Post–Secondary & Workforce Readiness

Career & Technical Education

Scott Stump
Colorado Community College System
Career & Technical Education
21st Century Career Technical Education

Scott Stump
Dean of Career & Technical Education, CCCS
Social Studies & Social Sciences
- Social, cultural, historical concepts
- Interpret sources, evaluate evidence, build conceptual frameworks
- Civic responsibility & political process
- Interpret from a global perspective

Arts & Humanities
- Shaping of culture
- Instruments of social & political thought
- Awareness of innovators

Mathematical Sciences
- Be quantitatively literate
- Algebraic & geometric principles
- Problem solving
- Data & statistics

Science
- Scientific method
- Draw conclusions
- Core concepts of disciplines
- Scientific concepts can be challenged

Literacy
- Read with understanding & write coherently
- Employ English properly & fluently
- Use logic & rhetoric
- Access primary & secondary sources
Joanna works in an office. Her computer is a stand-alone system. What is a stand-alone computer system?

It doesn't come with a chair.
Why would living close to a mobile phone mast cause ill health?

You might walk into it.
Steve is driving his car. He is travelling at 60 feet/second and the speed limit is 40 mph. Is Steve speeding?

He could find out by checking his speedometer.
Real Purpose

• Vision: Colorado CTE delivers proven pathways to lifelong career success!

• Mission: CTE ensures a thriving Colorado economy by providing relevant and rigorous education that is connected, responsive and real.
Colorado CTE Snapshot: Secondary Programs

- 112,400+ student enrollments
  - 1,200+ programs in 160 school districts
- One out of every three Colorado high school students is gaining valuable experiences through CTE (38% and increasing)
- 94% of respondents who completed secondary CTE programs were employed in related jobs and/or continuing their education one year later
Colorado CTE Snapshot: Postsecondary Programs

- 34,600 student enrollments
  - 600 programs delivered via
    - 13 system community colleges
    - 2 local district colleges
    - 1 four-year college
    - 3 area technical colleges
    - State correctional facilities
Statutory Authority

Coordination of K-14 Career Education System

• Approval and review of programs
• Distribution of State CTA Funds
• Distribution of Federal Perkins Funds
• Defining Instructor Requirements
Colorado’s Pipeline

100
In Colorado, for every 100 ninth grade students

70
students graduate from high school four years later

44
students immediately enter college

26
students are still enrolled in their second year

22
students graduate with either an associate’s degree within three years or a bachelor’s degree within six years

Source: NCES 2006
# Vocational Education vs. Career & Technical Education

<table>
<thead>
<tr>
<th>Vocational Education “Then”</th>
<th>Career and Technical Education “Now”</th>
</tr>
</thead>
<tbody>
<tr>
<td>For <em>Some</em> Students</td>
<td>For <em>All</em> Students</td>
</tr>
<tr>
<td>For a Few <em>Jobs</em></td>
<td>For All <em>Careers</em></td>
</tr>
<tr>
<td>6 to 7 “Program Areas”</td>
<td>17 Clusters – 81 Pathways</td>
</tr>
<tr>
<td>In Lieu of Academics</td>
<td>Aligns and Supports Academics</td>
</tr>
<tr>
<td>High School Focused</td>
<td>High School and College Partnerships</td>
</tr>
</tbody>
</table>
Postsecondary & Workforce Readiness
Foundation knowledge & skills for all career pathways include:
- Academic Content Knowledge
- Civic Responsibility
- Collaboration
- Communication
- Creativity & Innovation
- Critical Thinking/Problem Solving
- Find/Use Information Technology
- Global & Cultural Awareness
- Personal Responsibility
- Work Ethic

Specialized CTE Pathways include:
- Alternative Cooperative Education (ACE), FACS CORE & World of Work

**STEM (Science, Technology, Engineering & Math)**
See also STEM affiliated pathways noted by *
- Research, Exploration & Innovation
- Design, Development & Application

**Arts, A/V Technology and Communication**
- Audio/Video Technology & Film
- Journalism & Broadcasting
- Performing Arts
- Printing/Publishing
- Visual & Design Arts

**Information Technology**
- Information Support and Services
- Interactive Media
- Network Systems & Telecommunications*
- Programming & Software Engineering*

**Architecture & Construction**
- Construction
- Design & Pre-construction*
- Maintenance & Operations

**Manufacturing**
- Health, Safety & Environmental Assurance
- Logistics, Planning & Management Services
- Planning, Management & Regulation
- Sales & Service
- Transportation Operations
- Transportation/Systems Infrastructure
- Warehousing & Distribution Center Operations

**Health Science**
- Biotechnology Research & Development*
- Diagnostic Services*
- Health Informatics
- Supportive Services
- Therapeutic Services*

**Law, Public Safety, Corrections & Security**
- Correction Services
- Emergency & Fire Management Services*
- Law Enforcement Services
- Security & Protective Services

**Management and Administration**
- Administrative Services
- Business Information Technology
- Corporate/General Management
- Human Resource Management
- Operations Management

**Marketing**
- Marketing Communications
- Marketing Management
- Marketing Research
- Merchandising
- Professional Sales/Sales Management

**Finance**
- Accounting
- Banking Services
- Corporate Finance
- Insurance
- Securities & Investments

**Government & Public Administration**
- Foreign Service
- Governance
- Legal Services
- Planning
- Public Management & Administration
- Regulation
- Revenue & Taxation

**Agriculture, Food & Natural Resources**
- Animal Science*
- Agribusiness Systems
- Food Products & Processing Systems*
- Natural Resource & Environmental Systems*
- Plant Science*
- Power, Structural & Technical Systems*

**Energy**
- Electromechanical Generation & Maintenance*
- Electrical Energy Transmission & Distribution*
- Energy Efficiency & Environmental Technology*
- Fossil Energy Extraction, Processing & Distribution*
- Renewable Energy Production*

* STEM affiliated pathway

**Agriculture, Natural Resources & Energy**

**Specialized CTE Pathways include:**

**Hospitality & Tourism**
- Lodging
- Recreation, Amusements & Attractions
- Restaurants, Food & Beverage Services
- Travel & Tourism

**Human Services**
- Consumer Services
- Counseling & Mental Health Services
- Early Childhood Development
- Family & Community Services
- Personal Care Services

**Education & Training**
- Administration and Administrative Support
- Professional Support Services
- Teaching and Training

**Health Science, Criminal Justice & Public Safety**
- Correction Services
- Emergency & Fire Management Services*
- Law Enforcement Services
- Security & Protective Services

* STEM affiliated pathway

**Skilled Trades & Technical Sciences**

**Transportation, Distribution & Logistics**
- Facility & Mobile Equipment Maintenance
- Health, Safety & Environmental Management
- Logistics, Planning & Management Services
- Planning, Management & Regulation
- Sales & Service
- Transportation Operations
- Transportation/Systems Infrastructure
- Warehousing & Distribution Center Operations

* STEM affiliated pathway

**Colorado Career Cluster Model**

Revised February 9, 2010 - www.cccs.edu
<table>
<thead>
<tr>
<th>High School Diploma, On-the-Job Training</th>
<th>License/Certificate</th>
<th>Associate’s</th>
<th>Bachelor’s</th>
<th>Masters, Doctoral, Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapeutic Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clinical Rotation</td>
<td>• Certified Nurses Aide</td>
<td>• Dental Hygiene</td>
<td>• Athletic Training/Exercise Science</td>
<td>• Clinical Nutrition</td>
</tr>
<tr>
<td>• Dental Assisting</td>
<td>• Dental Assisting</td>
<td>• Licensed Practical Nurse</td>
<td>• Dentistry</td>
<td></td>
</tr>
<tr>
<td>• Health Aide</td>
<td>• Emergency Medical Technician</td>
<td>• Pre-medicine</td>
<td>• Medicine</td>
<td></td>
</tr>
<tr>
<td>• Medical Assisting</td>
<td>• Massage Therapy</td>
<td>• Surgical Technology</td>
<td>• Nurse Anesthetist</td>
<td></td>
</tr>
<tr>
<td>• Physical Therapy Assisting</td>
<td></td>
<td></td>
<td>• Recreational Therapy</td>
<td>• Pharmaceutical Services</td>
</tr>
<tr>
<td>Support Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Central Services Assisting</td>
<td>• Dietary Management</td>
<td>• Dietary Management</td>
<td>• Biomedical Technology</td>
<td>• Environmental Health Sciences</td>
</tr>
<tr>
<td>• Dietary Management</td>
<td>• Electrical/Electronic Equipment Repair</td>
<td>• Medical Office Management</td>
<td>• Environmental Health &amp; Safety</td>
<td>• Industrial Operations Engineering</td>
</tr>
<tr>
<td>• Electrical/Electronic Equipment Repair</td>
<td>• Medical Office Management</td>
<td>• Registered Dietetic Technician</td>
<td>• Prosthetic Therapies</td>
<td>• Public Health</td>
</tr>
<tr>
<td>• Admissions</td>
<td>• Medical Office Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Informatics</td>
<td>• Coding Experience</td>
<td>• Health Information Technology</td>
<td>• Community Health</td>
<td>• Health care Administration</td>
</tr>
<tr>
<td>• Data Entry</td>
<td>• Medical Assisting</td>
<td>• Medical Coding</td>
<td>• Health Care Administration</td>
<td>• Library Science</td>
</tr>
<tr>
<td>• Community Service</td>
<td>• Medical Librarian</td>
<td>• Medical Office Services</td>
<td>• Health Education</td>
<td>• Nursing Administration</td>
</tr>
<tr>
<td></td>
<td>• Medical Transcription</td>
<td>• Medical/Clinical Assisting</td>
<td></td>
<td>• Public Health</td>
</tr>
<tr>
<td>Diagnostic Services</td>
<td>• Electrocardiograph Technology</td>
<td>• Cardiovascular Technology</td>
<td>• Biology</td>
<td>• Cardiovascular Technology</td>
</tr>
<tr>
<td>• Nuclear Medical Technology</td>
<td>• Medical Laboratory Assisting</td>
<td>• Medical Imaging Technology</td>
<td>• Medical Imaging Technology</td>
<td>• Diagnostic Radiology</td>
</tr>
<tr>
<td>• Radiologic Technology</td>
<td>• Nuclear Medical Technology</td>
<td>• Nuclear Laboratory Science</td>
<td>• Nutrition</td>
<td>• Medical Laboratory Science</td>
</tr>
<tr>
<td>• Phlebotomy</td>
<td>• Nutritionist</td>
<td>• Psychology</td>
<td>• Nutrition</td>
<td>• Nuclear Medicine</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Pathology</td>
</tr>
<tr>
<td>Biotechnology Research &amp; Development</td>
<td>• Quality Assurance Technology</td>
<td>• Clinical Laboratory</td>
<td>• Biochemistry</td>
<td>• Anatomy</td>
</tr>
<tr>
<td>• Quality Control Technician</td>
<td>• Medical Laboratory</td>
<td>• Medical Laboratory</td>
<td>• Immunology</td>
<td>• Biochemistry</td>
</tr>
<tr>
<td>• Pharmacy Technician</td>
<td>• Clinical Laboratory</td>
<td>• Medical Laboratory Technician</td>
<td>• Medical Pharmaceutical Chemistry</td>
<td>• Oncology Biology</td>
</tr>
<tr>
<td></td>
<td>• Clinical Laboratory Technician</td>
<td>• Medical Laboratory</td>
<td>• Microbiology</td>
<td>• Pharmaceutical Sciences</td>
</tr>
<tr>
<td></td>
<td>• Medical Laboratory Technician</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Pathway: Health Informatics

**Plan of Study: Medical Administration**

**Career Goal (O*Net Code):** Healthcare Administrator (11-9111), Medical and Health Services Manager (11-9111), Medical Assistant (31-9092), Medical Records & Health Information (29-2071), Medical Secretary (43.5013)

<table>
<thead>
<tr>
<th>Suggested High School Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9th Grade</strong></td>
</tr>
<tr>
<td>Core Academic Courses:</td>
</tr>
<tr>
<td>Career Path Courses:</td>
</tr>
<tr>
<td><strong>10th Grade</strong></td>
</tr>
<tr>
<td>Core Academic Courses:</td>
</tr>
<tr>
<td>Career Path Courses:</td>
</tr>
<tr>
<td><strong>11th Grade</strong></td>
</tr>
<tr>
<td>Core Academic Courses:</td>
</tr>
<tr>
<td>Career Path Courses:</td>
</tr>
<tr>
<td><strong>12th Grade</strong></td>
</tr>
<tr>
<td>Core Academic Courses:</td>
</tr>
<tr>
<td>Career Path Courses:</td>
</tr>
</tbody>
</table>

**Extended Learning Experiences**

**Curricular Experiences:**

- **Example:** Health Occupations Students of America

**Extracurricular Experiences:**

- **Examples:** National Youth Leadership Forum on Medicine, Medical Mission Trips, Special Olympics

**Work-Based Learning Experiences:**

- **Career Preparation – Paid and Unpaid, Job Shadowing, Internships**

**Program Accreditation and/or Professional Association(s):**

- American Association of Medical Assistants
- Association of University Programs in Health Administration
- National Commission for Health Education Credentialing
- American Public Health Association

**Service Learning Experiences:**

- **Example:** Community Service Volunteer

| Postsecondary Credit Options: | Advanced Credit Pathway: HPR100 Intro to Health, HPR 101 Customer Service in Health Care, HPR 104 Health Care Options, HPR 106 Law & Ethics, HPR 178 Medical Terminology, MOT 133 Intro to Clinical Skills |

<table>
<thead>
<tr>
<th>Postsecondary Programs Available in Colorado</th>
<th>Colorado Institutions</th>
<th>Credential Extern Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Office Technologies</td>
<td>Pickens Technical College, EOGS, Community Colleges: Aims, Arapahoe, Denver, Front Range, Lamar, Morgan, Pikes Peak, Red Rocks, TSJC</td>
<td></td>
</tr>
<tr>
<td>Medical Office Management/Administration</td>
<td></td>
<td>High School diploma/GED</td>
</tr>
<tr>
<td>Medical Administrative Assistant</td>
<td></td>
<td>Acuplacer</td>
</tr>
<tr>
<td>Medical Administrative Assistant</td>
<td>Community Colleges: Aims, Arapahoe, Morgan, Pikes Peak, Red Rocks</td>
<td>High School diploma/GED</td>
</tr>
<tr>
<td>Medical Office Technologies</td>
<td>Mesa State College</td>
<td>Acuplacer</td>
</tr>
<tr>
<td>Health Care Management</td>
<td>Metropolitan State College of Denver</td>
<td>See MSCO Admission website.</td>
</tr>
<tr>
<td>Health Care Administration, MS</td>
<td>University of Colorado-Colorado Springs</td>
<td>ACT</td>
</tr>
<tr>
<td>International Health Management and Policy, MS</td>
<td>University of Colorado-Denver</td>
<td>See each school’s Admissions website.</td>
</tr>
<tr>
<td>Health Administration, MS</td>
<td>University of Northern Colorado</td>
<td></td>
</tr>
<tr>
<td>Executive MBA (Health Administration)</td>
<td>Public Health, MPH</td>
<td></td>
</tr>
</tbody>
</table>

**Career Options:**

- Medical Billing Clerk
- Medical Office Assistant

<table>
<thead>
<tr>
<th>Salary Range*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ - $25,000</td>
</tr>
</tbody>
</table>

- Medical Secretary

<table>
<thead>
<tr>
<th>Salary Range*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25,000 - $55,000</td>
</tr>
</tbody>
</table>

- Healthcare Administrator, Medical and Health Services Manager
- Public Health Educator, Patient Advocate, Data Analyst

<table>
<thead>
<tr>
<th>Salary Range*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$55,000 - $90,000</td>
</tr>
</tbody>
</table>

- Researcher, Healthcare System Manager
- Medical Consultant, Public Health Administrator

<table>
<thead>
<tr>
<th>Salary Range*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$90,000 - $125,000</td>
</tr>
</tbody>
</table>

* $ = $15,25,000; $25,55,000; $55,90,000; $90,000 = Above $90,000

*Insert institution name here* does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities. Please direct inquiries to: insert name, address, and telephone number of AA/EOE officer.
### Pathway: Visual & Design Arts

**Career Goal (O*Net Code):** (Click the code to access education, skills, and employment outlook information)

- Multimedia Arts & Animator (27-1014) *
- Photographer (27-4021)
- Artist (27-1019)

* - High Demand Career

#### Plan of Study: Multimedia Graphic Design

**Relevant Occupational Experience**

(Your Life Experiences may be worth College Credit!): 

[CCCS Credit for Prior Learning Guide](#)

(Insert relevant occupations/skills/Military experience here and include Institution policy on Credit for Prior Learning)

#### LMI Gateway Link to Related Occupations

### Possible Pathways to your Career!

<table>
<thead>
<tr>
<th>Certificate/Program</th>
<th>Program Length (<em>Based on meeting Program Entrance Requirements</em>)</th>
<th>Estimated Tuition</th>
<th>Career Options</th>
<th>Salary Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Image Design to Print</td>
<td>15 credits (1 Sem) 21 credits (2 Sem)</td>
<td></td>
<td>Graphic Designer/ Illustrator, Multimedia Graphic Designer, Web Designer, Professional Photographer</td>
<td>$ - $$</td>
</tr>
<tr>
<td>Multimedia Graphic Design</td>
<td>65 credits (4 Sem)</td>
<td></td>
<td>Graphic Designer/Illustrator, Multimedia Graphic Designer/Animator, Web Designer, Professional Photographer</td>
<td>$ - $$$</td>
</tr>
</tbody>
</table>

**Articulation Opportunities to Advanced Degrees:**

<table>
<thead>
<tr>
<th>Degree</th>
<th>Program</th>
<th>University</th>
<th>Career Options</th>
<th>Salary Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelors Degree: Art &amp; Design, with Graphic Design Emphasis</td>
<td>Associates Degree + 60 Credits</td>
<td>University of Northern Colorado</td>
<td>Artist, Art Director, Creative Director, Painter &amp; Illustrator, Multimedia Artist, Animator, Art Gallery Manager, Art Teacher, Photographer, Fine Artist, Career Teacher</td>
<td>$ - $$$</td>
</tr>
<tr>
<td>Graduate Degree: Art &amp; Design, with Graphic Design Emphasis</td>
<td>Bachelors Degree + ?? Credits</td>
<td></td>
<td>Artist, Art Director, Creative Director, Painter &amp; Illustrator, Multimedia Artist, Animator, Art Gallery Manager, Art Teacher, Photographer, Fine Artist, Career Teacher</td>
<td>$ -$$$$</td>
</tr>
</tbody>
</table>

**College Tuition Comparison Guide**

$ = $15-25,000; $$ = $25-55,000; $$$ = $55-90,000; $$$$ = Above $90,000

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*Career & Technical Education is delivered through the Colorado Community College System [www.cccs.edu]*
## Extended Learning Experiences

### Support Structures:
*(Insert support services for nontraditional students that exist at your institution here)*

Examples: Childcare facilities, Counseling services, Tutoring services, Academic Advising

### Financial Aid:
*(Insert Financial Aid Opportunities for students here)*

### Professional Affiliations
*(Insert professional organizations here)*

Examples:
- Media Communications Association-International
- National Academy of Television Arts & Sciences
- National Association of Minorities in Communications
- Screen Actors Guild
- World Wide Web Artists’ Consortium

### Practical Learning Experiences:
*(Insert non-classroom learning experiences here – ie internships, job shadowing, etc…)*

**Insert Institution Name** is accredited by the Higher Learning Commission and a member of the North Central Association of Colleges and Schools.

**Insert Institution Name Here** does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities. Please direct inquiries to: **Insert name, address and telephone number of AA/EO officer**

*This document is a guide only. It does not act as a legally binding contract.*

**Career & Technical Education is delivered through the Colorado Community College System** [www.cccs.edu](http://www.cccs.edu)
“Earn and Learn” Pathway - Health

Certified Nursing Assistant
$15-25,000

Licensed Practical Nurse
$25-41,000

Registered Nurse (ADN)
$40-70,000

Nurse (BSN)
$50-80,000

Director of Nursing (MSN)
$60-90,000
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.01</td>
<td>Employment Potential/Occupational Demand</td>
</tr>
<tr>
<td>3.02</td>
<td>Sufficient Size and Scope</td>
</tr>
<tr>
<td>3.03</td>
<td>Technical Advisory Committee</td>
</tr>
<tr>
<td>3.04</td>
<td>Facilities</td>
</tr>
<tr>
<td>3.05</td>
<td>Student Rights &amp; Other Compliance Factors</td>
</tr>
<tr>
<td><strong>3.06</strong></td>
<td><strong>Allowable Courses &amp; Academic Alignment</strong></td>
</tr>
<tr>
<td>3.07</td>
<td>Evaluation and Continuous Improvement</td>
</tr>
<tr>
<td>3.08</td>
<td>Articulation</td>
</tr>
<tr>
<td>3.09</td>
<td>Colorado Career and Technical Student Organizations (CTSOs)</td>
</tr>
<tr>
<td>3.10</td>
<td>Qualified &amp; Credentialed Instructors</td>
</tr>
<tr>
<td>3.11</td>
<td>Non-Duplicative</td>
</tr>
<tr>
<td>3.12</td>
<td>Specific Program Requirements</td>
</tr>
</tbody>
</table>
2010-11 High School CTE Enrollment by Career Cluster
2010-11 College CTE Enrollment by Career Cluster

- Health Science: 8,976
- Bus., Mgt. & Admin.: 2,493
- Architecture & Const.: 2,338
- Transp., Distrib., Logistics: 1,706
- Agri. Food & Nat. Resources: 1,150
- Manufacturing: 1,679
- Law, Pub. Safety & Security: 1,775
- Info. Tech.: 1,064
- Human Services: 1,023
- Hospitality & Tourism: 825
- Arts, A/V Tech., & Comm.: 1,036
- Education & Training: 1,011
- Gov't & Pub. Admin.: 390
- Finance: 25

Sci., Tech., Engin. & Math.*: 43
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Nurses</td>
<td>5,635</td>
</tr>
<tr>
<td>Retail Salespersons</td>
<td>3,116</td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>2,431</td>
</tr>
<tr>
<td>First-Line Supervisors/Managers of Retail Sales Workers</td>
<td>2,395</td>
</tr>
<tr>
<td>Web Developers</td>
<td>2,191</td>
</tr>
<tr>
<td>Computer Software Engineers, Applications</td>
<td>2,100</td>
</tr>
<tr>
<td>Computer Systems Analysts</td>
<td>2,026</td>
</tr>
<tr>
<td>Computer Support Specialists</td>
<td>2,019</td>
</tr>
<tr>
<td>Network and Computer Systems Administrators</td>
<td>1,814</td>
</tr>
<tr>
<td>Executive Secretaries and Administrative Assistants</td>
<td>1,663</td>
</tr>
</tbody>
</table>

Source: Help Wanted Online September 20, 2012
22-7-1005. Preschool through elementary and secondary education - aligned standards - adoption - revisions.

2(b): In developing the preschool through elementary and secondary education standards, the State Board shall also take into account any Career & Technical Education standards adopted by the State Board for Community Colleges and Occupational Education, created in Section 23-60-104, C.R.S., and, to the extent practicable, shall align the appropriate portions of the preschool through elementary and secondary Education standards with the Career and Technical standards.
To get started, login by clicking the Login button.

If you don't have a login and would like to create one, click here to register.

Creating an account and logging-in gives you access to more of the features of the site, such as:

- Creating, viewing, saving, and editing course outlines;
- Copying other saved courses;

Next, click one of the industry sectors below to get started.

Alternative Cooperative Education
Agricultural, Natural Resources & Energy
Business, Marketing & Public Administration
Health Science, Criminal Justice & Public Safety
Hospitality, Human Services & Education (FACS Core)
Skilled Trades & Technical Sciences
STEM, Arts, Design & Information Technology
AGBS.01 Describe agribusinesses, the relationship of agribusiness to the industry of agriculture and will identify opportunities in the agribusiness systems pathway

AGBS.01.01 Understand the history and global significance of agribusinesses

AGBS.01.01.a Define major components of agribusiness systems

AGBS.01.01.b Define the major trends and relationship of agribusiness to global agriculture production

MA10-GR.HS-S.1-GLE.2-EO.a Reason quantitatively and use units to solve problems (CCSS: N-Q)

MA10-GR.HS-S.3-GLE.2-EO.b Make inferences and justify conclusions from sample surveys, experiments, and observational studies. (CCSS: S-IC)

AGBS.01.01.c Identify various cultural perspectives in agriculture and the impact on agribusiness systems

MA10-GR.HS-S.3-GLE.2-EO.b Make inferences and justify conclusions from sample surveys, experiments, and observational studies. (CCSS: S-IC)

AGBS.01.01.d Understand current cultural perspectives, global trade, and environmental impact of agriculture and the impact on agribusiness systems

AGBS.01.02 Understand the history and future response in agribusiness systems to agriculture

AGBS.01.02.a Determine important historical trends in agribusiness systems

AGBS.01.02.b Describe evolution and technological advances in agribusiness systems

AGBS.01.02.c Analyze trends (population, societal, income, health, environmental) and their impact on agribusiness

MA10-GR.HS-S.1-GLE.2-EO.a Reason quantitatively and use units to solve problems (CCSS: N-Q)
The Career Pathways Assessment System (cPass) offers a way to measure high school students’ readiness for post-secondary education or entry into the workforce.

Rather than focusing on academic skills alone, cPass also measures the knowledge and skills needed for specific career pathways. With a mix of multiple choice questions, technology enhanced items, and performance based tasks, cPass measures skills both in the classroom and in real-world situations. Read More >>

Currently Planned Pathways:

- Comprehensive Agriculture
- Animal Systems
- Plant Systems
- Production
- Maintenance
- General Business
- Finance
- Marketing
- Education

Printable Brochure >>

View a List of All Pathways >>
Common Course Numbering System

Searching Current Courses For Fall 2012

Search For Courses By The Following Prefixes

Prefix Description
CAD    Computer Assisted Drafting
CAG    Colorado AG Leadership
CAR    Carpentry
CCN    Critical Care Nursing
CDF    Career Development Facilitator
CHE    Chemistry
CHI    Chinese
CHW    Community Health Work
CIS    Computer Information System
CMA    Casino Management
CMD    Communication Disorders
CNE    Transfer enter CCCS Com Title
CNG    Computer & Networking Tech
CNN    Critical Care Nursing
COM    Communication
CON    Construction Technology
COS    Cosmetology
Course: CON130
Title: Blueprint Reading
Long Title: Blueprint Reading
Course Description: Focuses on the techniques for reading and using blueprints and specifications with an emphasis placed on those drawing and types of information that are relevant to the carpentry craft.
Min Credit: 2

Status Notes: Course offered to fill gap and meet needs of students desiring an intro to blueprint reading and utilize this class to fulfill requirements for estimation class. Also revised from CTE201

Origin Notes: RRCC

STANDARD COMPETENCIES:

I. Demonstrate an understanding of blueprint terminology
II. Understand various views used to interpret/define a building
III. Create small drawing which reflect portions or sections of the blueprints
IV. Identify the different types of lines used on construction drawings. Identify selected architectural symbols commonly used to represent materials on plans.
V. Identify selected electrical, mechanical, and plumbing symbols commonly used on plans.
VI. Identify selected abbreviations commonly used on plans.
CTE program advisory committee’s are good to have. They provide valuable input to what the businesses needs are. Committee members, if chosen correctly, (and by correctly, I mean members from businesses that would provide jobs to those in the field we are teaching) can even offer experience of equipment that an instructor may want to purchase. For example, the instructor may be looking into purchasing a new machine; one of the members in the committee may have had an experience with the machine you are looking at purchasing, and can give you the pro’s and con’s of the machine. A good advisory committee should also be knowledgeable about how best to use resources. I was looking at purchasing a transmission flushing machine. With the input of the committee they recommended that the purchase would be better used in something else, and after some thought, that’s true. The members also inform me of the needs that their shop requires, and out of this I can blend those needs into my instruction.

James A. Brunelli, Automotive Technology, Trinidad State Junior College
Real Purpose

• Vision: Colorado CTE delivers proven pathways to lifelong career success!

• Mission: CTE ensures a thriving Colorado economy by providing relevant and rigorous education that is connected, responsive and real.