dangerous, and communications netiquette refers to good manners and proper behaviors when communicating through electronic media.	Increase awareness of health, safety and environmental issues ensuring student is able to make informed and responsible decisions.