

**TITLE 6            PRIMARY AND SECONDARY EDUCATION**  
**CHAPTER 29       STANDARDS FOR EXCELLENCE**  
**PART 3            CAREER AND TECHNICAL EDUCATION**

**6.29.3.1            ISSUING AGENCY:** Public Education Department, hereinafter the department. [6.29.3.1 NMAC - N, 6-30-2009]

**6.29.3.2            SCOPE:** All public schools, state educational institutions and educational programs conducted in state institutions other than New Mexico military institute.  
[6.29.3.2 NMAC - N, 6-30-2009]

**6.29.3.3            STATUTORY AUTHORITY:**

A.        Section 22-2-2 NMSA 1978 grants the authority and responsibility for the assessment and evaluation of public schools, state-supported educational institutions and educational programs conducted in state institutions other than New Mexico military institute.

B.        Section 22-2-2 NMSA 1978 directs the department to set graduation expectations and hold schools accountable. Section 22-2C-3 NMSA 1978 requires the department to adopt academic content and career technical performance standards and to measure the performance of public schools in New Mexico. [6.29.3.3 NMAC - N, 6-30-2009; A, 4-30-2015]

**6.29.3.4            DURATION:** Permanent.  
[6.29.3.4 NMAC - N, 6-30-2009]

**6.29.3.5            EFFECTIVE DATE:** June 30, 2009, unless a later date is cited at the end of a section. [6.29.3.5 NMAC - N, 6-30-2009]

**6.29.3.6            OBJECTIVE:** To establish challenging academic and technical standards with benchmarks and performance standards for students in grades 7-12 and to assist students in meeting such standards, including preparation for high-skill, high-wage or high-demand occupations in current or emerging professions, as defined in the scope of this regulation.  
[6.29.3.6 NMAC - N, 6-30-2009]

**6.29.3.7            DEFINITIONS:**

A.        “Career and technical education” means organized programs offering a sequence of courses (including technical education and applied technology education) which are directly related to the preparation of individuals in paid or unpaid employment in current or emerging occupations requiring an industry-recognized credential, certificate or degree. This phrase is also referred to as “vocational education” in 22-14-1 NMSA 1978.

B.        “Career and technical education course” means a course with content that provides technical knowledge and skills and competency-based applied learning, and that aligns with the regulations for educational standards and student expectations for all New Mexico students who attend schools as defined in the scope of 6.29.1.2 NMAC.

C.        “Career cluster” means a grouping of occupations in industry sectors based on recognized commonalities. Career clusters provide an organizing tool for developing instruction within the educational system.

D.        “Career pathways” means a sub-grouping, used as an organizing tool for curriculum design and instruction, of occupations/career specialties that share a set of common knowledge and skills for career success.

E.        “Cooperative education” means a method of education for individuals who, through written cooperative arrangements between a school and employers, receive instruction, including required rigorous and challenging academic courses and related career and technical education instruction, by alternation of study in school with a job in any occupational field, which alternation:

(1)       shall be planned and supervised by the school and employer so that each contributes to the education and employability of the individual;

(2)       may include an arrangement in which work periods and school attendance may be on alternate half days, full days, weeks or other periods of time in fulfilling the cooperative program.

- F. “Educational plan for student success (EPSS)” is the annual strategic long-range plan written by all districts and schools to improve student performance.
- G. “Eligible postsecondary institution” means a postsecondary institution that grants a certificate or associate degree in a career and technical occupational area.
- H. “Postsecondary education tech prep student” means a student who:
  - (1) has completed the secondary education component of a tech prep program;
  - (2) has enrolled in the postsecondary education component of a tech prep program at an institution of higher education.
- I. “Program of study” is a progressive continuum of courses that may be offered across grades 9-14. A program of study is a means to provide technical training, training to prepare for employment and training to prepare for entry into postsecondary education.
- J. “Secondary education tech prep student” means a secondary education student who has enrolled in two courses in the secondary education component of a tech prep program.
- K. “Tech prep program” means a program of study that combines a minimum of two years of secondary education with a minimum of two years of postsecondary education in a non-duplicative, sequential course of study.

[6.29.3.7 NMAC - N, 6-30-2009]

**6.29.3.8 CONTENT STANDARDS WITH BENCHMARKS AND PERFORMANCE STANDARDS FOR CAREER AND TECHNICAL EDUCATION, GRADES 7-12: A. Strand 1: Academic foundations.**

- (1) Content standard 1: Students will achieve the academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities common to all career clusters. Students will:
  - (a) grades 7-12 benchmark 1: complete required training, education and certification to prepare for employment in a particular career field; grades 7-12 performance standards:
    - (i) identify training, education and certification requirements for one’s occupational choice;
    - (ii) participate in career and technical-related training or degree programs; **(iii)** prepare for certification tests to qualify for licensure or certification in a chosen occupational area;
  - (b) grades 7-12 benchmark 2: demonstrate knowledge and skills in language arts required to pursue the full range of postsecondary education and career opportunities; grades 7-12 performance standards:
    - (i) model behaviors that demonstrate active listening;
    - (ii) adapt language for audience, purpose and situation (i.e., choice of diction, structure, style);
    - (iii) organize oral and written information;
    - (iv) compose well-organized copy for a variety of written documents such as: agendas, speeches and audio-visual presentations, bibliographies, drafts, forms/documents, notes, oral presentations, reports and explanations of technical terminology;
    - (v) edit copy to create well-organized written documents such as: agendas, speeches and audio-visual presentations, bibliographies, drafts, forms/documents, notes, oral presentations, reports and explanations of technical terminology;
    - (vi) demonstrate key elements of oral and written information such as: cause/effect, comparisons/contrasts, conclusions, context, purpose, charts/tables/graphs, evaluation/critiques, mood, persuasive text, sequence, summaries and technical subject matter;
    - (vii) evaluate oral and written information for: accuracy, adequacy/sufficiency, appropriateness, clarity, conclusions/solutions, fact/opinion, propaganda, relevance, validity and relationship of ideas;
    - (viii) identify assumptions, purposes, outcomes/solutions and propaganda techniques in oral and written information;
    - (ix) predict potential outcomes or solutions based on oral and written information regarding trends;

- (x) present formal and informal speeches including: discussion, information requests, interpretation and persuasive arguments;
- (c) grades 7-12 benchmark 3: demonstrate knowledge and skills of mathematics required to pursue the full range of postsecondary education and career opportunities; grades 7-12 performance standards:
  - (i) identify whole numbers, decimals and fractions;
  - (ii) demonstrate knowledge of arithmetic operations such as: addition, subtraction, multiplication and division;
  - (iii) demonstrate use of relational expressions such as: equal to, not equal, greater than, less than, etc.;
  - (iv) apply data and measurements to solve problems;
  - (v) analyze mathematical problem statements for missing or irrelevant data;
  - (vi) construct charts/tables/graphs from functions and data; **(vii)** analyze data when interpreting operational documents;
- (d) grades 7-12 benchmark 4: demonstrate knowledge and skills of science required to pursue the full range of postsecondary and career education opportunities; grades 7-12 performance standards:
  - (i) evaluate scientific constructs including: conclusions, conflicting data, controls, data, inferences, limitations, questions, sources of error and variables;
  - (ii) apply scientific methods in qualitative and quantitative analysis, data gathering, direct and indirect observation, predictions and problem identification.
- (2) Content standard 2: Students will develop specific language arts, math and science skills required to pursue pathway opportunities within a career cluster. Students will:
  - (a) grades 7-12 benchmark 1: demonstrate knowledge and skills of language arts specific to a career pathway opportunity; grades 7-12 performance standards:
    - (i) identify types of oral and written opportunities within a selected career cluster;
    - (ii) comprehend key elements of oral and written information relevant to a selected career pathway;
    - (iii) create oral and written representations of communications appropriate to a selected pathway;
  - (b) grades 7-12 benchmark 2: demonstrate knowledge and skills of mathematics specific to a career pathway opportunity; grades 7-12 performance standards:
    - (i) demonstrate knowledge of arithmetic operations needed to succeed within a selected career pathway;
    - (ii) analyze and summarize data appropriate to a selected pathway; **(iii)** construct charts/tables/graphs from functions and data needed to advance a selected career pathway;
  - (c) grades 7-12 benchmark 3: demonstrate knowledge and skills of science specific to a career; grades 7-12 performance standards:
    - (i) apply appropriate scientific methods in qualitative and quantitative analysis, data gathering, direct and indirect observation, predictions and problem identification;
    - (ii) understand how scientific discoveries and technological advancements are continually evaluated, validated, revised or rejected in relation to a selected career pathway.

**B. Strand 2: Communications.**

- (1)** Content standard 1: Students will use oral and written communication skills in creating, expressing and interpreting information and ideas, including technical terminology and information. Students will:
  - (a)** grades 7-12 benchmark 1: select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary; grades 7-12 performance standards:
    - (i) determine the most appropriate reading strategy for identifying the overarching purpose of a text (e.g., skimming, reading for detail, reading for meaning or critical analysis);
    - (ii) demonstrate use of content, technical concepts and vocabulary when analyzing information and following directions;

- (iii) select the reading strategy or strategies needed to fully comprehend the content within a written document (e.g., skimming, reading for detail, reading for meaning or critical analysis);
  - (iv) interpret information, data and observations to apply information learned from reading to actual practice;
  - (v) transcribe information, data and observations to apply information learned from reading to actual practice;
  - (vi) communicate information, data and observations to apply information learned from reading to actual practice;
  - (vii) evaluate the information, explanations or ideas of others by identifying and applying clear, reasonable criteria for evaluation;
- (b)** grades 7-12 benchmark 2: demonstrate use of the concepts, strategies and systems for obtaining and conveying ideas and information to enhance communication in the workplace; grades 7-12 performance standards:
  - (i) employ verbal skills when obtaining and conveying information;
  - (ii) record information needed to present a report on a given topic or problem;
  - (iii) write internal and external business correspondence that conveys or obtains information effectively;
  - (iv) communicate with others to clarify workplace objectives;
  - (v) communicate effectively with others to foster positive relationships;
- (c)** grades 7-12 benchmark 3: locate, organize and reference written information from various sources to communicate with co-workers and clients/participants; grades 7-12 performance standards:
  - (i) locate written information used to communicate with co-workers and customers;
  - (ii) organize information to use in written and oral communications;
  - (iii) reference the sources of information;
- (d)** grades 7-12 benchmark 4: evaluate and use information resources to accomplish specific occupational tasks; grades 7-12 performance standards:
  - (i) use informational texts, internet web sites and technical materials to review and apply information sources for occupational tasks;
  - (ii) evaluate the reliability of information from informational texts, internet web sites and technical materials and resources.
- (e)** grades 7-12 benchmark 5: use correct grammar, punctuation and terminology to write and edit documents; grades 7-12 performance standards:
  - (i) compose multi-paragraph documents clearly, succinctly and accurately;
  - (ii) use descriptions of audience and purpose when preparing and editing written documents;
  - (iii) use correct grammar, spelling, punctuation and capitalization when preparing written documents;
- (f)** grades 7-12 benchmark 6: develop and deliver formal and informal presentations using appropriate media to engage and inform audiences; grades 7-12 performance standards:
  - (i) prepare oral presentations to provide information for specific purposes and audiences;
  - (ii) identify support materials that will enhance an oral presentation;
  - (iii) prepare support materials that will enhance an oral presentation;
  - (iv) deliver an oral presentation that sustains listeners' attention and interest;
  - (v) align presentation strategies to the intended audience;
  - (vi) implement multi-media strategies for presentations;

- (g) grades 7-12 benchmark 7: interpret verbal and nonverbal cues/behaviors to enhance communication with co-workers and clients/participants; grades 7-12 performance standards:
  - (i) interpret verbal behaviors when communicating with clients and coworkers;
  - (ii) interpret nonverbal behaviors when communicating with clients and coworkers;
  - (iii) interpret a given verbal message/information;
  - (iv) respond with restatement and clarification techniques to clarify information;
- (h) grades 7-12 benchmark 8: develop and interpret tables, charts and figures to support written and oral communications; grades 7-12 performance standards:
  - (i) create tables, charts and figures to support written and oral communications;
  - (ii) interpret tables, charts and figures used to support written and oral communication;
- (i) grades 7-12 benchmark 9: listen to and speak with diverse individuals to enhance communication skills; grades 7-12 performance standards:
  - (i) apply factors and strategies for communicating with a diverse work force;
  - (ii) demonstrate ability to communicate and resolve conflicts within a diverse work force;
- (j) grades 7-12 benchmark 10: exhibit public relations skills to increase internal and external customer/client satisfaction; grades 7-12 performance standards:
  - (i) communicate effectively when developing positive customer/client relationships;
  - (ii) identify information related to customer needs.
- (2) Content standard 2: Students will locate, organize and reference written information from various sources to compose and prepare oral and written communications to convey technical concepts and company information. Students will:
  - (a) grades 7-12 benchmark 1: use writing and organizational skills to construct reports, graphs and tables; grades 7-12 performance standards:
    - (i) compile and arrange information to communicate main facts;
    - (ii) document sources and references of data;
    - (iii) organize and arrange information for effective coherence; (iv) use appropriate software to develop text, charts, graphs or figures to convey technical concepts;
  - (b) grades 7-12 benchmark 2: identify the main ideas of an informational text and determine the essential elements of the text; grades 7-12 performance standards:
    - (i) examine informational sources for ideas and concepts;
    - (ii) accurately interpret information from and detect inconsistencies in informational sources;
    - (iii) read informational and technical texts critically and independently;
    - (iv) analyze the validity of source information;
  - (c) grades 7-12 benchmark 3: identify and prepare support materials for an oral presentation; grades 7-12 performance standards:
    - (i) identify media and visual aids appropriate to understanding of topic;
    - (ii) operate efficiently the equipment associated with presentations;
    - (iii) prepare visual aids and support materials for easy viewing, without error.

C. Strand 3: Problem solving and critical thinking.

**(1)** Content standard 1: Students will solve problems using critical thinking skills (analyze, synthesize and evaluate) independently and in teams, using creativity and innovation. Students will:

**(a)** grades 7-12 benchmark 1: employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate); grades 7-12 performance standards:

- (i)** identify common tasks that require employees/team members to use problem-solving skills;
- (ii)** analyze elements of a problem to develop creative solutions;
- (iii)** describe the value of using problem-solving and critical thinking skills to improve a situation or process;
- (iv)** create ideas, proposals and solutions to problems;
- (v)** evaluate ideas, proposals and solutions to problems;
- (vi)** use structured problem-solving methods when developing proposals and solutions;
- (vii)** generate new and creative ideas to solve problems by brainstorming possible solutions;
- (viii)** critically analyze information to determine value to the problem-solving task;
- (ix)** guide individuals through the process of recognizing concerns and making informed decisions;
- (x)** identify alternatives using a variety of problem-solving and critical thinking skills;
- (xi)** evaluate alternatives using a variety of problem-solving and critical thinking skills;

**(b)** grades 7-12 benchmark 2: employ critical thinking and interpersonal skills to resolve conflicts with staff or customers; grades 7-12 performance standards:

- (i)** analyze situations and behaviors that affect conflict management;
- (ii)** determine best options/outcomes for conflict resolution using critical thinking skills;
- (iii)** identify with others' feelings, needs and concern;
- (iv)** implement stress management techniques;
- (v)** resolve conflicts with/for customers using conflict resolution skills;
- (vi)** implement conflict resolution skills to address staff issues/problems;
- (c)** grades 7-12 benchmark 3: identify, write and monitor workplace performance goals to guide progress in assigned areas of responsibility and accountability; grades 7-12 performance standards:
  - (i)** write realistic performance goals, objectives and action plans;
  - (ii)** monitor performance goals and adjust as necessary;
  - (iii)** recognize goal achievement using appropriate rewards in the workplace;
  - (iv)** communicate goal achievement with managers and co-workers;

**(d)** grades 7-12 benchmark 4: conduct technical research to gather information necessary for decision-making; grades 7-12 performance standards:

- (i)** align the information gathered to the needs of the audience;
- (ii)** gather technical information and data using a variety of resources;
- (iii)** analyze information and data for value to the research objectives;
- (iv)** evaluate information and data to determine value to research objectives.

**(2)** Content standard 2: Students will demonstrate the ability to evaluate and verify the appropriateness of a solution to a problem. Students will:

**(a)** grades 7-12 benchmark 1: understand problem-solving techniques; grades 7-12 performance standards:

- (i)** identify potential problems with a given solution to a problem;
- (ii)** demonstrate knowledge of decision-making skills and techniques;

**(b)** grades 7-12 benchmark 2: study potential, real and perceived emergency

situations to recognize and implement appropriate safety and security measures; grades 7-12 performance standards:

- (i) observe people and surroundings to identify dangerous situations;
- (ii) develop and role-play emergency situations, demonstrating caution and good judgment.

D. Strand 4: Information technology applications.

(1) Content standard 1: Students will use information technology tools specific to the career cluster to access, manage, integrate and create information. Students will:

(a) grades 7-12 benchmark 1: use personal information management (PIM) applications to increase workplace efficiency; grades 7-12 performance standards:

- (i) manage personal schedule and contact information;
- (ii) create memos and notes;

(b) grades 7-12 benchmark 2: employ technological tools to expedite workflow; grades 7-12 performance standards:

- (i) use information technology tools to manage and perform work responsibilities;
- (ii) use email to share files and documents;
- (iii) identify the functions and purpose of email systems;
- (iv) use email to communicate within and across organizations;

(c) grades 7-12 benchmark 3: operate internet applications to perform workplace tasks; grades 7-12 performance standards:

- (i) access and navigate internet (e.g., use a web browser);
- (ii) search for information and resources;
- (iii) evaluate internet resources for reliability and validity;

(d) grades 7-12 benchmark 4: operate writing and publishing applications to prepare business communications; grades 7-12 performance standards:

(i) prepare simple documents and other business communications; (ii) prepare reports and other business communications by integrating graphics and other non-text elements;

(iii) prepare complex multi-media publications;

(e) grades 7-12 benchmark 5: operate presentation applications to prepare and deliver presentations; grades 7-12 performance standards:

- (i) prepare presentations for training, sales and information sharing;
- (ii) deliver presentations with supporting materials;

(f) grades 7-12 benchmark 6: employ spreadsheet applications to organize and manipulate data; grades 7-12 performance standards:

- (i) create a spreadsheet;
- (ii) perform calculations and analyses on data using a spreadsheet;

(g) grades 7-12 benchmark 7: employ database applications to manage data; grades

7-12 performance standards:

- (i) manipulate data elements;
- (ii) manage interrelated data elements;
- (iii) analyze interrelated data elements;
- (iv) generate reports showing interrelated data elements;
- (h) grades 7-12 benchmark 8: employ computer operations applications to manage work tasks; grades 7-12 performance standards:
- (i) manage computer operations;
- (ii) manage file storage;
- (iii) compress or alter files.

(2) Content standard 2: Students will recognize and use information technology tools to access, manage, integrate, create and share information within a designated career pathway. Students will:

(a) grades 7-12 benchmark 1: use computer-based equipment (containing embedded computers or processors) to control devices; grades 7-12 performance standards:

- (i) operate computer-driven equipment and machines;

- (ii) use installation and operation manuals;
  - (iii) troubleshoot computer-driven equipment and machines;
  - (iv) access support as needed to maintain operation of computer-driven equipment and machines;
- (b)** grades 7-12 benchmark 2: employ collaborative/groupware applications to facilitate group work; grades 7-12 performance standards:
  - (i) facilitate group work through management of shared schedule and contact information;
  - (ii) facilitate group work through management of shared files and online information;
  - (iii) facilitate group work through instant messaging or virtual meetings;
- (c)** grades 7-12 benchmark 3: use installation and operating manuals; grades 7-12 performance standards:
  - (i)** install a relevant program using appropriate documentation; **(ii)** access available documentation to solve technology tool problems.
- E. Strand 5: Systems.**
  - (1)** Content standard 1: Students will demonstrate understanding of roles within teams, work units, departments, organizations, inter-organizational systems and the larger environment. Students will:
    - (a)** grades 7-12 benchmark 1: describe the nature and types of business organizations to build an understanding of the scope of organizations; grades 7-12 performance standards:
      - (i)** list the types and functions of businesses;



- (ii) describe the types and functions of businesses;
  - (iii) explain the functions and interactions of common departments within a business;
- (b) grades 7-12 benchmark 2: implement quality control systems and practices to ensure quality products and services; grades 7-12 performance standards:
  - (i) describe quality control standards and practices common to the workplace;
  - (ii) describe the benefits of using a cross-functional team in policy and procedure development.
- (2) Content standard 2: Students will identify how key organizational systems and government affect organizational performance and the quality of products and services. Students will:
  - (a) grades 7-12 benchmark 1: identify occupation-specific governmental regulations and national, state and local building codes to establish workplace/jobsite regulations and codes; grades 7-12 performance standards:
    - (i) read and discuss information on OSHA, EPA and other safety regulations;
    - (ii) apply information given in workplace/building regulations and codes correctly;
    - (iii) obtain, understand and follow material safety data sheets information;
  - (b) grades 7-12 benchmark 2: identify workplace/jobsite environmental hazards in order to promote workplace/jobsite safety; grades 7-12 performance standards:
    - (i) use hazardous materials safely;
    - (ii) follow safe practices relating to environmental hazards;
  - (c) grades 7-12 benchmark 3: understand global context of industries and careers; grades 7-12 performance standards:
    - (i) identify mission, organizational goals and objectives of a business;
    - (ii) understand the components of a business plan;
    - (iii) explain the role of risk-management in reducing risks and improving performance in business;
    - (iv) explain the approaches for managing organizational risks. **F.**
- Strand 6: Safety, health and environmental management.
  - (1) Content standard 1: Students will demonstrate understanding of the importance of health, safety and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. Students will:
    - (a) grades 7-12 benchmark 1: implement personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments; grades 7-12 performance standards:
      - (i) assess workplace conditions with regard to safety and health; (ii) align safety issues with appropriate safety standards to ensure a safe workplace/jobsite;
      - (iii) identify safety hazards common to workplaces;
      - (iv) identify safety precautions to maintain a safe worksite;
      - (v) select appropriate personal protective equipment as needed for a safe workplace/jobsite;
      - (vi) inspect personal protective equipment commonly used for a selected career pathway;
      - (vii) use personal protective equipment according to manufacturer's rules and regulations;
      - (viii) employ a safety hierarchy and communication system within the workplace/jobsite;
      - (ix) implement safety precautions to maintain a safe worksite;
    - (b) grades 7-12 benchmark 2: complete work tasks in accordance with employee

**(ii)**

rights and responsibilities and employer's obligations to maintain workplace safety and health; grades 7-12 performance standards:

**(i)** identify rules and laws designed to promote safety and health in the workplace;

state the rationale of rules and laws designed to promote safety and health;

**(c)** grades 7-12 benchmark 3: employ emergency procedures as necessary to provide aid in workplace accidents; grades 7-12 performance standards:

**(i)** use knowledge of first aid procedures as necessary;

**(ii)** use knowledge of CPR procedures as necessary;

**(iii)** use safety equipment as necessary;

**(d)** grades 7-12 benchmark 4: employ knowledge of response techniques to create a disaster or emergency response plan; grades 7-12 performance standards:

**(i)** complete an assessment of an emergency or disaster situation;

**(ii)** create an emergency or disaster plan.

**(2)** Content standard 2: Students will follow organizational policies and procedures and contribute to continuous improvement in performance and compliance. Students will:

**(a)** grades 7-12 benchmark 1: understand health and safety standards and concepts in the workplace; grades 7-12 performance standards:

**(i)** demonstrate knowledge of the relationship between health, safety and productivity;

**(ii)** identify health and safety standards established by government agencies;

**(iii)** ensure maintenance of a clean work area;

**(iv)** demonstrate knowledge of ergonomics and repetitive strain injury;

**(b)** grades 7-12 benchmark 2:

implement procedures to protect the health and safety of all individuals; grades 7-12 performance standards:

**(i)** use safety techniques in managing an emergency and ensuring a safe environment;

**(ii)** document and report emergency/crisis situations and outcomes to appropriate authorities.

G. Strand 7: Leadership and team work.

**(1)** Content standard 1: Students will use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. Students will:

**(a)** grades 7-12 benchmark 1: employ leadership skills to accomplish organizational goals and objectives; grades 7-12 performance standards:

**(i)** analyze the various roles of leaders within organizations (e.g. contribute ideas; share in building an organization; act as role models to employees by adhering to company policies, procedures and standards; promote the organization's vision; and mentor others);

**(ii)** exhibit traits such as empowerment, risk, communication, focusing on results, decision-making, problem-solving and investment in individuals when leading a group in solving a problem;

**(iii)** exhibit traits such as compassion, service, listening, coaching, developing others, team development and understanding and appreciating others when acting as a manager of others in the workplace;

**(iv)** exhibit traits such as enthusiasm, creativity, conviction, mission, courage, concept, focus, principle-centered living and flexibility when interacting with others in general;

**(v)** consider issues related to self, team, community, diversity, environment and global awareness when leading others;

**(vi)** exhibit traits such as innovation, intuition, adaptation, life-long learning and coachability to develop leadership potential over time;

- (ii)
  - (vii) analyze leadership in relation to trust, positive attitude, integrity and willingness to accept key responsibilities in a work situation;
  - (viii) describe observations of outstanding leaders using effective management styles;
  - (ix) participate in civic and community leadership and teamwork opportunities to enhance skills;
- (b) grades 7-12 benchmark 2: employ organizational and staff development skills to foster positive working relationships and accomplish organizational goals; grades 7-12 performance standards:
  - (i) implement organizational skills when facilitating others' work efforts; explain how to manage a staff that satisfies work demands while adhering to budget constraints;
  - (iii) describe how staff growth and development increase productivity and employee satisfaction;
  - (iv) organize team involvement within a group environment;
  - (v) work with others to develop and gain commitment to team goals;
  - (vi) distribute responsibility and work load fairly;
  - (vii) model leadership and teamwork qualities to aid in employee morale;
  - (viii) identify best practices for successful team functioning;
  - (ix) explain best practices for successful team functioning;
- (c) grades 7-12 benchmark 3: employ teamwork skills to achieve collective goals and use team members' talents effectively; grades 7-12 performance standards:
  - (i) work with others to achieve objectives in a timely manner; (ii) promote the full involvement and use of team member's individual talents and skills;
  - (iii) employ conflict-management skills to facilitate solutions;
  - (iv) demonstrate teamwork skills though working cooperatively with coworkers, supervisory staff and others, both in and out of the organization, to achieve particular tasks;
  - (v) demonstrate teamwork processes that provide team building, consensus, continuous improvement, respect for the opinions of others, cooperation, adaptability and conflict resolution;
  - (vi) develop plans to improve team performance;
  - (vii) demonstrate commitment to and a positive attitude toward team goals;
  - (viii) take responsibility for shared group and individual work tasks;
  - (ix) assist team members in completing their work;
  - (x) adapt effectively to changes in projects and work activities;
  - (xi) negotiate effectively to arrive at decisions;
- (d) grades 7-12 benchmark 4: establish and maintain effective working relationships with all levels of personnel and other departments in order to accomplish objectives and tasks; grades 7-12 performance standards:
  - (i) build effective working relationships using interpersonal skills;
  - (ii) use positive interpersonal skills to work cooperatively with co-workers representing different cultures, genders and backgrounds;
  - (iii) manage personal skills to accomplish assignments;
  - (iv) treat people with respect;
  - (v) provide constructive praise and criticism;
  - (vi) demonstrate sensitivity to and value for diversity;
  - (vii) manage stress and control emotions;
- (e) grades 7-12 benchmark 5: conduct and participate in meetings to accomplish work tasks; grades 7-12 performance standards:
  - (i) develop meeting goals, objectives and agenda;
  - (ii) assign responsibilities for preparing materials and leading discussions;

- (ii)
  - (iii) prepare materials for leading discussion;
  - (iv) assemble and distribute meeting materials;
  - (v) conduct meeting to achieve objectives within scheduled time;
  - (vi) demonstrate effective communication skills in meetings;
  - (vii) produce meeting minutes, including decisions and next steps;
  - (viii) use parliamentary procedure as needed to conduct meetings; (f)
  - grades 7-12 benchmark 6: employ mentoring skills to inspire and teach others; grades 7-12 performance standards:
  - (i) use motivational techniques to enhance performance in others;
  - (ii) provide guidance to enhance performance in others.
- (2) Content standard 2: Students will employ conflict identification and resolution to achieve organizational goals and objectives. Students will:
- (a) grades 7-12 benchmark 1: use conflict resolution skills to maintain a smooth workflow; grades 7-12 performance standards:

- (i) work collaboratively and cooperatively;
    - (ii) give and receive criticism in a diplomatic and constructive manner;
    - (iii) use diplomatic and constructive statements and responses;
  - (b) grades 7-12 benchmark 2: use human relations skills to work cooperatively with co-workers and foster good relations between different cultures, genders and backgrounds; grades 7-12 performance standards:

- (i) work effectively with a variety of co-workers;
- (ii) identify team member strengths and weaknesses;
- (iii) practice motivational techniques.

H. Strand 8: Ethics and legal responsibilities.

(1) Content standard 1: Students will know and understand the importance of professional ethics and legal responsibilities. Students will:

- (a) grades 7-12 benchmark 1: apply ethical reasoning to a variety of workplace situations in order to make ethical decisions; grades 7-12 performance standards:
  - (i) evaluate alternative responses to workplace situations based on personal or professional ethical responsibilities;
  - (ii) identify personal and long-term workplace consequences of unethical or illegal behaviors;
  - (iii) explain personal and long-term workplace consequences of unethical or illegal behaviors;
  - (iv) determine the most appropriate response to workplace situations based on legal and ethical considerations;
  - (v) explain the most appropriate response to workplace situations based on legal and ethical considerations.;

(b) grades 7-12 benchmark 2: interpret and explain written organizational policies and procedures to help employees perform their jobs according to employer rules and expectations; grades 7-12 performance standards:

- (i) locate information on organizational policies in handbooks and manuals;
- (ii) discuss how specific organizational policies and procedures influence a specific work situation.

(2) Content standard 2: Students will apply business laws and regulations to business situations. Students will:

- (a) grades 7-12 benchmark 1: apply laws and regulations to personnel situations; grades 7-12 performance standards:
  - (i) explain major points and purpose of laws and regulations concerning sexual harassment, gender equity and disabilities;
  - (ii) identify resources that provide specific information regarding personnel laws and regulations;
  - (iii) apply major laws affected in given scenarios/situations;
- (b) grades 7-12 benchmark 2: apply knowledge of copyright laws to business situations; grades 7-12 performance standards:
  - (i) analyze and interpret copyright laws and regulations;
- (ii) demonstrate ability to apply copyright laws to specific situations;
- (iii) identify procedures to avoid violation of copyright laws. **I.**

Strand 9: Employability and career development.

(1) Content standard 1: Students will know and understand the importance of employability skills. Students will:

- (a) grades 7-12 benchmark 1: identify and demonstrate the use of positive work behaviors and personal qualities needed to be employable; grades 7-12 performance standards:
  - (i) demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation;
  - (ii) demonstrate flexibility and willingness to learn new knowledge and skills;
  - (iii) exhibit commitment to the organization;
  - (iv) identify how work varies with regard to site, from indoor confined spaces to outdoor areas, including aerial space and a variety of climatic and physical conditions;

- (v) apply communication strategies when adapting to a culturally diverse environment;
  - (vi) manage resources in relation to the position (e.g., budget, supplies, computer, etc.);
  - (vii) identify positive work qualities typically desired in each of the career clusters pathways;
  - (viii) manage work roles and responsibilities to balance them with other life roles and responsibilities;
- (b) grades 7-12 benchmark 2: develop a personal career plan to meet career goals and objectives; grades 7-12 performance standards:
  - (i) develop career goals and objectives as part of a plan for future career direction;
  - (ii) develop strategies to reach career objectives;
- (c) grades 7-12 benchmark 3: demonstrate skills related to seeking and applying for employment to find and obtain a desired job; grades 7-12 performance standards:
  - (i) use multiple resources to locate job opportunities;
  - (ii) prepare a resumé;
  - (iii) prepare a letter of application;
  - (iv) complete an employment application;
  - (v) interview for employment;
  - (vi) list the standards and qualifications that must be met in order to enter a given industry;
  - (vii) employ critical thinking and decision-making skills to exhibit qualifications to a potential employer.
- (2) Content standard 2: Students will explore, plan and effectively manage careers. Students will:
  - (a) grades 7-12 benchmark 1: maintain a career portfolio to document knowledge, skills and experience in a career field; grades 7-12 performance standards:
    - (i) select educational and work history highlights to include in a career portfolio;
    - (ii) produce a record of work experiences, licenses, certifications and products;
    - (iii) organize electronic or physical portfolio for use in demonstrating knowledge, skills and experiences;
  - (b) grades 7-12 benchmark 2: demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals; grades 7-12 performance standards:
    - (i) compare employment opportunities to individual needs and career plan objectives;
    - (ii) evaluate employment opportunities based upon individual needs and career plan objectives;
    - (iii) demonstrate appropriate methods for accepting or rejecting employment offers;
  - (c) grades 7-12 benchmark 3: identify and exhibit traits for retaining employment to maintain employment once secured; grades 7-12 performance standards:
    - (i) model behaviors that demonstrate reliability and dependability;
    - (ii) maintain appropriate dress and behavior for the job to contribute to a safe and effective workplace/jobsite;
    - (iii) complete required employment forms and documentation such as I-9 form, work visa, W-4 and licensures to meet employment requirements;
    - (iv) summarize key activities necessary to retain a job in the industry;
    - (v) identify positive work behaviors and personal qualities necessary to retain employment;
  - (d) grades 7-12 benchmark 4: identify and explore career opportunities in one or more career pathways to build an understanding of the opportunities available in the cluster; grades 7-12 performance standards:

- (i) locate and identify career opportunities that appeal to personal career goals;
- (ii) match personal interest and aptitudes to selected careers;
- (e) grades 7-12 benchmark 5: recognize and act upon requirements for career advancement to plan for continuing education and training; grades 7-12 performance standards:
  - (i) identify opportunities for career advancement;
  - (ii) pursue education and training opportunities to acquire skills necessary for career advancement;
  - (iii) examine the organization and structure of various segments of the industry to prepare for career advancement;
  - (iv) research local and regional labor (work force) market and job growth information to project potential for advancement;
  - (v) manage employment relations to make career advancements;
- (f) grades 7-12 benchmark 6: continue professional development to keep current on relevant trends and information within the industry; grades 7-12 performance standards:
  - (i) use self-assessment, organizational priorities, journals, internet sites, professional associations, peers and other resources to develop goals that address training, education and selfimprovement issues;
  - (ii) read trade magazines and journals, manufacturers' catalogues, industry publications and internet sites to keep current on industry trends;
  - (iii) participate in relevant conferences, workshops, mentoring activities and in-service training to stay current with recent changes in the field;
- (g) grades 7-12 benchmark 7: examine licensing, certification and credentialing requirements at the national, state and local levels to maintain compliance with industry requirements; grades 7-12 performance standards:
  - (i) examine continuing education requirements related to licensing, certification and credentialing requirements at the local, state and national levels for one's chosen occupation;
  - (ii) examine the procedures and paperwork involved in maintaining and updating licensure, certification and credentials for one's chosen occupation;
  - (iii) align ongoing licensing, certification and credentialing requirements to career plans and goals;
- (h) grades 7-12 benchmark 8: examine employment opportunities in entrepreneurship to consider entrepreneurship as an option for career planning; grades 7-12 performance standards:
  - (i) describe the opportunities for entrepreneurship in a given industry;
  - (ii) identify and explore career opportunities in one or more career pathways;
- (i) grades 7-12 benchmark 9: understand the essential principles of an entrepreneurial organization; grades 7-12 performance standards:
  - (i) practice personal integrity and honesty;
  - (ii) interact appropriately and respectfully with diverse ethnic, age, cultural, religious and economic groups in various entrepreneurial and social situations;
  - (iii) exhibit respectful and empathetic behavior when interacting with customers in one-on-one and group situations.

**J. Strand 10: Technical skills.**

- (1) Content standard 1: Students will demonstrate the use of technical knowledge and skills required to pursue careers in all career clusters, including knowledge of design, operation and maintenance of technological systems critical to the career cluster. Students will:
  - (a) grades 7-12 benchmark 1: employ information management techniques and strategies in the workplace to assist in decision-making; grades 7-12 performance standards:
    - (i) use information literacy skills when accessing, evaluating and disseminating information;
    - (ii) describe the nature and scope of information management;

- (iii) maintain records to facilitate ongoing business operations;
  - (b) grades 7-12 benchmark 2: employ planning and time management skills and tools to enhance results and complete work tasks; grades 7-12 performance standards:
    - (i) develop goals and objectives;
    - (ii) prioritize tasks to be completed;
    - (iii) develop timelines using time management knowledge and skills;
    - (iv) use project management skills to improve workflow and minimize costs.
- (2) Content standard 2: Students will apply and demonstrate technical skills required for career specialties within a selected career pathway. Students will:
  - (a) grades 7-12 benchmark 1: understand technical skill requirements within the career field's techniques; grades 7-12 performance standards:
    - (i) obtain industry-recognized certifications where available and appropriate;
    - (ii) evaluate industry needs to explain the role and functions of critical industry-related technological systems;
    - (iii) measure and manage the reliability and performance of technological systems to establish use and maintenance guidelines;
  - (b) grades 7-12 benchmark 2: establish criteria to identify technical skills needed to run an industry efficiently; grades 7-12 performance standards:
    - (i) identify types of skills needed to succeed in a desired industry;
    - (ii) explore methods available to develop technical skills;
    - (iii) correctly operate the tools associated with a specific skill.

[6.29.3.8 NMAC - Rp, 6.30.2.21 NMAC, 6-30-2009; A, 4-30-2015]



### **6.29.3.9 AGRICULTURE, FOOD AND NATURAL RESOURCES CAREER CLUSTER (AG)**

#### **COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

- A.** All pathways in the AG career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the AG career cluster are the ability to:
- (1) analyze how issues, trends, technologies and public policies impact systems;
  - (2) evaluate the nature and scope of the cluster and the role agriculture, food and natural resources (AFNR) play in society and the economy;
  - (3) examine and summarize importance of health, safety and environmental management systems in AFNR organizations;
  - (4) demonstrate stewardship of natural resources in AFNR activities;
  - (5) describe career opportunities and means to achieve those opportunities in each of the pathways; and
  - (6) analyze the interaction among AFNR systems in the production, processing and management of food, fiber and fuel and sustainable use of natural resources.
- B.** Agribusiness systems career pathway (AG-BIZ). Students will:
- (1) apply management planning principles in AFNR business enterprises;
  - (2) use record keeping to accomplish AFNR business objectives, manage budgets and comply with laws and regulations;
  - (3) manage cash budgets, credit budgets and credit for an AFNR business using generally accepted accounting principles;
  - (4) develop a business plan for an AFNR enterprise or business unit; and
  - (5) use sales and marketing principles common to agribusiness systems to accomplish AFNR business objectives.
- C.** Animal systems career pathway (AG-ANI). Students will:
- (1) analyze historic and current trends impacting the animal systems industry;
  - (2) use best practice protocols for husbandry and welfare based upon animal behaviors;
  - (3) design and provide proper animal nutrition given desired outcomes for performance, development, reproduction and economic production;
  - (4) apply principles of animal reproduction given desired outcomes for performance, development or economic production;
  - (5) evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health;
  - (6) classify, evaluate and select animals based on anatomical and physiological characteristics; and
  - (7) apply principles of effective animal health care.
- D.** Environmental service systems career pathway (AG-ENV). Students will:
- (1) use analytic procedures and instruments to manage environmental systems activities;
  - (2) evaluate the impact of public policies and regulations on environmental services facility operations;
  - (3) develop proposed solutions to environmental issues, problems and applications using scientific principles of meteorology, soil science, hydrology, microbiology, chemistry and ecology;
  - (4) demonstrate the operation of environmental service systems (e.g., pollution control, water treatment, wastewater treatment, solid waste management and energy conservation); and
  - (5) use tools, equipment, machinery and technology common to tasks in environmental system services.
- E.** Food products and processing systems career pathway (AG-FD). Students will:
- (1) develop and implement procedures to ensure safety, sanitation and quality in food product and processing facilities;
  - (2) apply principles of nutrition, biology, microbiology, chemistry and human behavior to development of food products;
  - (3) select and process food products for storage, distribution and consumption; and
  - (4) explain the scope of the food industry and the historical and current developments of food products and processing.
- F.** Natural resources systems career pathway (AG-NR). Students will:
- (1) plan and conduct natural resource management activities that apply logical, reasoned and scientifically based solutions to natural resource issues and goals;

- (2) analyze interrelationships between natural resources and humans needed to manage natural resource systems;
  - (3) develop plans to ensure responsible and sustainable production and processing of natural resources; and
  - (4) demonstrate responsible management procedures and techniques to protect or maintain natural resources.
- G.** Plant systems career pathway (AG-PL). Students will:
- (1) develop and implement a crop management plan for a given production goal that accounts for environmental factors;
  - (2) apply the principles of classification, plant anatomy and plant physiology to plant production and management;
  - (3) propagate, culture and harvest plants and plant products based on current industry standards; and
  - (4) apply principles of design in plant systems to enhance an environment (e.g., floral, forest, landscape and farm).
- H.** Power, structural and technical systems career pathway (AG-PST). Students will:
- (1) apply physical science principles and engineering applications related to mechanical equipment, structures and biological systems to solve problems and improve performance in AFNR power, structural and technical systems;
  - (2) operate and maintain mechanical equipment related to AFNR power, structural and technical systems;
  - (3) service and repair mechanical equipment and power systems used in AFNR power, structural and technical systems;
  - (4) plan, build and maintain AFNR structures; and
  - (5) use control, monitoring, geospatial and other technologies in AFNR power, structural and technical systems.

[6.29.3.9 NMAC - N, 4-30-2015]

**6.29.3.10 ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER (AC) FOR COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

- A. All pathways in the AC career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the AC career cluster are the ability to:
- (1) use vocabulary, symbols and formulas commonly used in design and construction;
  - (2) use architecture and construction skills to create and manage a project;
  - (3) comply with regulations and applicable codes to establish and manage a legal and safe workplace and jobsite;
  - (4) evaluate the nature and scope of the AC cluster and the role architecture and construction play in society and the economy;
  - (5) describe the roles and responsibilities among trades and professions, including labor/management relationships;
  - (6) read, interpret and use technical drawings, documents and specifications to plan a project; and
  - (7) describe career opportunities and means to achieve those opportunities in each of the AC pathways.
- B. Construction career pathway (AC-CST). Students will:
- (1) describe contractual relationships with all parties involved in the building process to ensure successful build of a project;
  - (2) describe the approval procedures to ensure effective flow of information in the construction process;
  - (3) implement testing and inspection procedures to ensure successful completion of a construction project;
  - (4) apply scheduling practices to ensure the successful completion of a construction project;
  - (5) apply practices and procedures required to maintain jobsite safety;
  - (6) manage relationships with internal and external parties to successfully complete construction projects;
  - (7) compare and contrast the building systems and components for a given project;
  - (8) demonstrate the construction crafts required for each phase of a given project; and
  - (9) safely use and maintain appropriate tools, machinery, equipment and resources to accomplish construction project goals.
- C. Design and pre-construction career pathway (AC-DES). Students will:
- (1) justify design solutions through the use of research documentation and analysis of data;
  - (2) use effective communication skills and strategies (listening, speaking, reading, writing and graphic communications) to work with clients and colleagues;
  - (3) describe the requirements of the integral systems that impact the design of buildings and structures;
  - (4) apply building codes, laws and rules in the design and construction of projects;
  - (5) (identify the diversity of needs, values and social patterns in project design, including accessibility standards, to appropriately meet client needs;
  - (6) apply the techniques and skills of modern drafting, design, engineering and construction to projects;
  - (7) employ appropriate representational media to communicate concepts and design; and
  - (8) (apply standards, applications and restrictions pertaining to the selection and use of construction materials, components and assemblies for project design.
- D. Maintenance and operations career pathway (AC-MO). Students will:
- (1) recognize and employ universal construction signs and symbols to function safely in the workplace;
  - (2) use troubleshooting procedures when solving a maintenance problem to maintain buildings and structures;
  - (3) apply construction skills when repairing, restoring, or renovating existing structures;
  - (4) determine work required to repair or renovate an existing building or structure;
  - (5) plan and practice preventative maintenance activities to service existing structures; and
  - (6) maintain and inspect building systems to achieve safe and efficient operation of facilities.
- [6.29.3.10 NMAC - N, 4-30-2015]

**6.29.3.11 ARTS, AUDIO-VISUAL TECH AND COMMUNICATIONS CAREER CLUSTER (AR)  
FOR COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

- A.** All pathways in the AR career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the AR career cluster are the ability to:
- (1) analyze the interdependence of the technical and artistic elements of various careers within the AR cluster;
  - (2) analyze the importance of health, safety and environmental management systems, policies and procedures common in arts, audio-video technology and communications activities and facilities;
  - (3) analyze the lifestyle implications and physical demands required in the arts, audio-visual technology and communications workplace;
  - (4) analyze the legal and ethical responsibilities required in the arts, audio/visual technology and communications workplace;
  - (5) describe the career opportunities and means to achieve those opportunities in each of the AR pathways; and
  - (6) evaluate technological advancements and tools that are essential to occupations within the AR cluster.
- B.** A-V technology and film career pathway (AR-AV). Students will:
- (1) describe the history, terminology, occupations and value of audio, video and film technology;
  - (2) demonstrate the use of basic tools and equipment used in audio, video and film production;
  - (3) demonstrate technical support skills for audio, video and film productions; and
  - (4) design an audio, video or film production.
- C.** Journalism and broadcasting career pathway (AR-JB). Students will:
- (1) describe the diversity and variety of functions within the journalism and broadcasting career pathway;
  - (2) demonstrate writing processes used in journalism and broadcasting media;
  - (3) plan and deliver a media production (e.g., broadcast, video, web, mobile); and
  - (4) demonstrate technical support related to media production (e.g., broadcast, video, web, mobile).
- D.** Performing arts career pathway (AR-PRF). Students will:
- (1) describe the scope of the AR-PRF pathway and the roles of various individuals and business principles;
  - (2) demonstrate the fundamental elements, techniques, principles and processes for various dance styles and traditions in the pathway;
  - (3) perform a varied repertoire of focal or instrumental music representing diverse styles, cultures and historical period;
  - (4) demonstrate knowledge of music theory;
  - (5) explain key issues affecting the creation of characters, acting skills and individual roles; (6) create stage, film, television, or electronic media scripts in a variety of traditional and current formats;
  - (7) describe how technology and technical support enhances productions; and
  - (8) analyze all facets of stage and production management.
- E.** Printing technology career pathway (AR-PRT). Students will:
- (1) manage the printing process including customer service and sales, scheduling, production and quality control;
  - (2) demonstrate the production of various print, multimedia, or digital media products; and
  - (3) (perform finishing and distribution operations related to the printing process.
- F.** Telecommunications career pathway (AR-TEL). Students will:
- (1) demonstrate the use of industry-specific terminology, tools and test equipment;
  - (2) demonstrate telecommunication installation techniques using appropriate tools, materials, schematics diagrams, blueprints and industry specific codes and regulations;
  - (3) demonstrate decision-making, problem-solving techniques and communication skills when providing services for customers; and
  - (4) demonstrate the installation, repair and delivery of network systems.
- G.** Visual arts career pathway (AR-VIS). Students will:
- (1) describe the history and evolution of the visual arts and its role in and impact on society;
  - (2) analyze how the application of visual arts elements and principles of design communicate and express ideas; and
  - (3) analyze and create two- and three-dimensional art forms using various media.

**6.29.3.12 BUSINESS MANAGEMENT AND ADMINISTRATION CAREER CLUSTER (BM) FOR COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

- A. All pathways in the BM career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the BM career cluster are the ability to:
- (1) use mathematical concepts, skills and problem solving to obtain necessary information for decision-making in business;
  - (2) describe laws, rules and regulations as they apply to effective business operations;
  - (3) explore, develop and apply strategies for ensuring a successful business career;
  - (4) identify, demonstrate and implement solutions in managing effective business customer relationships;
  - (5) implement systems, strategies and techniques used to manage information in a business; and
  - (6) implement, monitor and evaluate business processes to ensure efficiency and quality results.
- B. Administrative support career pathway (BM-ADM). Students will:
- (1) plan, staff, lead and organize human resources to enhance employee productivity and satisfaction;
  - (2) access, evaluate and disseminate information for business decision making; and
  - (3) plan, monitor and manage day-to-day business activities.
- C. Business information management career pathway (BM-BIM). Students will:
- (1) describe and follow laws and regulations affecting business operations and transactions; (2) plan, monitor, manage and maintain the use of financial resources to ensure a business's financial well-being;
  - (3) access, evaluate and disseminate information for business decision making;
  - (4) plan, monitor and manage day-to-day business activities to sustain continued business functioning; and
  - (5) plan, organize and manage an organization/department to achieve business goals.
- D. General management career pathway (BM-MGT). Students will:
- (1) describe and follow laws and regulations affecting business operations and transactions;
  - (2) access, evaluate and disseminate information for business decision making;
  - (3) apply economic concepts fundamental to global business operations;
  - (4) employ and manage techniques, strategies and systems to enhance business relationships; (5) plan, monitor, manage and maintain the use of financial resources to ensure a business's financial well-being;
  - (6) plan, monitor and manage day-to-day business activities to sustain continued business functioning;
  - (7) plan, organize and manage an organization/department to achieve business goals; and
  - (8) create strategic plans used to manage business growth, profit and goals.
- E. Human resources management career pathway (BM-HR). Students will:
- (1) describe and follow laws and regulations affecting human resource operations;
  - (2) access, evaluate and disseminate information for human resources management decision making;
  - (3) motivate and supervise personnel to achieve completion of projects and business goals;
  - (4) plan, monitor and manage the use of financial and human resources to ensure a business's financial well-being;
  - (5) plan, staff, lead and organize human resources to enhance productivity and satisfaction;
  - (6) plan, monitor and manage day-to-day business activities to foster a healthy and safe work environment; and
  - (7) plan, organize and implement compensation, benefits, health and safety programs.
- F. Operations management career pathway (BM-OP). Students will:
- (1) describe and follow laws and regulations affecting business operations and transactions;
  - (2) develop and maintain positive customer relationships;
  - (3) apply inventory tracking systems to facilitate operational controls; and
  - (4) plan, monitor and manage day-to-day business activities to maintain and improve operational functions.

[6.29.3.12 NMAC - N, 4-30-2015]

**6.29.3.13 EDUCATION AND CAREER TRAINING CAREER CLUSTER (ED) FOR COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

- A. All pathways in the ED career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the ED career cluster are the ability to:
- (1) apply communication skills with students, parents and other groups to enhance learning and a commitment to learning;
  - (2) demonstrate effective oral, written and multimedia communication in multiple formats and contexts;
  - (3) use critical thinking to process educational communications, perspectives, policies or procedures;
  - (4) evaluate and manage risks to safety, health and the environment in education and training settings;
  - (5) demonstrate group collaboration skills to enhance professional education and training practice;
  - (6) analyze ethical and legal policies of professional education and training practice; (7) explain legal rights that apply to individuals and practitioners within education and training settings;
  - (8) demonstrate ethical and legal behavior within and outside of education and training settings;
  - (9) describe state-specific professional development requirements to maintain employment and to advance in an education and training career;
  - (10) apply organizational skills and logic to enhance professional education and training practice; and
  - (11) demonstrate group management skills that enhance professional education and training practice.
- B. Administration and administrative support career pathway (ED-ADM). Students will:
- (1) use research-based practices to develop, communicate and enlist support for a vision of success for all learners;
  - (2) identify behaviors necessary for developing and sustaining a positive learning culture;
  - (3) create instructional programs to meet the learning organization's objectives;
  - (4) identify instructional practices that meet the learning organization's objectives;
  - (5) model leadership skills for personnel in order to improve the performance of the learning organization;
  - (6) identify operations to meet the learning organization's objectives;
  - (7) plan strategically to meet the learning organization's objectives;
  - (8) apply internal and external resources to meet the learning organization's objectives and learner needs; and
  - (9) describe advocacy strategies to promote the learning organization's needs.
- C. Professional support services career pathway (ED-PS). Students will:
- (1) identify strategies, techniques and tools used to determine the needs of diverse learners;
  - (2) implement methods to enhance learner success;
  - (3) identify resources and support services to meet learners' needs; and
  - (4) identify resources and support services available in the learning organization to enhance the learning environment.
- D. Training career pathway (ED-TT). Students will:
- (1) use foundational knowledge of subject matter to plan and prepare effective instruction and design courses or programs;
  - (2) employ knowledge of learning and developmental theory to describe individual learners; (3) use content knowledge and skills of instruction to develop standards-based goals and assessments;
  - (4) identify materials and resources needed to support instructional plans;
  - (5) establish a positive climate to promote learning;
  - (6) identify motivational, social and psychological practices that guide personal conduct; (7) demonstrate organizational and relationship building skills used to manage instructional activities and related procedures;
  - (8) demonstrate flexibility and adaptability in instructional planning;
  - (9) use assessment and evaluation tools and data to advance learner achievement and adjust instructional plans;
  - (10) evaluate teaching and training performance indicators to determine and improve effectiveness of instructional practices and professional development; and
  - (11) implement strategies to maintain relationships with others to increase support for the organization.

[6.29.3.13 NMAC - N, 4-30-2015]

**6.29.3.15 GOVERNMENT AND PUBLIC ADMINISTRATION CAREER CLUSTER (GV) FOR COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

A. All pathways in the GV career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the GV career cluster are the ability to:

- (1) explain the purpose and functions of government and public administration and the application of democratic principles in the process of governmental and administrative policymaking;
- (2) analyze the systemic relationships of government and public administration agencies;
- (3) describe health, safety and environmental management systems, as well as policies and procedures in government and public administration agencies;
- (4) describe the implementation of plans and policies to respond to public health, safety and environmental needs in government and public administration agencies;
- (5) describe career opportunities and the means to achieve those opportunities in each of the GV career pathways; and explain the administration of human, financial, material and information resources in government and public administration agencies.

B. Foreign service career pathway (GV-FOR). Students will:

- (1) apply the knowledge acquired from history, law, geography, science, language studies, social sciences (including economic and political science), business, foreign policy and culture to perform diplomatic functions;
- (2) describe the laws, customs and current administrative practices of the United States and host countries used to manage administrative, social and policy matters;
- (3) describe the application of United States and host country laws, regulations, policies and procedures used to manage consular administrative matters; and
- (4) describe the application of host country laws, customs and effective administrative practices used to manage the conduct of diplomatic operations.

C. Governance career pathway (GV-GOV). Students will:

- (1) employ research skills to gather and document factual information, analyze data and interpret statistics applicable to matters of public policy;
- (2) develop and articulate reasoned, persuasive arguments to support public policy options or positions;
- (3) select and apply appropriate political processes to gain consensus for the resolution of differing opinions and positions; and
- (4) advocate to gain support for new laws, regulations, ordinances, programs or procedures; alternatively, advocate to gain support to reform or revoke existing laws, regulations, ordinances, programs or procedures.

D. National security career pathway (GV-SEC). Students will:

- (1) instruct persons who will perform tasks relating to national homeland security; (2) describe the appropriate duties, responsibilities and authority of a national security agency's personnel at all levels;
- (3) describe the leadership characteristics necessary to ensure compliance with rules of engagement and applicable ethical standards;
- (4) collect and analyze information from within and outside the United States to assess threats and opportunities regarding national security; and
- (5) develop strategies to defend against and respond to the effects of chemical, biological, radiological, nuclear (CBR-N) or other emergent events.

E. Planning career pathway (GV-PLN). Students will:

- (1) explain the planning process used to support the development and implementation of new and updated plans, programs and regulations for government and public administration agencies;
- (2) develop a comprehensive and focused strategic planning process for government and public administration agencies to manage change; and
- (3) formulate plans and policies that meet the social, economic and physical needs of the public.

F. Public management and administration career pathway (GV-MGT). Students will:

- (1) describe the organization of government or public administration department or agency;
- (2) design strategies to maximize the potential of a government or public administration department or agency to meet its vision, mission and goals;

- (3) use fiscal management skills to manage budget and allocation processes to ensure that resources are applied in a manner consistent with the department or agency's vision, mission and goals;
  - (4) facilitate the flow of ideas and information to keep the department or agency and its constituency informed of policies and operations;
  - (5) create plans that use department or agency expertise to help elected officials and others identify, implement and achieve common goals and objectives;
  - (6) use analysis, planning and fiscal services to fund department or agency priorities;
  - (7) describe ethical and fiscally responsible procurement systems and procedures used to meet department or agency needs;
  - (8) prepare procurement requirements, procedures and solicitations for bids or proposals;
  - (9) evaluate bids and proposals consistent with the requirements of the procurement process; **(10)** describe the oversight of awarded contracts to ensure the ethical and optimal use of public funds;
  - (11) describe laws and policies that are used to protect or disclose information; and
  - (12) develop strategies that encourage a creative and innovative environment in a government or public administration department or agency.
- G. Regulation career pathway (GV-REG). Students will describe enforcement of compliance with legal requirements and regulatory standards.
- H. Revenue and taxation career pathway (GV-REV). Students will:
- (1) examine evidence and ensure revenue compliance by interpreting applicable laws, applying appropriate investigative principles and following relevant procedures;
  - (2) acquire, analyze and disseminate information to facilitate clear and accurate communication with revenue and taxation stakeholders; and
  - (3) design, develop, operate and review data analysis systems and procedures to minimize and eliminate revenue-related financial problems.

[6.29.3.15 NMAC - N, 4-30-2015]



**6.29.3.16 HEALTH SCIENCES CAREER CLUSTER (HL) FOR COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

- A. All pathways in the HL career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the HL career cluster are the ability to:
- (1) determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career;
  - (2) explain the healthcare worker's role within their department, their organization and the overall healthcare system;
  - (3) identify existing and potential hazards to clients, co-workers, visitors and self in the healthcare workplace;
  - (4) evaluate the roles and responsibilities of individual members as part of the healthcare team and explain their role in promoting the delivery of quality health care;
  - (5) analyze the legal and ethical responsibilities, limitations and implications of actions within the healthcare workplace; and
  - (6) evaluate accepted ethical practices with respect to cultural, social and ethnic differences within the healthcare workplace.
- B. Biotechnology research and development career pathway (HL-BRD). Students will:
- (1) summarize the goals of biotechnology research and development within legal and ethical protocols;
  - (2) apply the fundamentals of biochemistry, cell biology, genetics, mathematical concepts, microbiology, molecular biology, organic chemistry and statistics to conduct effective biotechnology research and development of products;
  - (3) demonstrate basic knowledge of recombinant deoxyribonucleic acid (DNA), genetic engineering, bioprocessing, monoclonal antibody production, nanotechnology, bioinformatics, genomics, proteomics and transcript omics to conduct biotechnology research and development;
  - (4) demonstrate the principles of solution preparation, sterile techniques, contamination control and measurement and calibration of instruments used in biotechnology research;
  - (5) determine processes for product design and production and how that work contributes to an understanding of the biotechnology product development process; and
  - (6) summarize and explain the larger ethical, moral and legal issues related to biotechnology research, product development and use in society.
- C. Diagnostics career pathway (HL-DIA). Students will:
- (1) communicate information within a healthcare environment and convey key diagnostic information to healthcare workers and patients in an accurate and timely manner;
  - (2) assess and report patient's/client's health status in order to monitor and document patient progress;
  - (3) demonstrate the principles of body mechanics for positioning, transferring and transporting of patients/clients and perform them without injury to the patient/client or self;
  - (4) explain procedures and goals to the patient/client accurately and effectively, using strategies to respond to questions and concerns; and
  - (5) select and interpret diagnostic procedures.
- D. Health informatics career pathway (HL-HI). Students will:
- (1) communicate health information accurately and within legal and regulatory guidelines, upholding the strictest standards of confidentiality;
  - (2) describe the content and diverse uses of health information; and
  - (3) demonstrate the use of systems used to capture, retrieve and maintain confidential health information from internal and external sources.
- E. Support services career pathway (HL-SUP). Students will:
- (1) describe, differentiate and safely perform the responsibilities of healthcare support services roles;
  - (2) demonstrate work practices that maintain a clean and healthy healthcare facility to reduce or eliminate pathogenic organisms;
  - (3) follow established internal and external guidelines in order to provide high-quality, effective support services in the healthcare facility;
  - (4) maximize available resources for proper care and use of healthcare equipment and materials; and
  - (5) implement healthcare facility standards in order to maintain high-quality healthcare facilities.

- F. Therapeutic services career pathway (HL-THR). Students will:
- (1) use communication strategies to answer patient/client questions and concerns on planned procedures and goals;
  - (2) communicate patient/client information among healthcare team members to facilitate a team approach to patient care;
  - (3) use processes for assessing, monitoring and reporting patient/client health status to the treatment team within protocol and scope of practice; and
  - (4) evaluate patient/client needs, strengths and problems in order to determine if treatment goals are being met.

[6.29.3.16 NMAC - N, 4-30-2015]

**6.29.3.17 HOSPITALITY AND TOURISM CAREER CLUSTER (HT) FOR COMMON CORE FOR CAREER AND TECHNICAL EDUCATION:**

- A. All pathways in the HT career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the HT career cluster are the ability to:
- (1) describe the key components of marketing and promoting hospitality and tourism products and services;
  - (2) evaluate the nature and scope of the HT cluster and the role of hospitality and tourism in society and the economy;
  - (3) demonstrate hospitality and tourism customer service skills that meet customers' needs;
  - (4) describe employee rights and responsibilities and employers' obligations concerning occupational health and safety in the hospitality and tourism workplace;
  - (5) identify potential, real and perceived hazards and emergency situations and determine the appropriate safety and security measures in the hospitality and tourism workplace; and
  - (6) describe career opportunities and means to attain those opportunities in each of the HT pathways.
- B. Lodging career pathway (HT-LOD). Students will:
- (1) use various communication technologies to accomplish work tasks in lodging facilities;
  - (2) explain the role and importance of housekeeping operations to lodging facility;
  - (3) allocate staff positions to meet the needs of various lodging departments;
  - (4) describe the role and responsibilities of lodging managers;
  - (5) compare the advantages and disadvantages of independently owned and chain-affiliated lodging facilities;
  - (6) analyze the departmental interrelationships of a lodging facility;
  - (7) explain various check-in and check-out procedures used in the lodging industry;
  - (8) understand reservation procedures used in the lodging industry;
  - (9) explain how room access policies and procedures ensure guest safety and minimize risks to the lodging facility;
  - (10) explain how cash control procedures are used in the lodging industry;
  - (11) explain how guests and property are protected to minimize losses or liabilities in the lodging facility; and
  - (12) explain the basic legal issues in lodging management.
- C. Recreation, amusements and attractions career pathway (HT-REC). Students will:
- (1) describe career opportunities in the HT-REC pathway;
  - (2) explain admission and traffic control procedures used to manage and control individuals, groups and vehicles in recreation, amusement and attraction venues;
  - (3) determine the maintenance and technology needs for various recreation, amusement and attraction venues;
  - (4) describe safety and security issues unique to the HT-REC pathway;
  - (5) compile a resource base to manage emergency situations in recreation, amusement and attraction venues;
  - (6) identify safety and security issues for recreation, amusement and attraction venues that might require customer education;
  - (7) compare different ticket sales options to maximize revenue for recreation, amusement and attraction venues;
  - (8) describe the types of information and directions a guest would need at a recreation, amusement and attraction entry point;
  - (9) develop marketing strategies for recreation, amusement and attractions venues;
  - (10) analyze the merchandising, program and product potential for different recreation, amusement and attraction venues; and
  - (11) compare and contrast various types of recreation, amusement and attraction venues.
- D. Restaurants and food-beverage services career pathway (HT-RFB). Students will:
- (1) describe ethical and legal responsibilities in food and beverage service facilities;
  - (2) demonstrate safety and sanitation procedures in food and beverage service facilities;
  - (3) use information from cultural and geographical studies to guide customer service decisions in food and beverage service facilities;
  - (4) demonstrate leadership qualities and collaboration with others;

- (5) research costs, pricing, market demands and marketing strategies to manage profitability in food and beverage service facilities;
- (6) explain the benefits of the use of computerized systems to manage food service operations and guest service;
- (7) use technical resources for food services and beverage operations to update or enhance present practice;
- (8) implement standard operating procedures related to food and beverage production and guest service;
- (9) describe career opportunities and qualifications in the restaurant and food service industry; and
- (10) apply listening, reading, writing and speaking skills to enhance operations and customer service in food and beverage service facilities.

**E. Travel and tourism career pathway (HT-TT). Students will:**

- (1) apply information about time zones, seasons and domestic and international maps to create or enhance travel;
- (2) apply unit and time conversion skills to develop travel schedules and compute cost, distance and time (including travel time) factors;
- (3) analyze cultural diversity factors to enhance travel planning;
- (4) assess the potential (real and perceived) hazards related to multiple environments and recommend appropriate safety, health and security measures for travelers;
- (5) develop a safety and security plan containing proactive and reactive solutions to manage emergency situations for travelers and staff;
- (6) use common travel and tourism terminology used to communicate within the industry;
- (7) customize travel with diverse transportation, lodging, cruise and food options;
- (8) (compare and contrast services and products from related industries to understand and evaluate how they impact the delivery of travel and tourism products and services to customers;
- (9) identify the community elements necessary to maintain cooperative tourism development efforts;
- (10) develop a travel product that matches customer needs, wants and expectations;
- (11) design promotional packages to effectively market travel and tourism; and
- (12) select the most effective communication technique and media venue to convey travel marketing information to a target audience.

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**6.29.3.19 INFORMATION TECHNOLOGY CAREER CLUSTER (IT) FOR COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

- A. All pathways in the IT career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the IT (information technology) career cluster are the ability to:
- (1) demonstrate effective professional communication skills and practices that enable positive customer relationships;
  - (2) use product or service design processes and guidelines to produce a IT product or service;
  - (3) demonstrate the use of cross-functional teams in achieving IT project goals;
  - (4) demonstrate positive cyber citizenry by applying industry accepted ethical practices and behaviors;
  - (5) explain the implications of IT on business development;
  - (6) describe trends in emerging and evolving computer technologies and their influence on IT practices;
  - (7) perform standard computer backup and restore procedures to protect IT information;
  - (8) recognize and analyze potential IT security threats to develop and maintain security requirements;
  - (9) describe quality assurance practices and methods employed in producing and providing quality IT products and services;
  - (10) describe the use of computer forensics to prevent and solve IT crimes and security breaches;
  - (11) demonstrate knowledge of the hardware components associated with information systems; and
  - (12) compare key functions and applications of software and determine maintenance strategies for computer systems.
- B. Information support and services career pathway (IT-SUP). Students will:
- (1) provide technology support to maintain service;
  - (2) manage operating systems and software applications, including maintenance of upgrades, patches and service packs;
  - (3) apply appropriate troubleshooting techniques in resolving computer hardware, software and configuration problems;
  - (4) perform installation, configuration and maintenance of operating systems;
  - (5) demonstrate the use of networking concepts to develop a network;
  - (6) evaluate the effectiveness of an information system;
  - (7) employ system installation and maintenance skills to set-up and maintain an information system;
  - (8) employ system administration and control skills to monitor the performance of an information system;
  - (9) employ technical writing and documentation skills in support of an information system; and
  - (10) apply quality assurance processes to maximize information system operation.
- C. Network systems career pathway (IT-NET). Students will:
- (1) analyze customer or organizational network system needs and requirements;
  - (2) analyze wired and wireless network systems to determine if they meet specifications (e.g., institute of electrical and electronics engineers (IEEE), power, security);
  - (3) design a network system using technologies, tools and standards;
  - (4) perform network system installation and configuration; and
  - (5) perform network administration, monitoring and support to maintain a network system.
- D. Programming and software development career pathway (IT-PRG). Students will:
- (1) analyze customer software needs and requirements;
  - (2) demonstrate the use of industry standard strategies and project planning to meet customer specifications;
  - (3) analyze system and software requirements to ensure maximum operating efficiency;
  - (4) demonstrate the effective use of software development tools to develop software applications;
  - (5) apply an appropriate software development process to design a software application;
  - (6) program a computer application using the appropriate programming language;
  - (7) demonstrate software testing procedures to ensure quality products;
  - (8) perform quality assurance tasks as part of the software development cycle;
  - (9) perform software maintenance and customer support functions; and

- (10) design, create and maintain a database.

**E.**

Web and digital communications career pathway (IT-WD). Students will:

- (1) analyze customer requirements to design and develop a web or digital communication product;
- (2) apply the design and development process to produce user-focused web and digital communications solutions;
- (3) write product specifications that define the scope of work aligned to customer requirements;
- (4) demonstrate the effective use of tools for digital communication production, development and project management;
- (5) develop, administer and maintain web applications;
- (6) design, create and publish a digital communication product based on customer needs;
- (7) evaluate the functionality of a digital communication product using industry accepted techniques and metrics;
- (8) implement quality assurance processes to deliver quality digital communication products and services;
- (9) perform maintenance and customer support functions for digital communication products; and
- (10) comply with intellectual property laws, copyright laws and ethical practices when creating web/digital communications.

[6.29.3.19 NMAC - N, 4-30-2015]

**6.29.3.20 LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY CAREER CLUSTER (LW)  
FOR COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

- B.** All pathways in the LW career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the LW career cluster are the ability to:
- (1) analyze the nature and scope of the LW and the role law, public safety, corrections and security play in society and the economy;
  - (2) formulate ideas, proposals and solutions to ensure effective and efficient delivery of law, public safety, corrections or security services;
  - (3) assess and implement measures to maintain safe and healthy working conditions in a law, public safety, corrections or security environment;
  - (4) conduct law, public safety, corrections and security work tasks in accordance with employee and employer rights, obligations and responsibilities, including occupational safety and health requirements;
  - (5) analyze the various laws, ordinances, regulations and organizational rules that apply to careers in law, public safety, corrections and security; and
  - (6) describe various career opportunities and means to those opportunities in each of the LW pathway.
- C.** Correction services career pathway (LW-COR). Students will:
- (1) evaluate the correctional environment for signs of potential problems or danger; (2) demonstrate leadership roles, responsibilities and collaboration in correctional environments;
  - (3) analyze the impact of federal, state and local laws on correctional facilities;
  - (4) describe the various roles and impacts of forensics and computer forensics in the resolution of crime in the correctional environment;
  - (5) describe the legal, regulatory and organizational guidelines governing the correction services;
  - (6) compare and contrast different career fields in the correction services;
  - (7) demonstrate effective communication skills (e.g., writing, speaking, active listening and nonverbal communication) in the correctional environment;
  - (8) analyze the techniques used to manage crisis situations and resolve conflicts in correctional environments;
  - (9) demonstrate the protocols regarding the reduction or elimination of sexual harassment or abuse in the correctional environment;
  - (10) analyze situations that require the use of force, including deadly force, to determine when varying degrees of force should be used in correctional facilities;
  - (11) analyze the impact of the fourth, fifth, sixth and fourteenth amendments in the correction services environment;
  - (12) apply the ethical and legal responsibilities of correctional staff to various situations in the correction services environment; and
  - (13) describe the knowledge and technical skills needed to carry out the day-to-day operations at a correctional facility.
- D.** Emergency and fire management services career pathway (LW-EFM). Students will:
- (1) demonstrate effective communication skills (e.g., writing, speaking, listening and nonverbal communication) while utilizing communications equipment and platforms common to emergency and fire management services;
  - (2) manage an incident scene as the first responder using emergency response skills;
  - (3) use up-to-date technology equipment and applications to facilitate the management of emergency and fire management situations;
  - (4) demonstrate an understanding of the objectives and a commitment to the mission of emergency and fire management services;
  - (5) execute safety procedures and protocols associated with local, state and federal regulations;
  - (6) develop an organizational professional growth plan including the development of team building and leadership skills within the emergency and fire management environment;
  - (7) describe the legal, regulatory and organizational guidelines governing emergency and fire management services;
  - (8) compare and contrast the different career fields in fire and emergency management services;
  - (9) execute protocols for handling emergency situations that range from minor medical and fire emergencies to area-wide incidents;

- (10) demonstrate the use and various applications of the equipment commonly used in emergency and fire management services;
  - (11) implement an appropriate incident command system to effectively manage an incident scene;
  - (12) use common codes and icons to properly handle and transport potentially hazardous substances in fire and medical emergency scenes;
  - (13) implement public relations plans to enhance public awareness and safety in fire and emergency situations;
  - (14) describe the elements and issues involved in using the preparedness and response systems available to manage large-scale disasters; and
  - (15) analyze the key functions and techniques of critical infrastructure protection in cases of terrorism or natural disasters.
- E. Law enforcement services career pathway (LW-ENF). Students will:**
- (1) demonstrate effective communication skills (e.g., writing, speaking, listening and nonverbal communication) required in law enforcement;
  - (2) demonstrate proficiency in the operation of communication equipment used in an emergency telecommunications center;
  - (3) use anger and conflict management strategies to resolve problems in law enforcement settings;
  - (4) model behaviors that exhibit integrity and commitment to a code of conduct and ethics for law enforcement professionals;
  - (5) analyze the impact of federal, state and local laws on law enforcement procedures;
  - (6) execute established procedures to avoid the violation of the rights guaranteed by the fourth, fifth, sixth and fourteenth amendments;
  - (7) manage crime and loss prevention programs in collaboration with the community;
  - (8) explain the appropriate techniques for managing crisis situations in order to maintain public safety;
  - (9) evaluate for the signs of domestic violence, child abuse and neglect;
  - (10) demonstrate the routine day-to-day tasks conducted by various law enforcement agencies;
  - (11) describe law enforcement protocols and procedures designed to handle incidents related to homeland security, terrorism and other disaster situations;
  - (12) demonstrate the procedures to properly protect, document and process the crime scene and all related evidence;
  - (13) demonstrate procedures to assist individuals requiring special assistance from law enforcement personnel; and
  - (14) describe the behavioral symptoms of drug use and the inherent dangers associated with handling dangerous drugs.
- F. Legal services career pathway (LW-LEG). Students will:**
- (1) demonstrate effective communication skills (writing, speaking, listening and nonverbal communication) in the legal services environment;
  - (2) interpret nonverbal communication cues in order to discern facts from fabrication; (
  - (3) produce written legal materials using writing strategies applicable to the legal services environment;
  - (4) apply information technology tools to perform daily tasks assigned to legal services professionals;
  - (5) analyze the role forensics plays in preventing and solving crimes;
  - (6) use legal terminology to communicate within the legal services community;
  - (7) compare and contrast different career fields in the legal services;
  - (8) analyze the influence of the three branches of the United States government (judicial, legislative and executive) on the legal services; and
  - (9) analyze the impact of the fourth, fifth, sixth and fourteenth amendments on the provision of legal services.
- G. Security and protective services career pathway (LW-SEC). Students will:**
- (1) demonstrate effective communications skills (e.g., writing, speaking, listening and nonverbal communication) when communicating security-related directives, technical concepts and other information;
  - (2) use conflict resolution skills to resolve conflicts among individuals;



- (3) compare and contrast the roles, responsibilities, tools and techniques of the criminal justice and security fields;
- (4) describe the legal, regulatory and organizational guidelines governing the security and protective services;
- (5) analyze the impact of federal, state and local laws on the security and protective services field;
- (6) apply ethical and legal responsibilities of security and protective services personnel to various situations in the security and protective services field;
- (7) analyze the impact of the fourth, fifth, sixth and fourteenth amendments on the security and protective services;
- (8) compare and contrast the different career fields in the security and protective services;
- (9) evaluate the application and relevance of crime prevention concepts and security assessments to security and protective services functions;
- (10) explain the application of risk management principles to the protection of assets in various settings;
- (11) describe the importance of utilizing good public relations techniques and building relationships in security and crisis situations;
- (12) describe the role of security systems in an overall security strategy;
- (13) explain the duties of security and protective services personnel in terrorism, homeland security and disaster preparedness;
- (14) apply basic management principles for the effective supervision and management of a security force or an organization's security program;
- (15) perform the roles and responsibilities of a security officer, including basic incident response;
- (16) compare types and techniques of security approaches within the public and private sectors;
- (17) demonstrate the concepts and techniques used to ensure the security of information-based and intangible assets; and
- (18) summarize the importance and roles of intelligence analysis in crime prevention and homeland security.

[6.29.3.20 NMAC - N, 4-30-2015]

**6.29.3.23 SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS CAREER CLUSTER (ST) FOR COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

**A.** All pathways in the ST career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the ST career cluster are the ability to:

- (1) apply engineering skills in a project that requires project management, process control and quality assurance;
- (2) use technology to acquire, manipulate, analyze and report data;
- (3) describe and follow safety, health and environmental standards related to science, technology, engineering and mathematics (STEM) workplaces;
- (4) understand the nature and scope of the ST career cluster and the role of STEM in society and the economy;
- (5) demonstrate an understanding of the breadth of career opportunities and means to those opportunities in each of the ST career pathways; and
- (6) demonstrate technical skills needed in a chosen STEM field.

**B.** Engineering and technology career pathway (ST-ET). Students will:

- (1) use STEM concepts and processes to solve problems involving design or production;
- (2) display and communicate STEM information;
- (3) apply processes and concepts for the use of technological tools in STEM;
- (4) apply the elements of the design process;
- (5) apply the knowledge learned in STEM to solve problems; and
- (6) apply the knowledge learned in the study of STEM to provide solutions to human and societal problems in an ethical and legal manner.

**C.** Science and mathematics career pathway (ST-SM). Students will:

- (1) apply science and mathematics to provide results, answers and algorithms for engineering and technological activities;
- (2) apply science and mathematics concepts to the development of plans, processes and projects that address real world problems;
- (3) analyze the impact that science and mathematics has on society; and
- (4) apply critical thinking skills to review information, explain statistical analysis and to translate, interpret and summarize research and statistical data.

[6.29.3.23 NMAC- N, 4-30-2015]

**6.29.3.24 TRANSPORTATION, DISTRIBUTION AND LOGISTICS CAREER CLUSTER (TD) FOR COMMON CAREER TECHNICAL CORE FOR CAREER AND TECHNICAL EDUCATION:**

- A.** All pathways in the TD career cluster should align to business and industry certifications where available and appropriate. Student abilities common to pathways in the TD career cluster are the ability to:
- (1) describe the nature and scope of the TD cluster and the role of transportation, distribution and logistics in society and the economy;
  - (2) describe the application and use of new and emerging advanced techniques to provide solutions for transportation, distribution and logistics problems;
  - (3) describe the key operational activities required of successful transportation, distribution and logistics facilities;
  - (4) identify governmental policies and procedures for TD facilities;
  - (5) describe transportation, distribution and logistics employee rights and responsibilities and employers' obligations concerning occupational safety and health; and
  - (6) describe career opportunities and means to achieve those opportunities in each of the TD career pathways.
- B.** Facility and mobile equipment maintenance career pathway (TD-MTN). Students will:
- (1) develop preventative maintenance plans and systems to keep facility and mobile equipment inventory in operation; and
  - (2) design ways to improve facility and equipment system performance.
- C.** Health, safety and environmental management career pathway (TD-HSE). Students will:
- (1) describe the health, safety and environmental rules and regulations in transportation, distribution and logistics workplaces; and
  - (2) develop solutions to improve performance of health, safety and environmental management services.
- D.** Logistics planning and management services career pathway (TD-LOG). Students will:
- (1) develop solutions to provide and manage logistics services for the company and customers; and
  - (2) analyze and improve performance of logistics systems to provide logistics planning and management services.
- E.** Sales and service career pathway (TD-SAL). Students will:
- (1) analyze the ongoing performance of transportation, logistics and distribution-related sales and service operations; and
  - (2) demonstrate the use of sales and ongoing service of products and services that are transportation-related to promote development of existing and future clients and customers.
- F.** Transportation operations career pathway (TD-OPS). Students will:
- (1) develop and evaluate transportation plans to move people or goods to meet customer requirements;
  - (2) analyze performance of transportation operations in order to improve quality and service levels and increase efficiency; and
  - (3) comply with policies, laws and regulations in order to maintain safety, security and health and mitigate the economic and environmental risk of transportation operations.
- H.** Transportation systems and infrastructure planning, management and regulation career pathway (TD-SYS). Students will:
- (1) develop plans to maintain or improve the transportation infrastructure;
  - (2) assess, plan and manage the implementation of transportation services; and
  - (3) describe ways to improve the system utilization, flow, safety and environmental performance of transportation systems.
- I.** Warehousing and distribution center operations career pathway (TD-WAR). Students will:
- (1) demonstrate efficient and effective warehouse and distribution center operations;
  - (2) describe ways to improve the performance of warehouse and distribution operations; and
  - (3) analyze compliance with company policies and government laws and regulations in warehouse and distribution operations.

[6.29.3.24 NMAC - N, 4-30-2015]

**6.29.3.25**

**CAREER-READY PRACTICES.** The following indicate that a person is career-ready:

- A.** Acting as a responsible and contributing citizen and employee.
- B.** A career-ready individual:
  - (1) understands the obligations and responsibilities of being a member of a community, and demonstrates this understanding every day through interactions with others; career-ready individuals are conscious of the impact of their decisions on others and the environment around them; they think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace; they are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good;
  - (2) applies appropriate academic and technical skills; career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive; career-ready persons make connections between abstract concepts with real-world applications and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation;
  - (3) attends to personal health and financial well-being; career-ready individuals understand the relationship between personal health, workplace performance and personal well-being; career-ready persons act on that understanding to regularly practice healthy diet, exercise and mental health activities; career-ready persons also take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success;
  - (4) communicates clearly, effectively and reasonably; career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal or visual methods; career-ready persons communicate in the workplace with clarity and purpose to make maximum use of their own and others' time; they are excellent writers; they master conventions, word choice and organization and use effective tone and presentation skills to articulate ideas; they are skilled at interacting with others; they are active listeners and speak clearly and with purpose; career-ready persons think about the audience for their communication and prepare accordingly to ensure the desired outcome;
  - (5) considers the environmental, social and economic impact of their decisions; career-ready individuals understand the interrelated nature of their actions and regularly make decisions that have a positive impact on or mitigate negative impact on other people, organizations and the environment; they are aware of and use new technologies, understandings, procedures, materials and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and profitability of the organization;
  - (6) demonstrates creativity and innovation; career-ready individuals regularly think of ideas that solve problems in new and different ways, and contributing those ideas in a useful and productive manner to improve their organization; career-ready persons can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value; they seek new methods, practices and ideas from a variety of sources and seek to apply those ideas to their own workplace; they take action on their ideas and understand how to bring innovation to an organization;
  - (7) employs valid and reliable research strategies; career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies; career-ready persons use a reliable research process to search for new information; they evaluate the validity of sources when considering the use and adoption of external information or practices; they use an informed process to test new ideas, information and practices in their workplace situation;
  - (8) uses critical thinking to make sense of problems and persevering in solving them; career-ready individuals readily recognize problems in the workplace, understand the nature of the problem and devise effective plans to solve the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions; they carefully consider the options to solve the problem; once a solution is agreed upon, they follow through to ensure the problem is solved whether through their own actions or the actions of others;
  - (9) models integrity, ethical leadership and effective management; career-ready individuals act consistently in ways that align to personal and community-held ideals and principles while employing strategies to positively influence others in the workplace; career-ready persons have a

clear understanding of integrity and act on this understanding in every decision; they use a variety of means to positively impact the direction and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes or beliefs; they recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morale and organizational culture;

- (10) plans education and career path alignment to personal goals; career-ready individuals take personal ownership of their own educational and career goals, and regularly acting on a plan to attain these goals; career-ready persons understand their own career interests, preferences, goals and requirements; they have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship; they recognize the value of each step in the educational and experiential process, and they recognize that nearly all career paths require ongoing education and experience; they seek counselors, mentors and other experts to assist in the planning and execution of career and personal goals;
- (11) uses technology to enhance productivity; career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems; career-ready persons are flexible and adaptive in acquiring and using new technology; they are proficient with ubiquitous technology applications; they understand the inherent risks - personal and organizational - of technology applications, and they take actions to prevent or mitigate these risks;
- (12) works productively in teams while using cultural or global competence; career-ready individuals contribute positively to every team, formally or informally; career-ready persons apply an awareness of cultural differences to avoid barriers to productive and positive interaction; they find ways to increase the engagement and contribution of all team members; they plan and facilitate effective team meetings.

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