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## MEMORANDUM

**TO:** Members, Utah State Board of Education

**FROM:** Joel Coleman  
Interim Chief Executive Officer

**DATE:** November 7, 2014

**ACTION:** College and Career Awareness Update (formerly known as CTE Introduction)

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### **Background:**

CTE Introduction is a required seventh grade course. In order to facilitate up-to-date knowledge, exploration, and activities, the course has undergone a major revision including standards, objectives and indicators, curriculum, and course name. The new name is College and Career Awareness.

### **Key Points:**

College and Career Awareness provides students with the direction, decision making, and planning needed to explore options for their personal career paths. The program is a year-long course taught by a team of Career and Technical Education teachers. School counselors are involved in teaching important concepts to students and aligning the College and Career Ready Plan. Students are provided with instruction in career development. The student learning activities provide hands-on, real-world application.

### **Anticipated Action:**

The Standards and Assessment Committee will review the revisions to the College and Career Awareness standards and consider approving the release the standards for public comment. If approved, the full Board will consider giving preliminary approval for the draft standards.

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# College and Career Awareness

Unit of Credit: Full Year, 1.0 credit

Grade Level: 7

Prerequisite: None

CIP Code 13.0001

Core Code 39-01-0000-001

## Introduction

College and Career Awareness offers exploration and preparation in college and career pathways focusing on jobs that are high skill and high demand, as well as satisfying and financially rewarding. The College and Career Awareness course is designed to help students identify their interests, abilities, and skills. With appropriate developmental information related to careers, educational pathways, and self-knowledge, students are able to begin to make college and career goals for the future. College and Career Awareness is designed to acquaint students with the Utah labor market and the employment opportunities for which they can prepare by defining a College and Career Plan.

## Intended Learning Outcomes

The Intended Learning Outcomes (ILOs) describe the skills and attitudes students should explore and learn as a result of successful participation in the College and Career Awareness course. ILOs are an essential part of the CTE Core and provide teachers with a standard for evaluation of student learning. Significant understanding occurs when teachers incorporate ILOs in planned instruction for the College and Career Awareness course.

By the end of the College and Career Awareness course, at an age-appropriate level, students will:

1. Explain how self-knowledge/self-efficacy (interest, abilities, and strengths) relates to career interests and selecting and achieving goals.
2. Discuss how education, career exploration, planning for college career readiness, and current occupational information will assist individuals in making long-range plans (CCR Plan).
3. Become acquainted with a wide range of occupations, CTE Pathways, career trends and emerging careers.
4. Differentiate between entry-level and expert-level career readiness expectations.
5. Understand the importance of making career decisions related to career aspirations.
6. Expand career awareness through participation in Work-Based Learning experiences.
7. Participate in experiential activities related to career expectations.
8. Identify career and post-secondary education options through investigation of high school to college and career pathways.
9. Consider and explore non-traditional career opportunities.
10. Explain how academic content knowledge and technical skills are used in various careers.

## **STANDARDS, OBJECTIVES, INDICATORS**

### **STANDARD 1**

Students will be knowledgeable about the importance of career options and career planning; self-knowledge/self-efficacy (interest, aptitude, ability); current and emerging occupational information; and the preparatory steps for college and career readiness.

**Objective 1:** Identify and practice the attitudes, knowledge, and skills that contribute to effective learning in school and across the life span, including recognizing that completion of high school with essential academic and CTE coursework provides a wide range of substantial postsecondary and career options.

- a. Identify personal abilities, skills, interests, values, and motivations in terms of future goals.
- b. Develop a positive attitude toward work and learning by understanding the importance of responsibility, dependability, integrity, and work ethic.
- c. Apply time management and task management skills.
- d. Apply knowledge of learning styles to positively influence school performance.
- e. Demonstrate the ability to work independently, as well as cooperatively, with other students.
- f. Identify a broad range of interests and abilities, connecting to school in positive ways.
- g. Demonstrate the ability to balance family life, school, homework, extracurricular activities, and leisure time.
- h. Use problem-solving and decision-making skills to assess progress toward educational goals.
- i. Understand the relationship between classroom performance, success in school and success in life.
- j. Identify next step planning options consistent with interests, achievement, aptitudes, and abilities.
- k. Identify recommended course sequencing and pathway opportunities based on career interests.

**Objective 2:** Learn about the changing nature of the workplace, the value of work to society, and the connection of work to the achievement of personal goals.

- a. Understand that the changing nature of work requires adaptability, lifelong learning, and acquiring new skills.
- b. Understand how family and socioeconomic background can influence career choices, and the opportunities of traditional and nontraditional career choices.
- c. Develop skills to locate career information through UtahFutures. Understand the relationship between work, societal needs, and a global economy. Learn to understand and respect individual uniqueness.
- d. Understand employability skills. Determine values that affect life/career planning in terms of family, community involvement, work, and leisure.
- e. Participate in a variety of Work-Based Learning experiences that connect academic preparation with hands-on career development experiences, e.g., guest speakers, field studies, job shadows, and career fairs.

**Objective 3:** Assess and apply interests, personal skills, aptitudes and abilities to education planning and future career decisions.

- a. Understand the relationship between education, training, and the occupational choice.
- b. Explore life/career options and alternatives.
- c. Complete and utilize career assessments.
- d. Explore job-seeking skills such as writing a resume, completing a job application, and interviewing.
- e. Understand how life roles, personal beliefs, and attitudes affect career decision-making.

- f. Develop a written CCR Plan, including establishing academic goals and outlining short-term steps to achieve future life/career goals.
- g. Identify postsecondary options to support interests, achievement, aptitude, and abilities recognizing the potential in occupations as being open for choice without restrictions based on sex, race, ethnic heritage, age creed, or disability.

## **STANDARD 2**

Improve development in core subject content that is necessary for college and career readiness; explore relevant education, training, and career opportunities essential for success.

**Objective 1:** Students will explore education and training in Science, Technology, Engineering, and Math (STEM) career pathway opportunities.

- a. Investigate STEM careers available in Utah.
- b. Identify 8 STEM careers along with training and education necessary to enter the workforce.
- c. Participate in the STEM problem-solving process on a real-world problem.

**Objective 2:** Students will explore education and training in nontraditional career pathway opportunities.

- a. Investigate nontraditional careers that are in high demand in Utah.
- b. Identify 8 nontraditional careers along with training and education necessary to enter the workforce.

**Objective 3:** Students will develop 21<sup>st</sup> century skills for college and career readiness.

- a. Develop critical thinking, analysis, and problem solving strategies.
- b. Increase communication and teamwork skills.
- c. Increase proficiency in the use of technology.
- d. Establish time management and study habits.

**Objective 4:** Students will apply academic knowledge in college and career pathways.

- a. Participate in hands-on math applications.
- b. Participate in technical writing activities.
- c. Participate in applied science experiences.

## **STANDARD 3**

Students will explore skills, knowledge and concepts related to CTE College and Career Pathways in Agriculture, food, fiber, and natural resources.

**Objective 1:** Explore the careers, education, and training related to agricultural systems technology, food production and processing systems.

- a. Identify 10 careers in the agricultural systems technology, food production and processing systems.
- b. Identify the skills and education required to work in agricultural systems technology, food production and processing systems careers.
- c. Describe the variety of work environments in agricultural systems technology, food production and processing systems careers.
- d. Recognize the sources of food, clothing, and shelter, and the processes that are used to deliver them to the consumer.
- e. Identify and demonstrate the uses of Global Positioning Systems (GPS) and other satellite technologies in agriculture.

- f. Evaluate facts and opinions about food technologies to enhance food safety and food availability.

**Objective 2:** Explore the careers, education, and training related to plant and animal systems.

- a. Identify 10 careers in plant and animal systems.
- b. Identify the skills and education required to work in plant and animal systems careers.
- c. Describe the variety of work environments in plant and animal systems.
- d. Explain how supply and demand of agricultural products affect the marketplace and price (e.g., the supply, demand, and price of major grains such as wheat, corn, and soybeans).
- e. Explore biotechnology and its uses in agriculture.

**Objective 3:** Explore the careers, education, and training related to natural resource systems.

- a. Identify 10 careers in natural resource systems.
- b. Identify the skills and education required to work in natural resource systems careers.
- c. Describe the variety of work environments in natural resource systems.
- d. Explain the dependence and interaction between people and natural resources (e.g., rangeland, wildlife, wilderness, soil, water, and air).

#### **STANDARD 4**

Students will explore skills, knowledge and concepts related to CTE College and Career Pathways in Business and Marketing.

**Objective 1:** Explore the careers, education, and training related to accounting and finance, HR management, and hospitality and travel.

- a. Develop basic business employability skills.
- b. Understand the human resources aspects of business by completing the job application process, including resumes, online applications, etc.
- c. Understand how personal marketing can affect job outlooks.
- d. Understand how to perform basic cashiering functions (e.g... customer communication, problem solving, collecting money, counting change).
- e. Understand basic personal money management, including sales tax and payroll deductions.
- f. Understand economics and how it relates to the success of a business.
- g. Explore how financial choices impact outcomes.

**Objective 2:** Explore the careers, education, and training related to marketing and entrepreneurship and management.

- a. Understand how price, product, promotion, and place affect the success of a business.
- b. Understand how advertising and promotion used in social media and digital media drive profit.
- c. Use global examples of how goods, services, and ideas are marketed and distributed.
- d. Using career exploration in business, marketing, and related areas, develop a small business that is role-played in the classroom with successful operations.
- e. Explore related CTE Career Pathways.

**Objective 3:** Explore the careers, education, and training related to administrative support.

- a. Use word processing, spreadsheets, desktop publishing, and presentation software to perform basic tasks independently and collaboratively in a business setting.

- b. Understand how the Internet works and define Internet vocabulary, including terms such as URL, browser, search engine, etc.
- c. Understand proper etiquette and ethics when using the Internet and social media/digital marketing online applications.
- d. Use a browser to explore careers in business, marketing, and related areas.

## **STANDARD 5**

Students will explore skills, knowledge and concepts related to CTE College and Career Pathways in Family and Consumer Sciences.

**Objective 1:** Explore the careers, education, and training related to family and human services and early childhood education.

- a. Examine the impact of career choices on family lifestyles and family economics and finance in the classroom.
- b. Explore the development of acceptable interpersonal skills in the family and workplace.
- c. Identify the steps of problem-solving and demonstrate critical thinking.
- d. Identify the qualities required in a positive child care environment.
- e. Identify and use developmentally appropriate practices for young children.
- f. Explore related entrepreneur opportunities.

**Objective 2:** Explore the careers, education, and training related to textile design, fabrication, and entrepreneurship.

- a. Demonstrate skills related to clothing care/selection, construction, and textile fabrication.
- b. Explore and use textile technology, including interior design.
- c. Explore related entrepreneur opportunities.

**Objective 3:** Explore the careers, education, and training related to food science, nutrition, and culinary arts.

- a. Demonstrate basic food safety and sanitation.
- b. Understand and use basic culinary practices (i.e. measuring, reading a recipe, and converting recipes).
- c. Interpret nutritional information as part of a healthy diet.
- d. Demonstrate skills related to food presentation.
- e. Explore related entrepreneur opportunities.

## **STANDARD 6**

Students will explore skills, knowledge and concepts related to CTE College and Career Pathways in Health Science.

**Objective 1:** Explore the careers, education, and training related to biotech research and development.

- a. Complete a healthcare career study.
- b. Compare and contrast workplace etiquette and ethics related to healthcare.
- c. Distinguish effective verbal and nonverbal communication and explain the differences.

**Objective 2:** Explore the careers, education, and training related to diagnostics and health informatics

- a. Explore and demonstrate what it takes to make a Healthcare system work (e.g., hospital as a mini-city.)
- b. Identify how disease is transmitted and how to prevent the spread of disease.

- c. Understand and define the terms vital signs, blood pressure, pulse, temperature, and breathing rate.

**Objective 3:** Explore the careers, education, and training related to therapeutic services.

- a. Explore the Research and Development Pathway: Biotechnology
- b. Explore the Diagnostic Pathway: Clinical Laboratory and Medical Forensics
- c. Explore the Health Informatics Pathway: Medical Office Administrative Assistant
- d. Explore the Therapeutic Services Pathways: Dental
- e. Emergency Medical Technician (EMT)
- f. Nursing
- g. Pharmacy
- h. Surgical Technician
- i. Therapeutic Rehabilitation/Exercise

## **STANDARD 7**

Students will explore skills, knowledge and concepts related to CTE College and Career Pathways in Digital Media, Computer Science and Information Technology.

**Objective 1:** Explore the careers, education, and training related to networking and information technology support.

- a. Explore digital media and rich media as a communication media for projects and on the Web.
- b. Introduce creative thinking, problem solving, project planning, and design.
- c. Explore rich media creation and manipulation—photos, graphics, sound, video, animation, user experience (UX), etc.
- d. Explore the creation of 3D objects.
- e. Introduce concepts of file and folder management of assets.
- f. Develop project(s) using rich media, such as a game, HTML5app, website, an online video, or other rich media projects.
- g. Explore careers in digital media, information technology, Web development, networking, and related areas.

**Objective 2:** Explore the careers, education, and training related to digital design.

- a. Recognize that software development affects all facets of society.
- b. Introduce the computer science concepts of creative thinking, computational thinking, problem solving, collaboration, etc.
- c. Explore and use the concepts and structures of software development, such as sequence, loops, conditionals, variables, and function structures.
- d. Plan and develop a project such as a game, app, or other computer software development project.
- e. Explore the relationship between computer science and software development careers.

**Objective 3:** Explore the careers, education, and training related to software development.

- a. Recognize the use of information technology systems in all facets of society.
- b. Introduce the concepts of hardware, operation systems, and application software.
- c. Explore networks (wired, wireless, cellular, etc.).
- d. Utilize online database services—database search, language translation, etc.
- e. Utilize online data collection and applications – Google Forms, OneDrive Forms, ArcGIS online, Google Maps, etc.

- f. Develop a project that includes the use of computer hardware, networks, online services, and/or data collection.

## **STANDARD 8**

Students will explore skills, knowledge and concepts related to CTE College and Career Pathways in Technology and Engineering and Skilled and Technical Education.

**Objective 1:** Explore the careers, education, and training related to skilled and technical sciences education.

- a. Use tools, equipment and facility safely.
- b. Demonstrate the ability to use measuring tools to
- c. Measure accurately to 1/16" and to 1 mm.
- d. Define engineering and understand a basic engineering design process.

**Objective 2:** Explore the careers, education, and training related to technology and of how technology relates to society.

- a. Explore the characteristics and scope of technology in society.
- b. Explore the core concepts of technology in society.
- c. Explore the relationships among technologies and the connections between technologies and other fields.
- d. Explore the cultural, social, economic, and political effects of technology in society.
- e. Explore the role of society in the development of technology.
- f. Explore the influence of technology on history.

**Objective 3:** Explore the careers, education, and training related to engineering, manufacturing, construction, communication, energy, and transportation processes and technologies.

- a. Define engineering and understand a basic engineering design process.
- b. Explain the relationship of manufacturing technology in producing items people want and need.
- c. Identify the different types of construction (civil, commercial, industrial, residential, etc.).
- d. Understand and demonstrate how communication technology includes all the ways people have developed using technology to send and receive messages.
- e. Understand and explain the relationship between energy, power, and the ability to do work, and identify their sources (e.g., solar, fossil fuels, hydro, geothermal, wind, etc.).
- f. Explain transportation technology and identify types of transportation systems (e.g., land, air and space, marine, pipeline, and conveyor).